Fiscal Year 2026

Guide to Programs

National Natural Science Foundation of China

National Natural Science Fund Guide to Programs 2026

National Natural Science

Foundation of China

Brief Introduction

The National Natural Science Foundation of China publishes the *National Natural Science Fund Guide to Programs 2026 (*herein after referred to as *the Guide)*, in accordance with the *National Natural Science Foundation Regulations* and relevant documents on program management, to provide applicants with useful guidance on seeking support from the National Natural Science Fund. The *Guide* details NSFC's latest reform measures, application requirements, funding policies and funding priorities, and introduces different program types and their positioning, application conditions, and relevant requirements. It is an important basis for the allocation of the National Natural Science Fund, and also a must-read reference for applicants.

This book can serve as a reference for scientific researchers engaged in scientific research work in institutions such as universities and research institutes, as well as for personnel involved in science and technology management and science and technology policy research.

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Foreword

The Fourth Plenary Session of the 20th CPC Central Committee drew a blueprint for China's high-quality development during the 15th Five-Year Plan period, made systematic arrangements for accelerating high-level self-reliance and self-improvement in science and technology and the new-quality productive forces development, and guided the direction for the reforms and development of the Science Fund. In the year of 2026, under the guidance of Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era, the National Natural Science Foundation of China (hereinafter referred to as NSFC) will comprehensively implement the guiding principles of the 20th CPC National Congress and its Plenary Sessions. In accordance with the decisions of the CPC Central Committee and the State Council, and under the leadership of the Central Science and Technology Commission, NSFC will firmly grasp the historical context of the basic research development in China and the new mission and positioning of NSFC, leverage its role as the main channel for state funding in basic research, formulate and implement our 15th Five-Year Development Plan, and prioritize allocating valuable resources to front-line researchers with the greatest innovative vitality. NSFC will coordinate support for basic research, applied basic research, and talent development, encourage free exploration, strengthen original innovation, enhance the strategic, forward-looking, and systematic layout of basic research, continue to improve the effectiveness of science funding to provide a source of innovative support for building China's strength in science and technology.

NSFC will strengthen the basic research system layout and emphasize the orientation towards original innovation. The key to enhancing China's original innovation ability is to strengthen basic research. It is necessary to encourage free exploration and stabilize the "bedrock" of funding for basic research. NSFC will continue to optimize the layout of disciplines, promote interdisciplinary integration and research, and build a high-quality disciplinary system that is comprehensive and balanced. NSFC will deepen the implementation of Original Exploratory Programs and Major Non-Consensual Projects. For program types such as the General Program, Young Scientists Fund (C), and Fund for Less Developed Regions, we will strengthen the identification and recommendation of non-consensual innovative projects to drive the production of high-level original achievements. NSFC will also improve the basic conditions for scientific research and support the systematic development of scientific instruments and tools.

NSFC will strengthen the management of funding for applied basic research, and support the development of new quality productive forces. NSFC will further

enhance the overall coordination of major types of NSFC programs and national science and technology Major Programs, as a key measure for advancing applied basic research in the new era. We will strengthen the role of NSFC's Advisory Committee, anchor the efforts to the goal of building a leading nation in science and technology, and formulate a high-standard development plan during the 15th Five-Year Plan period. NSFC will fulfill the responsibilities as the main responsible unit, improve the formulation and implementation of plans for national S & T Major Programs in basic research, and ensure closer alignment between major types of NSFC programs and other national S&T plans. We will continue to improve the diversified funding mechanism for basic research, expand the scope of Joint Funds, reinforce the role of enterprises in innovation, optimize cooperation and management models, and improve both the funding and management performance of Joint Funds.

NSFC will build a systematic platform for cultivating talents for basic research, and cultivate high-level talents for basic research. The key to high-level basic research is talent. It is necessary to enhance the early-stage support for young researchers and cultivate the vibrant reserve force for basic research. NSFC will intensify efforts for basic research talent cultivation with a focus on young scientists, empower them to take the lead and play important roles, and build a talent pool of innovation vitality. NSFC will establish a long-term stable support mechanism to cultivate strategic scientists, leading S&T talent, and innovative research teams, implement a tiered evaluation and selective continuation fund for Young Scientists Fund (A), actively address the misuse of talent "labels", and steer research projects back to their academic essence. Adhering to a dual approach of attracting and cultivating talent, NSFC will adopt more proactive and open talent approaches to build a hub for basic research talent.

NSFC will improve scientific integrity mechanism and cultivate a healthy and positive research environment. The fair evaluation of NSFC projects is related to whether outstanding talents can get timely and effective support and the overall development of the national scientific research cause. NSFC will consolidate and expand the special rectification work results of "string-pulling", establish a full-process, full-coverage, multi-tiered modern oversight system for funding, and create a governance framework that enables coordinated oversight by multiple stakeholders. NSFC will strengthen publicity and education on the integrity of scientific research, seriously investigate and punish cases of misconduct in scientific research, expand the scope and depth of oversight over fund expenditures, explore the use of digital and smart auditing technologies in research funding supervision, and promote the development of a permanent and long-term governance system.

NSFC will actively integrate into the global innovation network and build a platform for international collaboration in basic research. Broad and in-depth international cooperation in basic research is the defining feature and inevitable trend of scientific and technological development in the new era. NSFC will build on its

unique strengths as an internationally recognized science fund, continue to implement the Science Fund for Global Challenges and Sustainability, expand and deepen international joint research, and support global innovators to conduct research in China. Guided by a more open and inclusive international cooperation strategy for basic research, NSFC will steadily promote strategic partnerships with organizations worldwide and foster a research environment rooted in openness, mutual trust, and cooperation. Efforts will be made to advance the Sustainable Development International Cooperation Program (SDIC), deepen technology transfer under the Belt and Road Initiative and South-South cooperation, aiming to solve common development challenges facing all countries through broader and deeper international cooperation in basic research.

Editorial Committee

Contents

Foreword i
2026 NSFC Reform Measures 1
Information on Application 4
Funding Areas and Precautions for Scientific Departments 27
Department of Mathematical and Physical Sciences 27
Division of Mathematics 28
Division of Mechanics 29
Division of Astronomy 32
Division I of Physics 33
Division II of Physics 35
Department of Chemical Sciences 36
Division I of Chemistry 39
Division II of Chemistry 40
Division III of Chemistry 43
Division IV of Chemistry 45
Division V of Chemistry 48
Department of Life Sciences 49
Division I of Biology 52
Division II of Biology 55
Division of Biomedicine 57
Division of Interdisciplinary Research 60
Division of Environment and Ecology 63
Division of Agriculture and food sciences 66
Division of Agricultural Environment and Horticulture 69
Division of Agriculture Animal 72
Department of Earth Sciences 75
Division I of Earth Sciences 77
Division II of Earth Sciences 79
Division III of Earth Sciences 81
Division IV of Earth Sciences 84
Division V of Earth Sciences 85
Department of Engineering and Material Sciences 87
Division I of Material Sciences 89
Division II of Material Sciences 91
Division I of Engineering Sciences 93
Division II of Engineering Sciences 97
Division III of Engineering Sciences 99
Division IV of Engineering Sciences 101

Division V of Engineering Sciences 105
Department of Information Sciences 108
Division I of Information Sciences 110
Division II of Information Sciences 111
Division III of Information Sciences 113
Division IV of Information Sciences 113
Department of Management Sciences 115
Division I of Management Sciences 118
Division II of Management Sciences 119
Division III of Management Sciences 120
Department of Health Sciences 122
Division I of Health Sciences 129
Division II of Health Sciences 132
Division III of Health Sciences 136
Division IV of Health Sciences 139
Division V of Health Sciences 141
Division VI of Health Sciences 144
Division VII of Health Sciences 147
Division VIII of Health Sciences 149
Division IX of Health Sciences 151
Division X of Health Sciences 153
Department of Interdisciplinary Sciences 156
Fields of physical sciences (T01) 159
Fields of intelligence sciences and smart manufacturing (T02) 159
Fields of life and health sciences (T03) 159
Fields of convergence sciences (T04) 160
Fields of scientific instruments (T05) 160
General Program 161
Young Scientists Fund (C) 162
Fund for Less Developed Regions 164
Key Program 166
Department of Mathematical and Physical Sciences 167
Department of Chemical Sciences 171
Department of Life Sciences 175
Department of Earth Sciences 179
Department of Engineering and Material Sciences 187
Department of Information Sciences 194
Department of Management Sciences 200
Department of Health Sciences 203
Major Program 207
Major Research Plan 208

Young Scientists Fund (B) 214
The Young Scientists Fund (A) 216
Science Fund for Creative Research Groups 220
The Science Fund for Excellent Research Groups 223
Tianyuan Fund for Mathematics 226
Special Fund for Research on National Major Research Instruments 230
International (Regional) Cooperation and Exchange Program 233
Key International (Regional) Joint Research Program 233
International (Regional) Cooperation and Exchange Program under Agreements/MoUs 238
Asia and Africa 239
America and Australasia 242
Europe 244
International Scientific Organizations and Multilateral Cooperation 248
Hong Kong and Macao SARs and Taiwan Region of China 250
Sino-German Center for Research Promotion 251
Research Fund for International Scientists 253
Science Fund for Global Challenges and Sustainability 256
International Collaboration Fund for Creative Research Teams 256
Large Scientific Infrastructure International Cooperation Research Program 258
NSFC Application Code 261
A. Department of Mathematical and Physical Sciences 261
B. Department of Chemical Sciences 268
C. Department of Life Sciences 271
D. Department of Earth Sciences 278
E. Department of Engineering and Material Sciences 281
F. Department of Information Sciences 285
G. Department of Management Sciences 287
H. Department of Health Sciences 289
T. Department of Interdisciplinary Sciences 301
Appendix 302
Programs of Joint Funds 305
Joint Fund for Regional Innovation and Development 306
Joint Fund for Corporate Innovation and Development 307
NSAF Joint Fund 308
Joint Fund for Meteorology 308
Joint Fund for Railway Basic Research 308
Joint Fund for Railway Innovation and Development 309
Joint Fund for Geology 309
Joint Fund for Basic Research of Large Aircraft 310
Joint Fund for Earthquake Sciences 310
Joint Fund for Cultural Relics 310

2026 NSFC Reform Measures

In line with the deployments of the CPC Central Committee and the State Council on further deepening the reform of the S & T system, and in support of the national strategy of building a strong nation in science and technology, the NSFC introduces the following reform measures in 2026.

I. Optimize the funding mechanism for talent programs

Greater policy support will be directed toward young talents, creating more opportunities for outstanding young researchers to take on leading roles and major responsibilities. The Science Fund for Creative Research Groups (B) will be opened to applicants from institutions in Hong Kong and Macao regions, to cultivate and develop more high-level research teams. The application policies for talent programs will be optimized to further strengthen overall coordination, thereby promoting a more equitable and efficient allocation of resources. Support for the cultivation of interdisciplinary talent will be enhanced. The application scope of the Department of Interdisciplinary Sciences will be expanded to include the Young Scientists Fund (C), broadening funding pathways for researchers in interdisciplinary fields at early career stages.

II. Strengthen support for original and disruptive research

Original and disruptive research is a crucial focal point for driving the high-quality development of basic research. Efforts will continue to advance the pilot implementation of major non-consensual projects, employing unconventional models for selection, funding, and management, and by funding several of them, NSFC aims to explore a practical path to support the non-consensual innovation. Concurrently, NSFC will continue the Original Exploratory Program, maintaining stable funding to encourage high-risk, high-return research and cultivate original scientific achievements. Additionally, within the review frameworks for regular project types, NSFC will strengthen the identification and recommendation of proposals with original and disruptive potential, thereby opening up more funding opportunities for such work.

III. Enhance funding for the scientific instrument and tools

Scientific instruments and tools are fundamental for exploring the unknown world and discovering natural laws, playing a significant role in promoting basic research and original innovation. The Department of Interdisciplinary Sciences will introduce a new application code for the Scientific Instruments and Tools field (T05), focusing on common key technologies and general-purpose research equipment, and supporting young researchers in developing original scientific instruments capable of solving major scientific challenges. A dedicated track for the scientific instruments and tools will be established within the Young Scientists Fund (A, B) managed by the Department of Interdisciplinary Sciences, aiming to cultivate and train professionals of such field. Furthermore, the application scope of the Department of Interdisciplinary Sciences will be expanded to include the Special Fund for Research on National Major Research Instruments (free application), further improving the funding channels in this field.

IV. Strive to improve the quality of project applications

Addressing issues such as overly lengthy proposals and the need to optimize proposal guidelines, efforts will be made to streamline and enhance the quality of project applications. The initiative will begin with the General Program and the Young Scientists Fund (C). Firstly, to increase information density, proposal structures will be redesigned with recommended page limits for the main text, to guide applicants toward a focus on core research contents and innovation points, encouraging concise writing over verbose descriptions. Secondly, the way publications are presented will be improved. Applicants will be required to add specific descriptions of their individual contributions, thereby providing a more intuitive and clear demonstration of their role in each work.

V. Reform and foster the international scientific funding system

NSFC will strengthen overall design to implement new funding mechanisms for the Science Fund for Global Challenges and Sustainability. NSFC will give full play to globally recognized cooperation models and funding resources, aiming to build an integrated funding system that integrates “research, talent, and platforms”. NSFC will enhance the internationalization of the review process for international talent programs, by increasing the proportion of foreign experts in panel reviews for the Research Fund for International Scientists and the International Collaboration Fund for Creative Research Teams. NSFC will provide support for international scholars to integrate into China’s research system, attracting overseas talent and creating an open innovation ecosystem with global competitiveness. The

International (Regional) Joint Research Programs and International (Regional) Joint Exchange Programs will be improved as key channels to expand cooperation with scientifically advanced countries and member countries of the Belt and Road Initiative, actively promoting the South-South cooperation, optimizing the funding structure and field selection, and continuously improving the international research funding system of NSFC.

VI. Refine the application requirements for Programs of Joint Funds

The total number of projects applied for (including as applicant and main participant) and currently undertaken (including as PI and main participant) for all Programs of Joint Funds is limited to 2. Projects that end in the same year of application are not counted towards this total. Applications for the pilot Joint Fund for Corporate Innovation and Development, Joint Fund for Private Enterprise Innovation and Development, Major Special Projects of the Joint Fund, and Ye Qisun Science Fund will not be counted towards the total number at the time of application, but will be counted after the application is formally accepted by NSFC. For the aforementioned Joint Funds, the total number of projects a researcher applies for (including as applicant and main participant) and is currently undertaking (including as PI and main participant) under the same named Joint Fund is limited to 1. Projects that end in the same year of application are not counted. For research directions proposed by the 11 provinces and autonomous regions that have joined the Joint Fund for Regional Innovation and Development (Inner Mongolia Autonomous Region, Jiangxi Province, Guangxi Zhuang Autonomous Region, Hainan Province, Guizhou Province, Yunnan Province, Xizang Autonomous Region, Gansu Province, Qinghai Province, Ningxia Hui Autonomous Region, and Xinjiang Uygur Autonomous Region), applicants from host institutions based in these regions are encouraged to apply, while applicants from outside host institutions should collaborate with higher education institutions, research institutes, and enterprises in these regions that possess considerable research capabilities and conditions.

VII. Persistently address the malpractice of “string-pulling”

Adhering to the principles of “positive guidance, strict discipline, extreme defense, and serious punishment”, NSFC will strengthen efforts in publicity and guidance, strictly enforce review discipline, and resolutely rectify the deep-rooted problem of “string-pulling”. Through systematically summarizing experience, NSFC aims to transform effective measures into institutionalized and standardized long-term mechanisms. By pooling efforts from all stakeholders and intensifying corrective actions, NSFC will jointly safeguard the scientific research integrity and strive to create a fair, just, and healthy review environment.

Information on Application

When applying for NSFC funds in 2026, applicants and their host institutions shall first read carefully the following documents: the *National Natural Science Foundation Regulations* (hereinafter referred to as the *Regulations*), this *Guide*, relevant guidelines for program management, *Regulations on NSFC Funded Projects Management*, and notifications and announcements pertaining to application. Should there be any conflicts between guidelines for program management and the *Regulations* or this *Guide*, the *Regulations* and this *Guide* shall prevail. Information on Application includes eligibility of applicants and requirements for applications, application limits, requirements for budgeting, requirements for scientific integrity and science and technology ethics, responsibilities and accountability of host institutions, etc.

I. Eligibility of applicants and requirements for applications

i. Eligibility of applicants

1. As the principal investigator (PI), the applicant should comply with Article 11 Clause 1 of the *Regulations*, i.e., the applicant shall have (1) the experience of undertaking basic research program(s) or other basic research activities; (2) a senior academic rank (title) or a doctoral degree, or recommendation from two researchers who are in the same research field and have a senior academic rank (title). Besides, those who apply for certain types of programs shall meet other specific requirements. For more information, please refer to this *Guide*.

When an applicant not employed as a full-time staff member at his or her host institution submits an application, he or she shall state his or her position, term of employment and annual working duration at the host institution in the application.

2. When a researcher conducting basic research satisfies the requirements of Article 11 Clause 1 of the *Regulations,* but has no employer or whose employer is not a registered host institution, on the condition that he or she has obtained the consent from a registered host institution, he or she is eligible to apply for the General Program and Young Scientists Fund (C), but is not eligible to apply for other programs.

Under this circumstance, the applicant shall fill in the employer information in CV and basic information page of the proposal, and sign the agreement in written form with

the host institution (for more information please refer to the *Guideline on Management of NSFC Host Institutions*). **The hard copy of the agreement shall be archived at the host institution for future reference instead of being submitted to NSFC.**

Researchers with overseas identity who are not employed in any host institution shall not apply for NSFC programs as researchers with no employer or whose employer is not a registered host institution.

3. NSFC's funding opportunities, namely, Young Scientists Fund (A, B and C) and Science Fund for Creative Research Groups (B) are open to applicants whose host institutions are the following universities, Hong Kong University, Chinese University of Hong Kong, Hong Kong University of Science and Technology, Hong Kong Polytechnic University, City University of Hong Kong, Hong Kong Baptist University, Lingnan University, Hong Kong Institute of Science & Innovation of CAS, Education University of Hong Kong, University of Macau, Macau University of Science and Technology, City University of Macau and Macao Polytechnic University. The same funding pattern and peer review criteria will be adopted, and no specific funding quota will be allocated to applications from Hong Kong and Macau SARs. Please refer to Young Scientists Fund (A, B and C) and Science Fund for Creative Research Groups (B) sections in this *Guide* for details.

4. Students pursuing the postgraduate degree (who have not obtained it by the NSFC submission deadline) are not eligible to apply as PI for any type of program (unless otherwise specified for certain categories). However, individuals pursuing a postgraduate degree while employed may, with the consent of their supervisor, apply through their employer institution (excluding host institutions in Hong Kong and Macao) as the PI for the General Program, the Young Scientists Fund (C), and the Fund for Less Developed Regions. The applicant should submit a scanned copy of a signed certification of the supervisor's consent, which explains the connection between the dissertation and the proposal and guarantees the working hours and conditions after the project commences, as an attachment to the application. In-service postgraduate students whose employer is not a registered host institution are not eligible to apply for any type of programs.

5. Postdoctoral fellows can apply for the following programs only: General Program, Young Scientists Fund (C), Fund for Less Developed Regions, and others to be determined by the corresponding solicitations. However, postdoctoral fellows are not allowed to apply for Young Scientists Fund (C) from any host institution in Hong Kong or Macau SARs.

6. The applicants for the Fund for Less Developed Regions should be full-time employees from host institutions in the specified regions (for more information, please refer to the chapter on Fund for Less Developed Regions in this Guide), or the technical personnel in accordance to national policies dispatched by the Organization Department to support Xinjiang and Xizang for a mission of three years or longer. The latter shall provide the supporting materials of the aiding mission issued by

organization or personnel department of the aided institutions. If the institution that a researcher works at for the aiding mission in Xinjiang or Xizang is not a registered host institution, the researcher is allowed to apply for Fund for Less Developed Regions through the eligible host institutions in the aided autonomous regions. Part-time employees in the specified host institutions, technical personnel from the specified host institutions affiliated to Chinese central government or the People's Liberation Army or host institutions outside the regions are not eligible to apply for the Fund for Less Developed Regions.

7. Any overseas researcher employed by a registered host institution shall not apply for projects as both a domestic applicant and an overseas collaborator (referring to overseas collaborators in international (regional) joint research projects).

The overseas collaborator of the International (Regional) Joint Research project (including Key International (Regional) Joint Research Program and International (Regional) Joint Research Program under Agreements/MoUs) shall not apply for other types of programs (except for the Research Fund for International Scientists and the International Collaboration Fund for Creative Research Teams) as PI before the end date of their projects.

A domestic PI who has an ongoing project shall not participate in the application for International (Regional) Joint Research Program (including Key International (Regional) Joint Research Program and International (Regional) Joint Research Program under Agreements/MoUs) as an overseas collaborator before the end date of the ongoing project.

8. To avoid duplicate funding, NSFC's Department of Management Sciences and National Social Science Fund have imposed joint restrictions on applications.. Please refer to the section "Funding Areas and Precautions"-Department of Management Sciences" of this *Guide* for specific requirements.

ii. Requirements for applications

1. The proposal shall be prepared by the applicant in person and in accordance with the instructions and outlines. The applicant and the main participants should fill in their CVs accordingly. **Please note that any unlawful, confidential or sensitive information must not be included in the proposal.** The applicant shall be responsible for the authenticity, completeness and legitimacy of the submitted proposal.

2. In accordance with program types, the applicant shall make accurate selection of the "funding category", "subclass introduction" and "annotation". For some programs, the annotation shall be selected strictly in accordance with this *Guide*. Where there is no relevant requirement, the annotation shall be left blank.

3. Applicants shall choose either "free exploratory basic research" or "goal-oriented basic research" based on the content of their proposal. "Free exploratory basic research" refers to cutting-edge basic research of original innovation derived

from curiosity or innovative academic inspiration, without aiming to meet the needs of current application needs. “Goal-oriented basic research” refers to basic research driven by the needs of national socioeconomic development.

For the projects of General Program, Young Scientists Fund (C) and Key Program under the pilot categorized review, NSFC will organize experts to conduct categorized reviews based on the research attributes selected by the applicants.

4. Applicants shall select the application code accurately based on the research directions or research areas of their proposals, in accordance with the “NSFC Application Code” specified in this *Guide*. Particular attention shall be paid to the following aspects:

(1) When selecting the application code, please ensure to include the secondary application code (four digits) is included.

(2) Key Programs, Joint Funds Programs, etc., may have special requirements for the application codes. For details, please refer to the relevant sections in this *Guide*.

(3) Applicants shall accurately select “Application Code 1” as well as the corresponding “research direction” and “key word” when filling out the proposal form.

(4) For any questions regarding the application code, please contact relevant scientific departments.

5. The applicant does not need to list students as main participants, but only needs to include them in the total number of participants. Main participants will complete their CVs online in the same manner as the applicant. The applicant shall invite main participants to complete their CVs via the Grants system and upload the PDF version of their CVs generated by the system. Applications that fail to include complete CVs of main participants cannot be submitted.

For each representative paper listed in the CV, an electronic copy of the full text of the published paper in PDF format shall be uploaded. For each representative monograph, a scanned copy of the cover, abstract, table of contents, copyright page, etc., in PDF format shall be uploaded.

When main participants are not affiliated with the same host institution as the applicant, the employer of the main participants shall be regarded as a collaborative research institution; however, overseas institutions are not regarded as such. Applicants shall accurately select online or fill in the employer information of the main participants. **The information on collaborative research institutions in the basic information section of the application form is automatically generated by the online application system.** The number of collaborative research institutions for each application shall not exceed two (unless otherwise specified).

6. If the proposed research involves issues related to science and technology ethics and security (such as biosecurity, information security), the applicant and main participants shall carefully study the science and technology ethics, and strictly

follow relevant national laws, regulations and codes of ethics, and provide corresponding materials as attachment in accordance with the requirements of relevant scientific departments (a scanned copy shall be attached to the electronic application).

(1) They have more than one host institution when applying or participating in NSFC projects in a given year;

(2) They have different host institutions for ongoing NSFC projects.

8. Researchers who apply for or participate in NSFC projects with different professional and technical positions (titles) in the same year shall specify the relevant circumstances in the "Other Situations to be Explained" section of the application form and provide a detailed explanation.

9. If the proposed research has received funding from other sources, the applicant shall specify the funding details and their difference and connection with the current proposal. Duplicate applications for the same research content to different funding agencies should be avoided.

If an applicant applies for different types of NSFC programs during the same year, he or she shall specify in the application the other NSFC program applications, their titles and information, and the connection and difference with the current application. **The above-mentioned projects that have already been returned without review or rejected for funding by NSFC do not need to be listed.**

10. The start date for research in proposal shall be January 1, 2027, and the end date December 31, 20xx, depending on the funding periods (unless otherwise specified in this *Guide*).

11. The applicant and main participants shall use one single identity document for the application.

When filling in names of the applicant and main participants, the applicant shall ensure the names are in standard characters and exactly the same as those on the identity documents.

Individuals who have previously received funds as applicants or main participants using other identity documents shall declare and provide details in the proposal. The host institutions shall be accountable for verification.

12. Host institutions shall download the "2026 NSFC Host Institution Letter of Commitment for Project Application" from the NSFC Grants system in advance. After the letter has been signed by the legal representative and stamped with the official seal of the host institution, the scanned electronic copy shall be uploaded to the system (only once per year). The host institution may submit the proposals only after completing the above-mentioned commitment procedures.

13.Applications for NSFC programs are paperless. **The applicant shall obtain consent of main participants and cooperative research institutions regarding all the content of the proposal before submission. The host institution shall confirm**

the online applications and attachments in the Grants system before the deadline, and submit the list of applications within 24 hours after the deadline. Host institutions do not need to mail hard copies of applications.

After a grant is awarded, the applicant and main participants shall provide their personal signatures on the signature and seal page of the application form. Overseas participants who are unable to sign the page shall send a signed paper document by letter, fax, or other means, stating their consent to participate and undertake the related responsibilities in the application and the research work, which will be submitted together with the signature and seal page. The cooperative research institution shall stamp the official seal on the signature and seal page, and ensure the name on the official seal is consistent with the name of the institution in the application. A cooperative research institution registered as a host institution with NSFC shall stamp the official seal of the host institution; a cooperative research institution that is not registered shall stamp the official seal of the legal entity. **The host institution should stamp the official seal on the signature and seal page of the application form and submit it together with the Project Plan.** The signature and seal information shall be consistent with that of the electronic application. NSFC shall handle the cases where the signed and sealed documents are not provided according to the requirements above based on relevant rules and regulations.

iii. Explanation on non-acceptance situations

According to the *Regulations*, applications for NSFC funds shall not be accepted under any of the following circumstances:

1. The applicant and main participants do not meet the requirements specified in the *Regulations*, this *Guide* and relevant management measures.

2. The application materials do not comply with the requirements stipulated in this *Guide*.

3. The applicant and main participants are banned from undertaking or participating in any science and technology activities supported by national fiscal funding due to breach of research integrity and scientific and technological ethics.

4. The number of proposals does not comply with the Application Limit requirements.

II. Application limit

i. General requirements

1. Applicants shall only apply for one type[1] of program per year, excluding

[1]Type of Program: For Program of Joint Funds, those under the same agreement are considered as one type of program. For Science Fund for Creative Research Groups, Type A and B are considered as one type of program. For Science Fund for Excellent Research Groups (including the former Basic Science Center Program), Type A, B, and continued grants are considered as one type of program.

Unless otherwise specified, National Science Fund for Distinguished Young Scholars in this *Guide* includes newly approved and continued grants; Science Fund for Creative Research Groups includes Type A and B; Science Fund for Excellent Research Groups includes Type A, B, and continued grants.

Integrated Projects and Strategic Research Projects of the Major Research Plan Program, Scientific Activity Projects of the Special Fund and International (Regional) Exchange Program.

2. Applicants who have received funding as the PI in the previous year for General Program, Major Program, Major Research Plan Program (excluding Integrated Projects and Strategic Research Projects), Program of Joint Funds (referring to the Joint Fund with the same name), and Fund for Less Developed Regions, may not apply for the same type of program again.

ii. Restriction on the total number of projects applied for and undertaken

Unless otherwise specified, projects whose funding period ends in the year of application shall not be counted toward the total number of projects applied for and undertaken. Proposals that fail the eligibility check shall not be subjected to the restriction on the total number of projects applied for and undertaken .

1. Limit on the total number of projects applied for and undertaken

For researchers with a senior academic rank (title), the total number of the following programs for which he or she applies as both applicant and main participant) and undertakes (as both PI and main participant) shall not exceed two: General Program, Key Program, Major Program, Major Research Plan Program (excluding the Integrated Projects and Strategic Research Projects), Joint Funds, Young Scientists Fund (C) (including the former Young Scientists Fund projects), Young Scientists Fund (B) (including the former Excellent Young Scientists Fund projects), Young Scientists Fund (A) (including the former National Science Fund for Distinguished Young Scholars projects), Fund for Less Developed Regions, Fund for Less Developed Regions, Key International (Regional) Joint Research Program, International (Regional) Joint Research Program under Agreements/MoUs with direct costs of more than 2 million yuan per project (only the PI are counted, main participants are not counted), Special Fund for Research on National Major Research Instruments, Science Fund for Creative Research Groups (excluding projects approved in 2024 and before), Science Fund for Excellent Research Groups (including the former Basic Science Center Program), Original Exploratory Program, and Emergency Program and Special Program with funding period of over one year (unless otherwise specified, and except for the scientific activities projects under Special Funds). **For researchers without senior academic rank (title)**, the total number of the above programs for which he or she applies and undertakes as PI shall not exceed **one, and the number shall not exceed two when he or she applies for and undertakes the projects as a main participant.**

The grants that were awarded in 2019 or earlier that are undertaken **by researchers with a senior academic rank (title)** as main participants shall not be counted toward the total number. However, projects for which researchers apply as

applicants or main participants, as well as projects awarded to researchers as PI and main participants in 2020 and subsequent years, shall be counted toward the total number.

Grants awarded in 2022 or earlier that are undertaken by researchers without a senior academic rank (title) as main participants shall not be counted toward the total number. However, projects for which researchers apply for as applicants or main participants, as well as those awarded to researchers as PI and main participants in 2023 and subsequent years shall be counted toward the total number. In case a researcher receives the senior academic rank (title), the projects he or she undertakes as the PI shall be counted toward the total number whereas those undertaken as a major participant shall not.

2. Programs not subject to the total number limit

There is no number limit for Tianyuan Fund for Mathematics, International (Regional) Joint Research Program under Agreements/MoUs with direct cost of no more than 2 million yuan per project, International (Regional) Exchange Program, Integration Program and Strategic Research Program of the Major Research Plan, Research Fund for International Scientists, International Collaboration Fund for Creative Research Teams, scientific activity projects under Special Program, other types of programs with funding period of no more than 1 year, and other programs specified in this Guide.

iii. Special requirements for certain types of programs

1. Key Program

The total number of Key Program projects applied for as applicant and currently undertaken as PI shall be limited to one. Projects concluding in the year of application are excluded in this count.

2. International (Regional) Cooperation and Exchange Program

The total number of International (Regional) Joint Research projects applied for as applicant and currently undertaken as PI shall be limited to one. Projects concluding in the year of application are excluded in this count.

For International (Regional) Exchange Program, the total number of projects applied for as applicant and currently undertaken as a PI under the same Agreement/ MoU shall be limited to one.

3. Special Fund for Research on National Major Research Instruments

Researchers with senior academic rank (title) shall apply (as applicant and main participant) for Special Fund for Research on National Major Research Instruments only once in the same year.

The PI and main participants of a project of Special Fund for Research on National Major Research Instruments are not allowed to apply for or participate in the application for the same program before the ongoing project is completed.

The PI of a project of Special Fund for Research on National Major Research

Instruments (with department's recommendation) is not allowed to apply for any type of NSFC program except for Young Scientists Fund (A), Strategic Research Program of the Major Research Plan, and scientific activity projects under Special Program.

4. Programs of Joint Funds

The total number of Joint Fund projects for which a researcher applies (including as applicant and main participant) and currently undertakes (including as PI and main participant) shall not exceed two. Projects concluding uin the year of application are excluded in this count. At the stage of application, proposals for Joint Fund for Corporate Innovation and Development, Joint Fund for Private Enterprise Innovation and Development, the Major Special Projects of Joint Fund, and Ye Qisun Science Fund are not counted toward the total number at the time of submission, but will be counted after submission confirmed by NSFC. For the Programs of Joint Fund mentioned above, the total number of projects under the same named Program of Joint Fund for which a researcher applies (including as applicant and main participant) and currently undertakes (including as PI and participant) shall not exceed 1. Projects concluding in the year of application are not included in this count.

5. Young Scientists Fund (A) and Young Scientists Fund (B)

At the stage of application, proposals for the Young Scientists Fund (A) and Young Scientists Fund (B) are not included in the counting quota; however, they will be counted after their submissions are confirmed by NSFC. The two programs are subject to the new coordination requirements for national science and technology talent programs, as specified in their respective sections in this Guide.

6. Science Fund for Excellent Research Groups (including the former Basic Science Center Program), the Science Fund for Creative Research Groups, the Continued Fund for Young Scientists Fund (A, including the former Continued National Science Fund for Distinguished Young Scholars), and the International Collaboration Fund for Creative Research Teams

At the stage of application, proposals for the Science Fund for Creative Research Groups and the Science Fund for Excellent Research Groups are not included in the quota count. They will be counted from submission until the official funding decision is issued by NSFC and upon approval. Proposals for the Science Fund for Excellent Research Groups that do not enter the on-site inspection procedure will not be counted.

Applicants and main participants shall only apply for and participate in one project per year for the Science Fund for Creative Research Groups, the Science Fund for Excellent Research Groups, the Continued Fund for Young Scientists Fund (A) or the International Collaboration Fund for Creative Research Teams.

The PI and main participants with senior academic rank (title) who are undertaking the project of Science Fund for Creative Research Groups shall not apply

for Science Fund for Excellent Research Groups; however, applications are allowed in the year of conclusion.

The PI and main participants (key members) shall not apply for any other NSFC grants before the awarded project concludes except for the Young Scientists Fund (A) and the Young Scientists Fund (B), the Strategic Research Program of Major Research Plan, and Scientific Activities Projects under Special Program.

The PI who is undertaking or has completed the project of the Young Scientists Fund (A, including the former Continued National Science Fund for Distinguished Young Scholars), the Science Fund for Creative Research Groups, or the Science Fund for Excellent Research Groups (including the former Basic Science Center Program), is not eligible to apply for or participate in the application for International Collaboration Fund for Creative Research Teams.

The PI with senior academic rank (title) who is undertaking the project of International Collaboration Fund for Creative Research Teams, Science Fund for Creative Research Groups, Science Fund for Excellent Research Groups (including the former Basic Science Center Program) is not eligible to apply or participate in the application for International Collaboration Fund for Creative Research Teams.

Participants who withdraw from the Fund for Creative Research Groups or the Basic Science Center Program is not eligible to apply for or participate in the applications for those two types of programs within 2 years.

The PI who is undertaking or has completed the project of the Continued Fund for Young Scientists Fund (A) (including the former Continued Funding for National Science Fund for Distinguished Young Scholars) is not eligible to apply for or participate in the application for the Fund for Creative Research Groups.

7. Science Fund for Excellent Research Groups and Special Fund for Research on National Major Research Instruments (department's recommendation)

Applications for the Science Fund for Excellent Research Groups and Special Fund for Research on National Major Research Instruments (with department's recommendation) are mutually exclusive in the same year.

8. Original Exploratory Program

The Original Exploratory Program is not counted toward of the total number of applications and grants at application stage, but will be included in the scope of the total number of applications and grants after the grant is awarded (except for projects with funding period of no longer than 1 year).

Researchers can only apply for one project under Original Exploratory Program (including pre-application) within n the same year.

9. Research Fund for International Scientists and International Collaboration Fund for Creative Research Teams

For the Research Fund for International Scientists and the International Collaboration Fund for Creative Research Teams, the total number of project that a

researcher can apply for as the applicant and undertake as the PI is limited to 1.

iv. The limit on the PI for accumulated number of funding

1. For the Young Scientists Fund (C), Young Scientists Fund (B), Young Scientists Fund (Type A), Science Fund for Creative Research Groups, and Science Fund for Excellent Research Groups, an applicant may receive funding only once. The Continued Fund for both Young Scientists Fund (A) and Science Fund for Excellent Research Groups are not subject to this limitation. Awardees for the Young Scientists Fund (A) and the Science Fund for Excellent Research Groups may apply for Continued Funding upon the completion of their projects.

2. An applicant may only be awarded once for each of the three tiers of the Research Fund for International Scientists, namely, the Research Fund for International Young Scientists, the Research Fund for International Excellent Young Scientists and the Research Fund for International Senior Scientists.

3. Starting from 2016, for the Fund for Less Developed Regions, an applicant's accumulated number of funding cannot exceed three. Projects approved in and before 2015 are not included in this count.

v. Joint Limit with National Science and Technology Programs

In accordance with the *Notice of the General Office of the Ministry of Science and Technology, the General Office of the Ministry of Finance and the Office of the National Natural Science Foundation of China on Further Strengthening the Project Approval Management of National Science and Technology Plan* a joint limit is imposed on the NSFC Major Program (only for PI and co-PIs of grants), the Science Fund for Excellent Research Groups (including the former Basic Science Center Program, only for academic leaders and key members), the Special Fund for Research on National Major Research Instruments (only for PIs and main participants with senior academic rank (title) of the department recommended projects) and the National Key R&D Program (only for PIs and co-PIs, and excluding Young Scientist Program, Small and Medium-sized S&T-based Enterprise Program, and International Cooperation Program), and the National S&T Major Program (only for PIs and co-PIs, and excluding Young Scientist Program). The number of projects (subjects) that a researcher applies for and undertakes in the same period shall not exceed two in principle. Applications in the year when the above projects (subjects) are completed are not counted in the number limit.

For researchers with senior academic rank (title), the total number of the Special Fund for Research on National Major Research Instruments (including Special Program on National Major Research Instruments) and the National Key R&D Program-"Basic Scientific Research Infrastructure and Major Research Instrument R&D" (Scientific equipment direction) one may apply for (including as applicant and main participant) and undertake (including as PI and main participants) shall not

exceed one.

vi. Special notice

1. During the evaluation period (prior to the NSFC's final decision), the application shall be counted toward the total number limit, with the exception of those under Original Exploratory Program. Applications not subject to the restriction on the total number of projects include: applications for Science Fund for Excellent Research Groups that do not enter the site inspection procedure, applications for Special Fund for Research on National Major Research Instruments (free application) that do not enter the budget review procedure, applications for Special Fund for Research on National Major Research Instruments (department's recommendation) that do not enter the budget review or site inspection procedure.

2. In the case that applicants engaged in multiple host institutions apply for or undertake through different host institutions, the Limit is still applicable.

3. In case of an inconsistency between other management regulations and this Limit in terms of total project numbers, the latter shall prevail.

III. Budget Preparation

i. General requirements

The applicants shall formulate and submit the project budget in accordance with the guidelines of relevant official documents of the Central Government and the State Council, as well as the *Measures for Fund Management of NSFC-Supported Projects* and the *Specification of Budget Table Preparation for NSFC-Supported Projects*, following the principles of policy compliance, target relevance and economic rationality. The proposed budget shall reflect the actual needs of the proposed research. The host institution shall carefully examine and approve the proposed budget in accordance with relevant regulations.

ii. Contents

There are two categories of financial management system for NSFC-funded projects, i.e., the lump-sum payment system and the budget-based system.

1. Lump-sum projects

Applicants of lump-sum projects are not required to prepare a project budget when submitting their applications.

2. Budget-based projects

Applicants of budget-based projects shall complete the Budget Table of the NSFC-funded Projects (hereinafter referred to as Budget Table) and the Budget Justification in accordance with the actual needs of the proposed research and the average funding amount of a certain type of program.

(1) Budget Table

Only the amount of direct costs, fund to be allocated to cooperative research institutions in the direct costs and fund from other sources are required to be filled in. There is no fixed proportion for each account of the direct costs. Applicants shall draft the budget based on the definition, scope and standards of each account and their actual needs. Indirect costs will be uniformly calculated by the NSFC. The accounts of direct costs on the Budget Table are as follows:

Equipment expenses refer to the costs of purchase or trial production of special instruments and equipment, the upgrading and modification of existing instruments and equipment, and the rent of instruments and equipment from other institutes during the implementation period of the project. Computing instruments and software tools can be included in the equipment expense. The purchase of new equipment should be strictly controlled to avoid duplicate purchases by encouraging open sharing, independent research and development, renting special instruments and equipment, and upgrading existing instruments and equipment.

With regard to equipment purchase cost, applicants shall prepare the budget scientifically, rationally, and truthfully based on the existing resources and conditions for the proposed research. During project implementation, the host institution shall fulfill its responsibilities and carefully review any proposed increases to the equipment purchase budget.

Experimental and Operating expenses refer to the purchase, transportation, handling and arranging of low-value consumables such as materials and auxiliary materials consumed during the implementation period of the project, as well as test and processing costs, fuel and power costs, publication/documentation/dissemination/IPR service costs, conference/travel/international cooperation and exchange costs, and other related expenses.

Labor costs refer to the labor fees paid to graduate students, postdoctoral fellows, visiting scholars, and researchers and research assistants employed for the project, as well as the consulting fees paid to the experts hired on a temporary basis during the implementation period of the project. The expenditure standard of labor costs for the hired personnel should be level with the average salary of the employees of local research community and technical service industry, depending on the assignments they undertake in the project. The social insurance subsidies and housing provident funds paid by the host institution are included in the labor costs subject. Fees paid to temporarily hired consulting experts shall not be paid to any personnel involved in the research and management of this project or its sub-projects. Budget for such fees shall be prepared in accordance with the relevant provisions of the *Notice of the Ministry of Finance on the Measures for the Expert Consultation Fees for Central Financial Research Projects*.

Funds to be allocated to cooperative research institutions under direct costs: please fill in the total amount of fund under direct costs that is to be transferred

from the host institution to cooperative research institutions. When determining this amount, the host and cooperative institutions should engage in full consultation based on the actual needs of the project, taking into consideration the necessity of the transfer and the reasonableness of the amount.

Fund from other sources: please fill in the funds obtained from the host institution and other sources.

(2) Budget Justification

Applicants shall describe the direct costs budget of each account in the Budget Table, and funds under direct costs to be allocated to cooperative research institutions and from other sources in Budget Justification. The justification of each account shall explain subjects of expenditure based on the research tasks.

Equipment expenses: applicants shall elaborate on the necessity and rationality of expenditures on equipment. Basic cost estimation justifications shall be provided according to the categories of equipment purchase, trial production and modification, and rental and usage. Detailed explanations regarding the equipment's main performance indicators and key technical parameters shall be made for a single purchase of equipment totaling 500,000 yuan or above.

Experimental and Operating expenses: applicants shall elaborate on material costs, test and processing costs, fuel and power costs and other expenditure categories for basic calculation and explanation.

Labor costs: applicants shall consider the necessity of the research task undertaken by the recipients, the working hours dedicated to the project, the rationality of the cost standard and other factors, and make basic calculation and explanation according to the types of personnel. Expert consultation fee shall be administered in accordance with relevant national regulations.

Funds to be allocated to cooperative research institutions under direct costs: applicants shall provide description on the necessity of research tasks that cooperative research institutions undertake and the transfer of direct costs determined through consultation. In case there are more than one cooperative research institution, they shall be addressed respectively.

Funds from other sources: applicants shall briefly indicate the source of funding and the subjects of expenditure.

iii. Management of funds allocated to cooperative research institutions

1. If the applicant and the participant of a project are not from the same host institution, the participant's host institution (based in the Chinese mainland) shall be regarded as a cooperative research institution.

2. The applicant and the participant shall reach an agreement on the division of research tasks, and together with their respective host institutions, shall determine the funds to be transferred for cooperative research through consultation. The funds to be transferred may include both direct and indirect costs. In the Budget Table and

Budget Explanation, only the direct cost portion of the funds to be transferred for cooperative research needs to be filled in; the indirect cost portion shall be specified in the cooperative research agreement (contract).

3. The applicant and the participants of the project shall prepare their respective budgets (hereinafter referred to as sub-budgets) according to their respective research tasks. Each sub-budget shall be signed by the applicant and the participant (in the blank space of the Budget Table). The applicant shall complete a total budget of the project and submit it to NSFC. The sub-budgets need not to be submitted to NSFC, but shall be kept in the respective host institutions for future reference.

4. For collaborative research, the host institution shall, as the primary entity, sign a collaborative research agreement (contract) with the cooperative research institutions and affix its official seal or a specialized seal of equivalent validity. The collaborative research agreement (contract) shall be signed no later than one month after the review of the Project Plan. The agreement (contract) shall specify whether funds will be transferred, the amount to be transferred, the transfer schedule, the purpose of the funds, the research tasks to be undertaken by the cooperative research institutions, and the handling of breaches of contract.

The collaborative research agreement (contract) is not required to be submitted but shall be kept on file at the host institution for future reference. The host institution shall strengthen its review of collaborative research agreements (contracts) and any subsequent supplements, and shall retain them as project archives for reference.

5. The host institution is responsible for supervising the research activities and funds management of its cooperative research institutions related to the project. It shall establish and improve a fund management system for collaborative research, clarifying requirements including contract review, budget preparation, funds transfer, and funds utilization. The host institution shall review the authenticity, necessity, and reasonableness of collaborative research agreements (contracts) and sub-budgets, and properly archive the relevant documents for future reference as required. During project implementation, the host institution shall, based on the PI's recommendations and factors such as the research progress, timely transfer funds to the cooperative research institutions in accordance with the Project Plan and the collaborative research agreement (contract), and exercise proper supervision over the transferred funds. The host institution shall not delay funds transfers without justifiable reasons.

The host institution shall establish a management mechanism for adjustments to collaborative research agreements (contracts). In cases of adjustments to the collaborative research content and changes to the transferred funds during the research process, a supplementary agreement (contract) shall be signed in a timely manner, and such adjustments or changes shall be separately explained in the Project Progress Report and the Project Conclusion Report. Except for the cooperative research institutions specified in the Project Plan, no cooperative research institutions shall be added, removed, or changed without approval. Any change to cooperative

research institutions shall be submitted to the NSFC for review. The host institution shall control any increase in the funds to be transferred for collaborative research and shall fully demonstrate the necessity of such an increase. A supplementary agreement (contract) shall be signed if an increase is indeed necessary.

The host institution is responsible for supervising the transferred funds. It shall refine management requirements through provisions in the collaborative research agreement (contract), clarify the rights and responsibilities of the institutions and their supervisory requirements, and urge the cooperative research institutions to manage and use funds legally, compliantly, and efficiently. The host institution may, as needed, require the cooperative research institutions to provide relevant financial documents on the income and expenditure of transferred funds to supervise their fund utilization.

Cooperative research institutions bear direct responsibility for the authenticity and compliance of project fund utilization. They shall manage and use project funds in accordance with the *Measures for the Management of Funds for NSFC Funded Projects* and the collaborative research agreement (contract), properly archive relevant documents for future reference as required, and cooperate with the host institution for the supervision and management of the transferred funds. Cooperative research institutions shall not further transfer funds to external parties in the form of commissioned research or collaborative research.

iv. Responsibilities of host institutions and PIs

The host institution, bearing the responsibility for the project funding management, shall establish and improve the funding management mechanism following the principle of unified leadership, multi-level management, and individualized responsibility. With internal regulation, performance management and supervision and restraint mechanisms put in place, the host institution shall review and approve the project budget, expenditure, final account as well as the budget adjustments carefully, so as to achieve "consistency between real expenditure and final account", and ensure that all expenditures are truthful, legitimate and effective. The PI in charge of the project is directly responsible for the use of the grant, and bears legal responsibility to ensure the compliance, rationality, authenticity and relevance of the use of the grant.

v. Management of unexpended funds

The NSFC-funded grants are earmarked for supporting scientific researchers to carry out basic research and explorations at frontiers of science, as well as strengthening personnel capability and team-building. Such funds must be used for the designated purposes. The host institution shall establish and refine management systems for unexpended funds, revitalize the use of unexpended funds, speed up the progress of fund use, and improve the efficiency of fund expenditure. The PI

responsible for the project shall arrange the expenditures reasonably according to the needs of scientific research activities, not only to avoid crash expenditure, but also to prevent excessive leftovers.

For projects with an unexpended fund ratio over 30%, the PI shall provide a detailed explanation in the project conclusion report regarding the reasons and the plan for subsequent use of the funds.

For projects approved for conclusion by the NSFC, the host institution will be fully in charge of coordinating the use of the remaining funds. The host institution shall make arrangements to use these funds for direct costs in basic research, prioritizing the research needs of the team undertaking the project. After the project is completed, indirect costs cannot be disbursed from the remaining funds. For unexpended funds that remain unused by the original project team after two years (calculated from January 1 of the year following receipt of the conclusion approval notice from NSFC), the host institution shall revitalize them and make arrangements within the institution for basic research. An internal basic research program using pooled remaining funds to support young talent or original research is encouraged. Should there be any other requirements for the management of central government scientific research funds, those requirements shall prevail. Host institutions shall report on the management and utilization of unexpended funds in their annual management reports.

If a project conclusion is not approved by the NSFC, the host institution shall return the remaining funds to NSFC within 30 days upon receiving the written notice from NSFC.

vi. Notes on budget preparation for the Special Fund for Research on National Major Research Instruments and the Major Program

For projects of the Special Fund for Research on National Major Research Instruments and the Major Program, applicants shall carefully prepare the budget based on the actual needs of the research tasks, with the principles of objective relevance, policy compliance, and economic rrationality. The NSFC will organize budget reviews. For applications to the Special Fund for Research on National Major Research Instruments, NSFC will not support projects that seriously exceed the actual needs. When completing the budget, applicants shall carefully refer to the budget preparation examples for each expenditure category provided in the budget preparation instructions.

Equipment costs: for individual pieces of equipment priced at 50,000 yuan or more, a detailed explanation shall be provided, including the main performance indicators, key technical parameters, specific model and purpose of the equipment, as well as its role in the project research, the necessity of the expenditure, and the reasonableness of the cost estimation. For individual pieces of equipment priced less than 50,000 yuan, a categorical explanation shall be provided, including the relevance

to the research tasks, the necessity of the expenditure, and the reasonableness of the cost estimate.

When preparing a budget for equipment trial production, if the trial-produced equipment is a process product (i.e., components or tooling products developed to accomplish project tasks), the relevant costs incurred in the trial production (including directly related costs such as those for small instruments, materials, testing and processing, and fuel and power) shall be included in the equipment trial production budget. If the trial-produced equipment is the target product (i.e., where the main task of the project is to develop such equipment), the cost estimate shall be listed separately under appropriate budget categories such as equipment costs, operating expenses, and labor costs.

Experimental and operating expenses:

1. Materials purchase: when preparing a budget for material purchase, the relevance of the main materials to be consumed during project implementation to the project tasks, the necessity of the purchase, and the reasonableness of the quantities shall be explained. Costs for material transportation, loading/unloading and handling shall be estimated together with the material ex-factory (supply) price. Other auxiliary materials and low-value consumables may be briefly explained by category.

2. Testing, analysis, and processing costs: when preparing a budget for testing, analysis, and processing, the specific content and requirements of such work, as well as their relevance and necessity to the project research tasks, shall be explained in detail. The basis for estimating the number of tests, specifications, prices, etc., shall be detailed. Core research tasks shall not be subcontracted under the guise of testing, analysis, and processing costs.

3. Fuel and power costs: when preparing a budget for fuel and power, the estimation shall be based on the anticipated operating hours of relevant instruments and scientific devices and the current (at the time of budget preparation) prices of water, electricity, gas, fuel, etc. The sources or allocation bases for the parameters and the estimation method shall also be provided. Routine costs for water, electricity, gas, and heating at the host institution shall be covered by indirect costs.

4. Publication/documentation/dissemination/IPR service costs: when preparing a budget for publication, documentation, information dissemination, and IPR services, explanations shall be provided separately for publication fees, material costs, purchases of specialized software, literature retrieval fees, etc.

5. Meeting/travel/international cooperation and exchange costs: when preparing a budget for meetings, travel, and international cooperation and exchange, the principles of “practicality, streamlining, efficiency and economy” shall be upheld, and relevant national and institutional regulations shall be strictly followed.

Labor costs:

1. No proportional limit is specified for the labor cost budget. It shall be prepared and explained realistically based on factors such as the full-time working

hours of researchers and relevant personnel involved, as well as the tasks they undertake.

2. When preparing a budget for labor costs for graduate students, postdoctoral fellows, etc., consideration shall be given to the person-months of their participation in the project research, as well as the institution's management methods of research labor costs to its graduate students and postdoctoral fellows. The estimation shall be based realistically on the average disbursement level for graduate students and postdoctoral fellows in research institutions in the same region and field.

3. When preparing a budget for labor costs for project-employed researchers and research support personnel, the necessity of the research tasks they undertake and the reasonableness of their allocated working hours shall be explained.

vii. Miscellaneous

1. In accordance with the guidelines of the *Opinions of the General Office of the State Council on Reforming and Improving the Management of Scientific Research Funds Financed by the Central Government* and The *Regulation on the Funding Management of NSFC-funded Projects*, the host institution shall fulfill its responsibility for the funding management, timely improve its internal administrative systems, enhance the relevant services for researchers, fully implement the financial assistant system for scientific research, improve the management of financial reimbursement, and thus establish an information-based reimbursement mechanism addressing actual needs of scientific research.

2. Projects funded by the NSFC under the Young Scientists Fund (A/B/C) and the Program for Young Students in Basic Research are subject to the lump-sum financial management system, and therefore are not required to prepare project budgets. Other types of programs shall adopt budget-based system.

3. The figures on the budget table shall be measured in "ten thousand yuan", rounded up to 2 decimal places. The costs or prices of each item are measured in "yuan", rounded to the nearest integer. Foreign currency must be converted into RMB at the spot exchange rate published by the People's Bank of China.

IV. Requirements for scientific integrity and S&T ethics

To enhance scientific research integrity and S&T ethics, prevent scientific misconduct in science fund application, the NSFC proposes instructions and requirements for scientific integrity and S&T ethics to be followed. The applicant shall inform the main participants of the content of the proposal and the requirements of scientific research integrity and science and technology ethics to ensure the main participants' full awareness. The applicant and the main participants shall be responsible for the authenticity, integrity and legality of the content of the proposal and supporting materials. The applicant shall strengthen the relevant education and

training for members of the research group, especially the students participating in the research project.

i. About personal information

1. The NSFC project shall be applied for by the applicant in person. Applicants and main participants shall truthfully fill in the personal information and be responsible for its authenticity; at the same time, the applicant shall also be responsible for the authenticity of the personal information of all the main participants. It is strictly prohibited to forge or provide false information.

2. The academic degree information of applicants and main participants shall be consistent with that stated on the diploma. The date of degree acquisition shall be match that indicated on the diploma.

3. Applicants and main participants shall faithfully and accurately fill in the title information validly appointed by the host institution or cooperative research institutions (For titles appointed internally, the appointing institutions shall have the qualification for evaluation of corresponding titles). Forgery or providing false title information is strictly prohibited. The host institution shall verify the professional title information of applicants and main participants to ensure compliance with the above requirements.

4. Applicants who are unemployed or whose employer is not a registered host institution shall truthfully fill in the work unit and the employment information. Provision of false information is strictly prohibited.

5. Applicants and main participants shall faithfully and accurately complete their curricula vitae, including a detailed record of academic titles and their corresponding periods. It is strictly prohibited to omit the middle academic title and only write the highest one, for example, "1986 to present, Professor". It is strictly prohibited to forge or falsify relevant information.

6. Applicants shall accurately provide the information of their postgraduate and postdoctoral supervisors, and shall not falsify or omit any relevant informationsss. If the applicant is an on-the-job candidate pursuing a graduate degree, he/she shall truthfully fill in the identity information, and provide relevant materials according to the requirements stated in the "Eligibility of applicants and requirements for applications" section. Concealmemt of such information is prohibited.

ii. About research content and foundation

1. Applicants shall complete the body part of the proposal in accordance with the Guide, instructions provided in the online application system and requirements of the outline, and faithfully present their relevant research work and research contents. Plagiarism or fraud are strictly prohibited. (including but not limited to plagiarism of others' academic viewpoints, research ideas, research schemes, and text expressions with complete semantics). Violation of law and regulations, codes of ethics and

regulations regarding S&T security are also strictly prohibited.

2. When filling in the research achievements such as papers, applicants and main participants shall truthfully list the names of all authors (inventors or participants) of the research results as they appeared in the original publications, and shall not alter the order of authors (inventors or participants). **The representative papers listed in the CV shall truthfully reflect the authors' names, and shall not falsely label the first author or corresponding author, change the meaning of author ranking, or exaggerate personal contributions. The scope for collecting personal contribution information for achievements includes applicants for all program types and main participants of Science Fund for Creative Research Groups and Science Fund for Excellent Research Groups.**

3. Research results obtained from scientific misconducts such as forgery, tampering, plagiarism, commissioning "third party" to write or submit the proposal, and peer-review fraud as the basis of applying for science funds shall not be included as the foundation or results to apply for NSFC funding.

4. Applicants shall truthfully describe the peer reviews of research results, and shall not fabricate or exaggerate their academic contributi.

5. Applicants and main participants shall strictly abide by the academic norms and codes of conduct recognized by the scientific community. Research on humans, experimental animals and other research involving ethical risks in science and technology shall pass ethical review in accordance with the requirements of the state, department (industry) and institutions.

6. Proposals with same or similar research contents shall not be submitted by different applicants through different host institutions to apply for different types of programs simultaneously. Re-submission of projects that have already been funded is not allowed.

7. The research content of the proposal should not be t identical to that of any proposal that has been submitted through another channel and is currently under review. If the research content has been funded through other channels or programs, applicants shall state the funding situation and the difference and connection with the proposed project in the application. Applicants shall not resubmit the same research content to the NSFC for funding. During review period of the NSFC project, if the same research content receives funding from other channels, NSFC shall be timely informed.

8. When preparing the application, if generative AI technologies are used to track research trends or collect and organize references, applicants must verify the authenticity and accuracy of the information and references generated by the generative AI. Applicants shall be responsible for the generated content used, shall make a comprehensive and truthful declaration of its use, and shall label the content in accordance with relevant national regulations. Applications directly generated by generative AI and unverified generated content shall not

be used.

iii. Other relevant requirements

1. Prior to submission of proposals, applicants and the host institutions shall strictly comply with respective commitments made during the process of application and review.

2. It is strictly prohibited to engage in any activities that may affect the fairness of NSFC review.

V. Responsibilities of host institutions

1. Host institutions shall organize application work by strictly abiding by the *Regulations*, *Guide to Programs*, *Regulations on Fund Management of National Natural Science Fund Host Institutions*, other relevant notices and management methods and funding management methods, the *Regulation on the Funding Management of NSFC-funded Projects,* among others.

2. Host institutions shall implement the *Opinions of NSFC on Further Strengthening the Science Fund Management of Host Institutions*, earnestly fulfill the responsibilities of management, and strengthen and standardize science fund management.

3. Host institutions shall establish a scientific research ethics review mechanism to prevent ethical and security risks. In accordance with relevant laws, regulations and codes of ethics, host institutions shall establish and improve scientific research ethics management systems; strengthen ethical review mechanism and process supervision; improve the sense of responsibility and legal awareness of scientific research personnel with regard to scientific research ethics through publicity, education and training.

4. Host institutions shall establish a scientific and technological security review mechanism to ensure no confidential or sensitive information appears in the proposals. In accordance with relevant laws and regulations, host institutions shall establish and improve scientific and technological security management systems; strengthen liability system for biosecurity, information security and other scientific and technological security; improve the sense of responsibility and legal awareness of scientific research personnel with regard to scientific and technological security, etc. through publicity, education and training.

5. Host institutions are held accountable for the eligibility of applicants, and shall examine and verify the authenticity, completeness and legality of proposals. Host institutions that allow applicants without employer or whose employer is not a registered host institution as listed in Article 11 Clause 2 of Regulations to apply for funds via their institutions, shall bear the responsibilities listed in Article 13 of the Regulations, and sign the written contract. The written contract shall be archived at the host institution for further reference instead of being submitted to NSFC.

6. Host institutions should ensure that they themselves, collaborative institutions, applicants and main participants are not within a penalty period during which their application, undertaking and participation of S&T activities funded by governmental finance are restricted.

7. Host institutions should focus on the quality of the proposals, rather than the number of proposals attained by mass mobilization, setting rigid goal, and adopting reward and punishment measures linked to proposal submissions, so as to gradually improve the overall level of basic research at their institution.

8. Host institutions should upload the electronic scanned copy of the 2026 NSFC Host Institution Letter of Commitment for Project Application that is signed by the legal representative and stamped with the official seal in a timely manner, to ensure applicants can finish and submit their proposals online on time; and confirm and submit each and every proposal and its attachments, and the list of proposals (proposals not submitted by the peak season deadline will be exempt from submitting the list) of the host institution within the set time frame, to ensure all the proposals be accepted properly.

VI. Accountability

1. Host institutions that neglect management and fail to perform the duties of examining the authenticity, completeness and compliance of the application materials, or host institutions and cooperative institutions violating commitments, shall be punished depending on the severity of the situation by NSFC in accordance with the *Regulations*, *Notice of NSFC and MoST on Further Consolidating the Primary Responsibility of Institutions Undertaking National Science and Technology Programs (Special Projects, Funds, etc.) in Upholding Academic Culture and Scientific Integrity*, *Rules for the investigation and handling of scientific integrity cases (for trial implementation), NSFC Measures for Investigation and Handling of Research Misconduct, Memorandum of Cooperation on Imposing Joint Disciplinary Measures on Discredited Entities in the Area of Scientific Research*, requirements stated in this *Guide* and the signed letter of commitment.

2. Applicants and main participants violating the requirements and commitments stated in this *Guide* or other scientific and technological activities, once discovered, shall be punished (such as termination of review) depending on the severity of the situation by NSFC in accordance with the provisions of the *Regulations* and the *Guide*.

3. Suspected violations of scientific research integrity requirements will be investigated, and verified cases will be handled with seriousness. Clues and whistle-blowing reports related to the violation of disciplines and laws will be transferred to relevant discipline inspection and supervision departments in accordance with their respective management authority.

Funding Areas and Precautions for Scientific Departments

Department of Mathematical and Physical Sciences

Mathematical and physical sciences (including mathematics, mechanics, astronomy, physics I and physics II) are important foundations of natural science, and the precursor and basis for the development of contemporary science. In their own development, mathematical and physical sciences also provide theories, methods and means for other disciplines. Research findings in mathematics and physics play a key role in promoting the progress of both basic and applied scientific disciplines. Disciplines in mathematical and physical sciences are peculiar in characteristics, such as big differences between or among disciplines, and pure theoretical research (such as mathematics, theoretical physics, etc.) and experimental studies. Many disciplines feature “mega-science”, such as high energy physics, nuclear physics, astronomical physics, high temperature plasma physics, etc.

Mathematical and physical sciences have extensive interactions with other sciences, for example, with information science, life science and management science, physics with materials science, life science, information science and chemistry, astronomy with earth science, and mechanics with engineering science, material science and earth science. Their interactions produce a series of interdisciplinary and cross-boundary disciplines and new research areas, and at the same time research objects and areas are also expanding.

The Department will continue to increase its support on basic research that takes as its primary goals advancing the disciplinary development, promoting original innovation and training talented researchers and meeting the needs of national long-term development, as well as interdisciplinary research within the Department and with other departments.

In 2025, the Department received 14,305 applications for General Program, which is 1,366 more than 2024, increasing 10.567%, and funded 1,889 projects, and the funding rate was 14.84%, and the funding per project was 500,100 yuan on average. The funding per project was 435,800 yuan for mathematics, and 525,000 yuan for other disciplines. In 2024, the Department received 8,795 applications for

Funding of programs in Department of Mathematical and Physical Sciences in 2025

Unit: 10,000 yuan

Divisions		General program			Young scientist program			Less developed region program		
		Projects	Direct cost	Success rate (%)	Projects	Direct cost	Success rate (%)	Projects	Direct cost	Success rate (%)
Mathematics	Mathematics I	272	11 852	14.91	337	10 110	20.85	43	1 166	14.38
	Mathematics II	321	13 988	14.81	415	12 450	20.83	59	1 599	14.60
Mechanics	Dynamics and control	73	3 844	14.90	69	2 070	20.72	6	186	14.29
	Solid mechanics	173	9 091	14.82	180	5 400	20.76	17	525	14.05
	Fluid mechanics	95	5 000	14.75	95	2 850	20.88	6	185	13.64
	Bio-mechanics	37	1 933	14.98	38	1 140	20.88	3	93	15.79
Mechanics	Aerospace mechanics	30	1 563	14.78	31	930	20.81	1	31	12.50
	Explosive and impact dynamics	44	2 306	14.77	53	1 590	21.20	2	62	18.18
	Environmental mechanics	22	1 153	15.17	17	510	20.48	4	124	14.81
Astronomy	Astrophysics	79	4 127	14.99	83	2 490	21.23	11	338	17.19
	Basic astronomy and technical methods	36	1 913	14.57	31	930	19.87	0	0	0.00
Physics I	Condensed matter physics	278	14 595	14.75	292	8 760	20.74	34	1 050	13.77
	Atomic and molecular physics	41	2 150	15.07	44	1 320	21.26	6	185	15.38
	Optics	159	8 339	14.85	177	5 310	20.70	18	558	15.00
	Acoustics	43	2 267	15.03	45	1 350	21.03	4	124	17.39
	Quantum regulations	32	1 679	14.88	41	1 230	21.24	2	61	13.33
Physics II	Fundamental physics and particle physics	120	6 276	14.87	134	4 020	21.68	16	493	17.02
	Nuclear physics, nuclear technology and its applications	148	7 757	14.83	161	4 830	20.10	6	185	10.71
	Accelerator, reactor and detectors	57	3 023	14.69	66	1 980	20.69	1	31	14.29
	Plasma physics	63	3 314	14.89	65	1 950	21.10	4	124	14.81
Total or average		**2 123**	**106 170**	**14.84**	**2 374**	**71 220**	**20.83**	**243**	**7 120**	**14.47**
Direct cost per project			50.1			30.00			29.30	

Young Scientists Fund programs, and funded 2,281 projects. The success rate was 25.94%.

In 2025, the Department received 11,397 applications for Young Scientists Fund, and funded 2,347 projects. The success rate was 20.83%. The development of young scientists is particularly important for the development of mathematical and physical sciences. The Department has always been paying attention to fostering and supporting young scientists, and the funding rate of the Young Scientists Fund has always been higher than that of General Program projects.

In 2025, the Department received 1,679 applications for Fund for Less Developed Region, and funded 243 projects. The success rate was 14.47%. The funding per project was 293,000 yuan on average.

Division of Mathematics

Mathematics (A01～A06)

The Division encourages creative research on important issues in the mainstream and frontier of mathematics, explorations of new ideas, new theories and methods in mathematics and interdisciplinary applications, inter-crossing of different branch

disciplines with mathematics, and applied mathematical research on practical issues. Applicants are required to have sound research background and capability. Proposals should be prepared based on deep understanding of the current status of the research involved, main issues and relevant research methods and available approaches. The Division encourages researchers to consolidate research team, foster talents and promote academic exchanges through the funded research projects. Research direction adjustment is allowed when needed.

For basic mathematics, the funding aims at maintaining stable development of research directions where China is traditionally strong and has comparatively large-scale research capability, promoting fast development of research areas that are within the mainstream of international mathematical research but relatively weak in China, and promoting interdisciplinary research among branches of mathematics. Focus is given to algorithm, grid theory and its algorithm, geometrical method in representation theory, comparative geometry and geometric analysis in non-smooth space, application in of modern harmonic analysis in number theory, associate geometry and geometric measure, random analysis method and application, and mathematical problems in quantum field theory.

The funding for applied mathematics and computational mathematics aims at improving applications in solving practical problems, and gives more emphasis to basic theory and new methods with strong practical background and sound potentials for application. NSFC encourages mathematical modeling of practical problems, analysis and computation, and statistical methods and theory for big data, supports research on mathematical physical logic, algorithm complexity, discrete probability modeling, optimal algorithm, and combinational algorithm. Focus is given to applied research such as mathematical modeling and theory of new materials, uncertainty theory in data processing, coding theory and information security, mathematical modeling and analysis in environmental and energy sciences, bio information and life system, pathogenesis and control of infectious disease, mathematical methods for complex bio process and development of diseases, statistical methods in industry and medical science, statistical and optimization method in deep learning and artificial intelligence, modeling and analysis in economic prediction and financial risk management, and mathematical theory and new method for industrial, medical imaging and image processing.

Division of Mechanics

Mechanics (A07～A13)

Mechanics includes basic branches such as dynamics and control, solid mechanics, fluid mechanics, as well as interdisciplinary branches such as biomechanics, explosion and impact dynamics, and environmental mechanics. The

Division, on the one hand, supports projects with creative ideas in the frontiers of basic research, and promotes interdisciplinary research of mechanics with newly emerged artificial intelligence (AI), biomedical engineering and quantum information; on the other hand, pays close attention to research related to global frontier areas, economic development, major national interests and human health, strengthens integration of mechanics with major demand in fields such as aerospace, marine engineering, energy and environment, civil architecture, high end manufacturing, and defense equipment, pays attention to deep space, deep earth and deep sea, low space technology and engineering, brain machine interface, solid batteries, space power, etc.. The Division supports interdisciplinary research and encourages experimental research using the available experimental facilities and key labs in China and advocates development of engineering analysis software and development of scientific instruments.

Applications for research in areas of dynamics and control should pay attention to the theory and experimental studies on complex systems and dynamical behavior and regulation of major equipment. The Division encourages research on analytical mechanics on complex systems, nonlinear system dynamics, dynamic design and re verse problems, stochastic system dynamics and dynamics of aircraft and launcher vehicles. We also encourage interdisciplinary research between AI and dynamics and control theory, between dynamics and materials, physics information and biology disciplines, and promotes the application of the theory and method of dynamics and control in major engineering and equipment such as aerospace, ships and sea, high speed rail, autonomous unmanned intelligent system.

Applications in the area of solid mechanics should pay attention to proposing key topics from major engineering projects and focusing on deformation and failure behavior of materials and structures in various service environment and conditions. The Division encourages research on continuum mechanics, constitutive relations and strength theory, multi-scale and multi-field coupled mechanics, damage, fatigue, fracture and failure mechanisms, experimental method and techniques of materials in complex and extreme conditions, method and software of computational mechanics, evaluation of reliability and completeness of engineering structures, surface and interface mechanics, stability of solid materials and structures, optimal design of material and structures, and fluid solid coupled mechanics, etc. The Diviison also encourages interdisciplinary studies of solid mechanics with materials, physics, chemistry, biology, medicine and information disciplines, computational and experimental method based on AI, design method and functional regulation technology for new materials and structures, and promote application of solid mechanics theory and method in the field of deep space, deep earth and deep sea, major civil engineering, aerospace, high end equipment, extreme manufacturing, integrated circuits, and new energy.

Applications in fluid mechanics should pay attention to studies on key fluid

mechanic problems in major national need areas such as aerospace, energy, sea, transportation, life and health, major equipment, etc., and focusing on the theory, laws and mechanism governing complex flows. The Division strengthens research on compressible turbulent flows, high speed hydrodynamics, high temperature gas dynamics, multi-phase and multi- media fluid mechanics, flow noise and control technology, new measurement technology in experimental fluid mechanics, and new method in computational fluid mechanics. The Division also encourages studies on mechanism and laws of fluid flows in multi scales, multi process, extreme and non-equilibrium, cross field and cross media conditions.

Applications in biomechanics should pay attention to mechanical principles of life process on different scales, and clinical needs serving human health and diseases. The Division strengthens research on bio mechanical problems in multi scale bio mechanics and human damage and protection in complex environment and extreme conditions, on the development of new technology and new method of computation, and AI method and technology for clinical needs, and solving related mechanical problem in the diagnosis, treatment and rehabilitation. The Division also encourages development of materials, devices, technology and software in biomedical applications.

Applications for aerospace mechanics should focus on basic science and applied basic research related to important national need and future equipment of aerospace industry, and focus on basic research in areas of hypersonic flight, bear space and deep space exploration, extreme low orbit, cross field and cross media flight, smart morphing aircraft and groups, and low space flight, etc. The Division strengthens research on areas such as design basis for aircraft aerodynamic configuration and power system, new materials and structure mechanical performance evaluation, mechanical theory and coordination control method for smart flight, mechanics of manufacturing technology, total life digital twin technology, environment and life security support. The Division also encourages research on the application of AI, and uncertain engineering system theory in aerospace.

Applications for explosive and impact dynamics should focus on the dynamic response and mechanism of materials and structures under explosive and impact loading, and strengthen on research such as dynamic behavior of materials under high strain rate, new types of anti-impact materials and structures, method and diagnosis technology of dynamical experimental mechanics, human damage caused by impact loading and the technology of providing protection, basic theory of explosive physics, efficiency and control mechanism of energy release, etc. The Division also encourages theoretical simulation and experimental studies on deep space hypersonic impact, energy containing materials, and AI related technology.

Applications for environmental mechanics should pay attention to mechanical principles related to complex environment and natural disasters, and serve for the need of disaster protection and control, ecological repair and engineering design. The

Division encourages developing theory and numerical method, experimental technology for characterization and observation, and strengthen studies on basic theory of rock and soil mechanics, environmental fluid mechanics, extreme environment and disaster mechanics, and mechanical issues in agricultural environmental disaster, etc. The Division encourages studies on key mechanical problems in wind and sand disasters, marine dynamic disasters, rock and soil disasters, environmental pollution, carbon seal, urban disasters, and underground space security, etc.

The Division encourages basic research in micro-gravity fluid physics and combustion, micro-gravity manufacturing and space technology, space materials and structure service performance, space life sciences and medical engineering technology. For General Program applications, please mark “Micro-gravity science and technology” in the application forms.

Division of Astronomy

Astronomy (A14～A19)

The Division mainly supports research on astrophysics, basic astronomy, astronomical instruments and technology. In accordance with the global trend of astronomical development and the present situation in China, the Division supports research proposals with emphasis on the development of technology and instrumentation. Studies based on existing observation apparatus in China will be encouraged. The Division promotes the combination of innovative ideas, observation and theories, and studies on new technologies and methodologies for astronomy, especially those closely related to the mega-science facilities including those that are under construction in China. Interdisciplinary research is strongly encouraged so as to gradually build up research teams with special features and influence in international scientific communities. International cooperation and exchange will be given much attention.

In the General Program projects funded in recent years, a good balance has been achieved between astrophysics (including galaxies and cosmology, stellar and galaxy matters, solar and planetary system), basic astronomy (including astrometry, celestial mechanics and history of astronomy) and astronomical technology and methods. Young researchers have become the main force in astronomical research and more than half of the awardees are under the age of 40.

In 2026, in addition to strengthening continuous support for projects integrating theory and observation and projects conducted by young scientists, the Division will emphasize on interdisciplinary research with physics, space science, earth science, information science, and life sciences, etc., strengthen support on research on advantageous directions, promote research related to using large observatory facilities

in China, and foster research topics that have the potential of making breakthroughs. The Division encourages research on basic physical process on celestial bodies, celestial chemical evolution, and celestial bodies in the solar system, extra solar system planetary system, infrared astronomy, space astronomical measurement, space and time references, as well as astronomical research that addresses the national needs.

In the next few years, the Division will continue to give priority to support research in basic astronomy, astronomical technology and methods, and applications of AI in astronomical research, as well as to relative small scaled astronomical research institutions. The Division encourages research based on equipment that has already been built or being built, and conceptual studies on new technologies that are urgently needed for large-scale telescope and space exploration.

Division I of Physics

Physics I (A20～A24)

The funding scope of the Division covers research on condensed matter physics, atomic and molecular physics, optics, acoustics and new research areas formed between these four disciplines and other disciplines.

According to the current status and requirements of disciplinary development, the Division pays attention to study on experimental methods and techniques motivated by creative ideas, encourages research in new computational methods and simulation software closely related to experimental physics and exploratory types, key basic physical issues serving national needs, and new physical concepts and methods in interdisciplinary areas. The Division encourages especially in-depth and sustained studies on important physical problems and potential applications that have not become hot topics, and research in basic physical problems on devices, and emphasize on new areas and directions.

The condensed matter physics studies the structure, interaction, dynamic process of condensed matters and the relations between its macro properties. The Division pays attention to modeling and computation in electron related systems, macro quantum phenomenon, quantum phenomena and quantum effects in various low dimensional and small-scale systems, quantum information and solid state quantum computation, superconducting physical properties, self-spinning and magnetism, poly ferric properties and magnetic electro coupling, topological state and topological order, condensed matter physics in extreme conditions, device physics and advanced technologies and methods of characterization, computer simulation method and software, surface and interface physics, semiconductor physics, and physical problems in energy transformation, transport, and storage, non-linear response analysis, temporary physical phenomena in non-equilibrium conditions, Non-

Hermitian physics, physics and application of advanced functional materials. Encouraged areas include physical issues and experimental methods related to soft matters, biophysics, and AI, and applications of AI in condensed matter physics. The Division pays special attention to creative studies on material, device and physics having important application prospects.

The atomic and molecular physics studies structure, property, interaction and laws of motion of atoms and molecules, and their interactions with surrounding environment. The Division encourages researchers to pay attention to atomic, molecular structures, spectrum and regulations, complex interactions of atomic and molecular systems, cluster structure, physical property and assembly, atomic and molecular impact physics, atomic and molecular interactions with laser, atomic and molecular properties and regulation in external field, strong field atomic molecular dynamics, atomic and molecular physics in extreme conditions, cold atomic molecular physics, and their applications in quantum information, and precision measurement physics based on atoms and molecules. The Division encourages studies on frontier problems in atomic and molecular physics and interdisciplinary areas.

Optics studies generation, propagation of light and its interaction with matter. The Division supports research on generation and regulation of new optical field, super-fast and strong light physics and interference regulation, physical problems of light in complex media and micro nano structures, new optical materials and device physics, precision spectrum and high resolution imaging, physic problems in new wave band optics and new light sources, photo quantum physics and quantum optics, topological and Non-Hermitian physics in optics and optical systems. We emphasize on precision regulation on optical field phase and structure, ultra-high spatial and temporal resolution, super strong and extreme weak optical field, novel optical materials, physics and applications, especially photoelectric integration and photon chip physics and application. The Division encourages applications of optics in life sciences, health, energy and environment, space technology, material physics, and information sciences.

Acoustics studies the generation, propagation, reception of sound and its effects, including physical acoustic, hydro acoustics, ultrasonic, noise and vibration control, language acoustics, biological acoustics, atmospheric acoustics and earthquake sound, novel acoustic materials and devices, processing of acoustic information, etc. The Division pays attention to basic and applied basic studies having important application potentials. The Division also pays attention to propagation and control of sound in complex structures, acoustic field and information process in sea, and acoustic sensing and devices in the coupling of multi physical field. The Division encourages interdisciplinary research in medicine, material science, and information science.

Quantum science and technology are based on the principles of quantum

mechanics, mainly study quantum phenomena and quantum laws in matter, and computation, communication and precision measurement using quantum interference and entanglement properties. Research focuses on tree core areas, namely, quantum computation, quantum communication and quantum precision measurement, and relevant topics in quantum materials and quantum devices. The Division encourages basic research in the discovery of new quantum laws, precision measurement physics, quantum computation, quantum simulation, quantum communication, preparation of quantum materials and exploration of novel properties, studies on quantum device physics and development of new types of quantum technology. Focus will be given to coordinated development of condensed matter system, atomic molecular systems and optical systems, and interdisciplinary research of quantum physics with information science and material science.

Division II of Physics

Physics II (A25～A30)

The Division mainly supports research on fundamental physics, particle physics, nuclear physics, accelerator, reactor and detector, plasma physics, and nuclear techniques and applications.

For fundamental physics, funding will be focused on original, farsighted and leading studies, including mathematical physics, quantum physics, statistic physics and gravitation and cosmology. Stress will be given to important theoretical physical issue arising from scientific experiments, and encouraging interdisciplinary research.

For particle physics and nuclear physics, the Division will support studies on frontier theories and experiments, pay attention to innovation of research methods and application of new technology, promote research related to large-scale experimental facilities that are in operation, upgrading or to be completed soon both in China and abroad, promote exploratory studies on future experimental facilities, and strengthen interdisciplinary research with cosmology, astronomy and other disciplines.

For research in areas of accelerator, reactor and detector, the Division supports new principles of accelerator, studies on the physical principles and key technologies in advanced steam control, strong steam accelerator, colliders and various advanced radiation sources, advanced reactor physics, thermodynamic hydrology and safety of reactors, advanced nuclear fuel, smart control and simulation of reactors, and new types of particles and radiation detection method and technologies such as large area, high counting rate, high temporal resolution, low cost and weak signal detection, etc., and researched related to nuclear electronics.

For research in plasma physics, the Division supports basic and applied studies on the basic process of plasma and its reaction with matters, new diagnosis methods and AI technology, laser and high energy mass physics, tetra hertz and microwave,

space and dust plasma, and low temperature plasma. the Division encourages research on major application issues in magnetic confinement and inertial confinement fusion, and related topics related to large experimental facilities.

For research in nuclear technology and application, focusing on major applications in advanced nuclear energy, new accelerator technology, electronic information areas, we support technologies and methods related to interaction of particle beam and matter, radiation physics, radiation effect, radiation detection and imaging, radiation protection, synchronized radiation, free electron laser and reactor, and scatted neutron source, and applications of nuclear technology in areas such as new materials, advanced manufacturing, bio-medicine, energy and environment, etc.

In order to make better use of the limited funds, the Division encourages researchers to make full use of big scientific facilities and existing small and medium experimental platforms to conduct research. The Division encourages experimental studies with innovative methods of high resolution diagnosis and detection, and proposals to conduct experiments that may play an important role in the development of accelerator, nuclear detection devices, and gravity waves.

Department of Chemical Sciences

Chemistry is the science that explores the compositions, structures, reactions, transformations, properties, and functions of matters, which plays a central role in multidisciplinary integration. Chemical engineering, involved as the unique industrial characteristic of the fundamental science, aims to facilitate large-scale production by applying the principles of transfer and conversion of matters and energy, and ultimately to construct a substantial foundation for the essentials and sustainable development of human society.

The Department of Chemical Sciences is dedicated to raising the overall quality and international status of China’s fundamental research and nurturing innovative talents and teams with international impact in the fields of chemistry and chemical engineering. Specifically, the Department stimulates and funds research on the reactions, processes, and functions across multi-scales and multi-levels, from atoms and molecules to molecular aggregation and the condensed state. Studies on complex chemical systems are also encouraged to pursue the precise control and logical understanding of chemical synthesis, processes, and functions. Moreover, the Department emphasizes expanding the knowledge of chemistry and chemical engineering in multiple research fields, such as biology, materials, energy, information, resources, environmental science and human health aiming to address the critical scientific issues confronting economy, society, national security and sustainable development. Accordingly, projects funded by the Department particularly focus on the frontier research in chemistry and chemical engineering, employing various

Funding for General Program, Young Scientists Fund (Category C), and Fund for Less Developed Regions in the Department of Chemical Sciences in 2025

Unit: 10000 yuan

Disciplines	General Program			Young Scientists Fund (Category C)			Fund for Less Developed Regions		
	No. of Projects	Direct cost	Success rate (%)	No. of Projects	Direct cost	Success rate (%)	No. of Projects	Direct cost	Success rate (%)
Synthetic Chemistry	332	16 600	13.32	303	9 090	15.68	54	1 728	12.05
Catalysis and Surface/ Interface Chemistry	224	11 200	13.32	245	7 350	15.70	32	1 026	11.81
Chemical Theory and Mechanism	124	6 200	13.29	114	3 420	15.66	12	384	12.50
Chemical Measurement Science	178	8 900	13.30	170	5 100	15.71	23	736	11.98
Materials Chemistry	272	13 600	13.29	304	9 120	15.72	37	1 184	11.86
Environmental Chemistry	248	12 400	13.33	226	6 780	15.69	37	1 184	11.90
Chemical Biology	170	8 500	13.27	160	4 800	15.72	26	832	12.26
Chemical Engineering and Industrial Chemistry	519	25 950	13.30	432	12 960	15.70	53	1 696	11.94
Energy Chemistry	194	9 700	13.27	228	6 840	15.69	25	800	11.36
Total or Average	**2 261**	**113 050**	**13.30**	**2 182**	**65 460**	**15.70**	**299**	**9 570**	**11.93**
Average direct cost (per project)	50.00			30.00			32.01		

* The average funding amount for direct cost applies to General Program and Fund for Less Developed Regions projects; the Young Scientists Fund (Category C) projects implement a lump-sum funding system with a fixed amount.

strategies, including the combination of micro and macro, statics and dynamics, theoretical chemistry empirical approach, precise analytical technologies, and fundamental experiments and process engineering. In addition, innovative and interdisciplinary research bringing in new theories, technologies and breakthroughs from other disciplines is highly encouraged to push the boundaries of chemistry and chemical engineering disciplines for sustainable development.

The Department will consistently promote innovative and high-quality research in the cutting-edge fields, with a focus on in-depth and systematic research, and a priority support to proposals on the basis of multidisciplinary integration. The Department supports creative projects by laying emphasis on the research diversity in ideas, methods, and contents, whereas research duplication is highly discouraged. Besides, the Department will take measures to support high-risk original research, to overcome bottlenecks that largely limited the rapid development of chemistry and chemical engineering in China, and ultimately to facilitate a shift from high-quantity to high-quality in research outcomes. In the review process, scientific significance is the core criterion for selection, and the contribution to the balance, coordination and sustainability of entire discipline will be comprehensively considered. Ultimately, the Department will promote the fundamental research of chemistry and chemical engineering in China to the international frontier.

For the General Program projects, the Department received 16,999 proposals in 2025, which was 1,853 proposals increased than in 2024, a rise of 12.23%. After review, 2,261 proposals were funded with an average success rate of 13.30%, and an

average direct cost of 500,000 yuan per project.

For the Young Scientists Fund (Category C) projects, the Department received 13,900 proposals in 2025, which was 1,359 proposals increased with a rise of 10.84% than in 2024. After review, 2,182 proposals were funded with an average success rate of 15.70%. The Department consistently places a priority of fostering and supporting young researchers to make outstanding achievements in the “golden age” of innovation. Adhering to the principle of people-oriented fostering of innovative talents, the Department gives full play to the "seedling cultivation" functions of the Young Scientists Fund (Category C), and ensuring the funding for outstanding young scientific researchers. Young researchers are encouraged to conduct innovative and independent research different from their advisors’ topics. The review criteria will put less emphasis on previous publications, so as to foster a more flexible and supportive environment for the innovative exploration of young scientists.

For the Fund for Less Developed Regions projects, the Department received 2,506 proposals in 2025, an increase of 326 proposals by 14.95% compared with 2024. After review, 299 proposals were funded with an average success rate of 11.93% and an average direct budget of 320,100 yuan per project. On the premise of stabilizing the funding scale of the Fund for Less Developed Regions, the Department is committed to further promoting the research quality and the funding benefit, stabilizing a large number of talents engaged in basic scientific research, and continuously narrowing the gap between different regions. Applicants are encouraged to carry out research by taking advantage of the local resources, in order to promote the coordinated development of China's regional economy.

Notices:

1. Applicants are advised to review research funding priorities outlined by the divisions of the Department of Chemical Sciences.

2. Proposals with similar research contents must not be submitted by different applicants.

3. Requirements on research ethics and scientific securities (including biology and information security):

(1) For proposals involving research ethics, applicants shall submit the approval certificate (upload a scanned copy in attachment) issued by ethics committee of the institution or higher authorities. Proposal without the proper ethics certificate will not be funded.

(2) For proposals involving scientific securities, applicants shall strictly comply with the relevant national laws and regulations; supporting institutions shall make a security commitment and submit a scanned copy in attachment. The proposal without the proper security commitment will not be funded.

4. To ensure the outcome of funded projects, the applicants supported by high-level funding programs (including Key Program, International (Regional) Joint

Research Program, Major Program, Major Research Plan, Key Program and Integrated Program of Joint Funds, and Special Fund for Research on National Major Research Instruments) during the recent two years, would in principle not be supported while applying for low-level funding programs this year. It also applies to the research proposals that have similar contents or used repeatedly in other applications for national science and technology projects.

5. In project application materials (including project proposals, project presentation, etc.) shall be directly relevant to the research content of the proposed project.

Division I of Chemistry

The Division I supports research in the field of synthetic chemistry.

Synthetic Chemistry (B01)

Synthetic Chemistry is a discipline that studies the synthesis and transformation of substances. It aims to precisely prepare substances with specific compositions, structures, properties and functions, through the selective control of the transformation and aggregation processes of inorganic, organic, polymer and other substances. Facing the needs of new substances, new materials, new devices and new processes in the fields of chemistry, physics, life science, materials science, information science, as well as energy and the environment, synthetic chemistry explores the mechanisms and laws of the synthesis and transformation processes of substances, and develops new synthetic strategies, methods and theories.

Synthetic chemistry focuses on the rational design, structural control and transformation processes of function-oriented substances, and constructs substances with specific structures and functions through efficient and highly selective synthesis and assembly strategies. Aiming at greenness, safety, economy and convenience, synthetic chemistry realizes the precise synthesis of substances, and pays attention to human health, environmental friendliness, the effective utilization of resources and energy, and sustainable development.

Synthetic chemistry encourages the following research directions: synthesis driven by new reagents, new reactions, new structures, new strategies, new laws, etc.; synthesis assisted by artificial intelligence; synthesis under unconventional conditions; synthesis regulated by non-equilibrium states or external fields; surface and interface synthesis; synthesis based on isotope labeling or isotope effects; the controllable synthesis of polymers, and their transformation towards high performance and high value; synthesis based on non-covalent interactions or the combination of covalent and non-covalent interactions; biosynthesis and biomimetic synthesis; the rational design and precise synthesis of function-oriented substances; in-situ and multi-element

characterization techniques of substances structures and the structure-activity relationships; the mechanisms, laws and theories of substances synthesis; and the synthetic methodologies that are atomically economic, green, sustainable, precisely controllable, etc.

Synthetic chemistry is the foundation and core of the discipline of chemistry. It advocates the interdisciplinary integration of multiple disciplines, encourages original innovation and breakthroughs at the source with the creation and transformation of substances as the core, promotes the solution of major scientific problems in related fields, and contributes to the development of the national economy and society.

Division II of Chemistry

The Division II supports the research in the field of catalysis and surface/interface chemistry, as well as chemical theory and mechanism.

Catalysis and Surface/Interface Chemistry (B02)

Catalysis and Surface/Interface Chemistry focuses on understanding the structure, reactions, and properties of surfaces and interfaces, as well as elucidating the fundamental principles governing physical and chemical transformations on surfaces and interfaces.

Catalysis and surface/interface chemistry exhibit obvious interdisciplinary scientific characteristics. These fields focus on precise construction, dynamic evolution and regulation of surfaces and interfaces, and paying attention to the core scientific challenges in surface/interface physical chemistry. The fundamental theories and methodologies related to surfaces and interfaces are the key driving forces for the development of discipline. The funded research areas encompass catalytic chemistry, surface chemistry, colloid and interface chemistry, electrochemistry, as well as surface/interface-related studies in energy, environment, materials, and life sciences. These research areas span diverse interfaces, including surfaces, gas-solid interfaces, gas-liquid interfaces, liquid-liquid interfaces, liquid-solid interfaces, solid-solid interfaces, gas-liquid-solid multiphase interfaces, soft-matter interfaces, and biomimetic bio-interfaces.

Catalysis and surface/interface chemistry place strong emphasis on fundamental theoretical research and physicochemical characterization methodologies. The fields prioritize the development of novel theoretical and computational methods, emphasize the close combination with experimental sciences. The fields encourage the use of artificial intelligence technology and large-scale scientific facilities, to develop advanced characterization techniques and methods with time-space-energy resolution to reveal the physical-chemical processes and their evolutionary principles on surfaces and interfaces.

Catalytic chemistry prioritizes the development of novel catalytic concepts, theories, and methodologies, as well as the discovery of new catalytic reactions, systems, and processes. The field emphasizes investigations into catalytic mechanisms and kinetics to achieve the construction and regulation of the catalytic active sites, establish the structure-activity relationship of catalysts, and develop innovative catalytic materials. The field also aims to develop new theoretical and experimental approaches for dynamic, multi-scale studies under operational conditions, and to explore the catalytic reaction processes and mechanisms under multi-field coupling. It encourages the research on the coupling and decoupling of the catalytic reaction process, sustainable energy and green carbon science, and interdisciplinary integration of heterogeneous, homogeneous, biocatalysis, and synthetic biology.

Surface chemistry supports research on atomic- and molecular-scale chemical and physical processes at surfaces and interfaces, with particular emphasis on controlling electronic states and tuning the properties of interfacial compositions and structures. The field is dedicated to developing novel theories and methods to investigate the charge and energy transfer across interfaces, molecular assembly and reaction dynamics at surfaces. It strengthens the intersection and integration with important fields such as energy conversion and utilization, the semiconductor industry, chip technology, friction and lubrication, low-dimensional functional materials, astrochemistry, health science, and environmental engineering.

Colloid and interface chemistry mainly focuses on advancing fundamental and applied research in novel principles, methods, technologies and materials, with particular emphasis on developing spatiotemporally resolved characterization techniques for colloidal and interfacial systems. The field places strong importance on the design, synthesis of new surfactant molecules, macromolecules and micro/nano particles, and the investigation of their aggregation behavior; the development of novel colloidal dispersion systems; the development of functionalized self-assembly systems; the construction of soft-matter materials with biomimetic properties, self-healing capabilities, and responsive functionalities; the understanding of fundamental interfacial phenomena including adsorption, adhesion, and wetting behavior at complex interfaces and developing effective regulation strategies for biomimetic/biological interfaces. Furthermore, the field actively encourages both fundamental research and practical applications in areas such as high-end functional interfaces, anti-icing/de-icing, aerosols, soil science, pesticides/agrochemicals, petroleum, daily chemicals, food science, and biomedicine.

Electrochemistry mainly supports the research including the construction, characterization, and the theoretical and simulation methods of the electrochemical interface system; developing in-situ and operando characterization methods and multi-scale simulation approaches for electrochemical systems. It aims to establish novel models beyond classical double-layer theory, conduct in-depth study on the

microscopic structure and dynamic evolution of electrochemical interfaces; explore charge transfer, mass transport and conversion, energy storage and conversion processes under multi-field coupling, reveal fundamental structure-performance relationships of electrochemical interfaces, and develop new electrode materials, electrolyte systems, and devices. The research focuses on fundamental electrochemical processes and interfacial electrochemistry across key areas, including energy storage, hydrogen energy, carbon and nitrogen fixation, electrochemical synthesis, photo-electro-thermal coupled catalysis and electrochemical engineering. It also extends to high-end applications such as advanced electronic manufacturing, brain science and technology, biology and life processes, as well as sensing and recognition.

Interdisciplinary research pertaining to surfaces and interfaces is highly encouraged, with the objective of promoting a paradigm shift in the fundamental methodologies of interfacial chemistry

Chemical Theory and Mechanism (B03)

Chemical Theory and Mechanism aims to establish and develop new chemical theories and experimental methods, and to reveal the mechanisms and basic laws of chemical reactions and related processes. The research fields supported by chemical theory and mechanism mainly include chemical theory and methods, chemical simulation and applications, chemical thermodynamics, chemical kinetics, structural chemistry, photochemistry and spectroscopy, chemical reaction mechanism, molecular electronics and molecular magnetism, polymer physics and polymer physical chemistry, chemoinformatics and artificial intelligence, as well as chemical programs and software.

Chemical theory and methods focus on electronic structure, dynamics, and statistical mechanics, and aim to develop new methods of computational chemistry. Chemical simulation and applications involve rational design and computational models for complex systems in chemistry, materials, biology, medicine, etc., as well as in fields such as synthesis, catalysis, energy, chemical engineering, environment, and information. Chemical thermodynamics encourages the development of chemical theories and experimental methods suitable for complex systems, reveals the internal connection between the thermodynamic properties and microscopic structures of the systems, and emphasizes the cross-applications in emerging areas such as nanomaterials, interfaces, critical states, and catalytic reactions. Chemical kinetics encourages the development and utilization of new experimental and theoretical methods to explore the essential characteristics and reaction processes of chemical reactions in the gas phase, on the surface, and in the condensed phase, as well as chemical kinetics under extreme conditions; it encourages research using large scientific facilities such as advanced coherent light sources; and it focuses on the research of ultrafast dynamics and microscopic structures and mechanisms. Structural

chemistry focuses on the development of structural characterization methods and technologies for complex systems, controllable synthesis and molecular assembly, crystalline structures, dynamic bonding and transformation, encourages the rational design of new structures, the research of structure-activity relationships, and applications in the fields of energy, catalysis, materials, biology, etc. Photochemistry and spectroscopy encourage the development of new technologies with spatial, temporal, and energy resolution and their combined new methods, to explore the photochemical, photophysical, and photobiological mechanisms of new luminescent and photoconversion systems. Applications in fields such as photocatalysis, photovoltaics, and photo-functional materials are also emphasized. Chemical reaction mechanism focuses on applying theoretical chemistry, computational chemistry, artificial intelligence, and experimental methods to explore the microscopic mechanisms and basic laws of chemical reaction processes, and also pays attention to the applications in fields such as organic synthetic chemistry, polymer synthesis, enzyme chemistry, and catalysis. Molecular electronics and molecular magnetism encourage the development of new experimental and theoretical methods, emphasize the construction of new structures and the proposal of new mechanisms, and their cross -applications in chemical reactions, environmental sensing, optoelectronic devices, etc. Polymer physics and polymer physical chemistry encourage the use of methods and means, such as theory and simulation, new experimental characterization technologies, etc., to study the chain behavior and interactions of macromolecules, the regulation and evolution mechanisms of structures at different scales, and the essence of the correlation between microscopic structures and macroscopic properties. Cross-applications in polymer rheology, polymer/supramolecular assembly, polymer materials are also emphasized. Chemoinformatics and artificial intelligence encourage the development of analysis, coding, storage, conversion methods, and standards for chemical objects and research processes. Emphasis is placed on the development of methods, platform construction, and applications of big data and artificial intelligence technologies in fields such as chemistry, chemical engineering, materials, energy, life sciences, and medicine. Chemical programs and software highlight the importance to the development of programs, the creation of software characteristic platforms with independent intellectual property rights, and the integration and engineering of domestic software.

Division III of Chemistry

The Division III supports research in the field of materials chemistry and energy chemistry.

Materials Chemistry (B05)

Materials Chemistry is a discipline that studies the design, preparation, structure,

property and application of materials, which connects chemistry with other disciplines including materials science, life science, medical science and information science. Materials chemistry as a branch of application-oriented chemistry, is the molecular basis for new material systems. By employing chemical theory and methods, it designs new materials at the atomic and molecular levels, develops preparation methods and techniques, and reveals the structure-property relationships of materials. It aims to achieve materials' function transfer, integration and collaboration by modulating multi-scale and multi-level structures, and also develop new high-performance and multi-functional materials for targeted applications in the fields of energy, environment, health and information.

Materials chemistry focuses on precise preparation of new materials with specific function via tailoring the materials' structure and properties. It lays a strong emphasis on enabling research at the intersection between multidisciplines to facilitate interdisciplinary integration and unravel the structure-property relationships. A common feature of the research is to investigate the molecular basis and fundamental principles of the material systems using a combination of multiple characterization techniques. It strives to achieve full utilization of characteristic resources in China.

Materials chemistry intends to promote the discovery of functional materials, encouraging not only fundamental research on materials with electrical, optical, magnetic and other properties, but also interdisciplinary research related to biology, medicine and pharmacy. Exemplary key frontier directions include, but not limit to, structural design and preparation of advanced materials assisted by artificial intelligence, development of chemical methods and principles in advanced processing technologies. Energetic materials chemistry shall address basic sciences underlying the high-density storage, on-demand release and efficient utilization of chemical energy.

Energy Chemistry (B09)

Energy Chemistry focuses on the conversion, storage, transmission and utilization of energy at the atomic and molecular level. On the basis of chemical theory and methods, its primary mission is to achieve clean, low-carbon and highly-efficient utilization of energy by establishing mechanisms of energy conversion and storage, and developing new theories, methods, materials, and devices.

Energy chemistry is committed to the efficient and clean utilization of fossil resources and renewable energy, particularly the carbon-based energy, solar energy, wind energy, hydrogen and biomass energy. Specifically, the related research area includes liquefaction and gasification of carbon-based energy, new photovoltaic/ thermal materials and devices, chemical conversion of clean energy, electrochemical energy storage materials and devices, chemical energy storage materials. Besides, attention shall also be drawn to photochemical, electrochemical, photoelectric,

photothermal, and thermoelectric energy and chemical processes.

Division IV of Chemistry

The Division IV supports research in the field of chemical measurement science, environmental chemistry and chemical biology.

Chemical Measurement Science (B04)

Chemical Measurement Science aims to develop measurement principles, strategies, technologies, and methods in chemistry and related fields, and to develop various analytical devices, instruments, components, and associated software, in order to accurately obtain the spatiotemporal dynamics of the composition, distribution, structure, and function of substances.

Chemical measurement science is oriented toward the global scientific frontiers and national major needs, with an emphasis on original methodological innovation, interdisciplinary integration, digital intelligence empowerment. It places importance on the development of instruments based on novel principles and the performance enhancement of key components. The research supported by Chemical measurement science covers the measurement and analysis from ultra-micro to ultra-macro, from static to dynamic states, and complex systems under practical working conditions. Key research areas include: sample treatment and separation, theories and applications of spectroscopic methods, chemical and biosensing, chemical imaging, instrument development and innovation, etc. The research scope covers chromatography, spectroscopy, electrochemistry, mass spectrometry, optical spectroscopy, electron microscopy, calorimetry, energy-dispersive analysis, imaging analysis, and related emerging fields.

The priority funding areas of chemical measurement science include processing, separating, and identifying complex samples; development and application of multidimensional spectroscopic principles and techniques; ultrafast and spatiotemporally resolved spectroscopic techniques and chemical imaging; precision measurement at single-atom, single-molecule, single-cell, and single-particle levels; in-situ dynamic analysis of chemical and chemical engineering processes; in-vivo, real-time chemical detection and imaging; structural and functional analysis of biomolecules; molecular recognition and diagnosis of major diseases; early warning, identification, and tracing for public safety; development of instruments and devices; chemical measurement based on large-scale scientific facilities; chemical measurement methods under working conditions; and intelligent chemical measurement and data.

Environmental Chemistry (B06)

Environmental Chemistry is a discipline that studies the presence,

characteristics, behavior, effects of chemical substances in environmental media, as well as the principles and methods of pollution control. It is an important branch of chemical science and a core component of environmental science.

Facing the frontiers of global science and technology and major national needs, environmental chemistry adheres to a problem-oriented approach, highlighting foresight, innovation, interdisciplinary integration, and practicality. The main funding areas of environmental chemistry cover pollution characteristics and analysis, pollution processes and mechanisms, pollution prevention, control and remediation, environmental toxicology and health, environmental theory and calculation, radiochemistry and radiation chemistry, biosafety and chemical protection, etc.

Environmental Chemistry encourages focus on the major problems in China's ecological and environmental protection, refining key scientific issues. Through the combination of laboratory research and field tests, theoretical simulation and artificial intelligence, it develops new detection and monitoring technologies and methods, and studies the environmental chemical behavior, ecological and health effects, prevention and control principles and methods of pollutants, etc. The priority funding areas include analysis and characterization of pollutants in complex environmental media, the behavior and tracing of typical pollutants at multi-media interfaces, new principles and technologies of environmental catalysis, the formation mechanism and control of atmospheric complex pollution, the processes, control and remediation of water and soil pollution, the treatment, disposal and resource utilization of solid waste, the interaction mechanism between pollutants and microorganisms, new technologies and principles of green and low-carbon pollution control, the synergy mechanism of pollution reduction and carbon reduction and carbon cycle utilization, the environmental exposure and health effects of emerging contaminants, environmental computational chemistry and big data, the prevention and control of radioactive pollution and the resource utilization of radionuclides, key chemical issues in hazardous chemicals and radiation protection, etc.

Chemical Biology (B07)

Chemical Biology is an interdisciplinary field that integrates chemistry with biology, medicine, informatics, and other disciplines. It applies or innovates chemical theories, methods and techniques to explore the nature and regulatory mechanisms of biological phenomena. The key objective of chemical biology is to develop or employ chemical tools to investigate the structures, interactions, and functions of biomolecules, cells, tissues, and living organisms; to explore the chemical basis and novel regulatory strategies of life processes; and to provide critical support for biotechnology, disease diagnosis and treatment, and drug discovery and development. By creating new analytical methods, reaction technologies and molecular tools, chemical biology offers novel concepts and approaches for biological and medical research, advances the visualization, control, and engineering of life processes (or

functions), and enables translational applications in life and health.

Focusing on the processes and dynamic patterns of key molecular events in living systems, and leveraging the characteristics and creativity of chemical science, chemical biology mainly conducts the following research. ①Molecular probes for biological systems: the design and discovery of molecular probes for real-time, in-situ, dynamic, and quantitative detection, regulation, and diagnosis of life activities and diseases. ②Chemical biology of bimolecules: development of new biocompatible reactions or the construction, labeling, and modification of bimolecules and biological targets; investigation and regulation of the biological functions of proteins, nucleic acids, carbohydrates, lipids, as well as bioactive small molecules, metabolites, ions, and other substances. ③Chemical biology of natural products: function- or biogenesis-oriented discovery of natural products with novel skeletons, structures, and activities, and elucidation of their targets and mechanisms of action. ④ Chemical genetics: application of genetic and systems biology principles, using chemical molecules and omics technologies to address biological questions, or to understand the functions of biological macromolecules by perturbing or regulating physiological processes. ⑤Biosynthetic chemistry: elucidation of the chemical and enzymatic mechanisms underlying the biosynthesis of biological molecules; mining, engineering, and design of biocatalytic elements and systems to perform selective chemical reactions and synthesize target or functional molecules, promoting applications in biocatalysis and biomanufacturing. ⑥Medicinal chemical biology: establishment and optimization of virtual and physical chemical libraries; development of screening, delivery, and related technologies to interrogate life processes, uncover new pathways and molecule interactions, and enable the identification and validation of drug targets, biomarkers, and lead compounds. ⑦Theories, methods, and technologies of chemical biology: creation of chemical tools, functional materials, and technological methods, assembly and simulation of complex living systems; establishment of new theories in chemical biology; revelation of the chemical nature of life; intervention in complex life processes; and promotion of basic and translational research at the interface of chemistry, life sciences and medicine. ⑧Chemical biology of carrier systems: application of chemical biology principles and techniques to study the structures, physicochemical properties, in vivo behaviors and effects of carrier molecules. Research includes the analysis and optimization of structure–activity relationships, chemical basis of in vivo behaviors and mechanisms, the chemical design of intelligent delivery systems, the evaluation of biocompatibility, and the chemical nature of carrier–biosystem interactions. ⑨Translational and applied chemical biology: solving bottlenecks in biological systems and meeting industrial and biomedical demands by leveraging chemical tools; advancing the translation of fundamental chemical biology achievements into industrial and biomedical applications. Key directions include chemical technologies for disease therapy and diagnosis, innovative chemistry for

green development, biosynthesis driven by functional molecule translation, and optimization of translational pathways for interdisciplinary chemical biology technologies.

To meet the national strategic needs in life and health, chemical biology emphasizes original innovation and breakthroughs in new concepts and theories. Priority is given to: studies on molecular probes for dissecting mechanisms and regulating functions in key life processes and major diseases; research using chemical approaches to solve biological and medical problems; fundamental investigations into reaction mechanisms and theories in biological systems; exploration of the chemical origin of life and chemical communication in living systems; promotion of cross-disciplinary integration between chemistry and biology, medicine, informatics, engineering, agriculture, energy, and other fields.

Division V of Chemistry

The Division V supports research in the field of chemical engineering and industrial chemistry.

Chemical Engineering and Industrial Chemistry (B08)

Chemical Engineering and Industrial Chemistry focuses on the flow, transfer, reaction and their interrelationships in the process of substances transformation. The discipline aims to clarify the phenomena and laws of transfer and reaction during substances transformation, along with their regulatory mechanisms on the process efficiency and the structural properties of products. It is dedicated to developing new theories, methods, technologies, processes and equipment for efficient substance transformation. Characterized by a key feature of process engineering, the discipline encourages interdisciplinary integration to provide scientific foundations and technical supports for major national needs, including modern manufacturing, energy security, strategic emerging industries, as well as life and health.

This discipline focuses on molecular engineering, process engineering, product engineering, system engineering, and cross-scale scientific research. In recent years, its research scope has become increasingly concentrated, with the emergence of several new directions: ① In-situ and dynamic observation, multi-scale simulation, and precise regulation of micro-nano structures and interfaces; ② Advancing the greenization, low-carbon transformation, high-end upgrading, and intelligentization of chemical processes, while developing novel process intensification methods for unconventional and extreme conditions; ③ In-depth integration with fields such as new energy, new materials, life and health, and electronic information, and the establishment of a new AI-driven paradigm for chemical engineering.

Innovative research in chemical engineering would be rewarded with priority

support, including but not limited to: chemical engineering thermodynamics, transfer, and reaction processes under unconventional and extreme conditions, mesoscale spatiotemporal dynamic regulation, micro-nano scale process intensification, big data and intelligent manufacturing of chemical engineering, green and low-carbon chemical engineering technologies, advanced materials and specialty chemicals, photoelectric conversion and energy storage engineering, green and efficient conversion and high-value utilization of resources, synthetic biotechnology, green biological manufacturing, as well as the fundamentals of chemical engineering in interdisciplinary fields involving materials, energy, resources, environment, medicine, health, information devices, etc.

Department of Life Sciences

Life science research is one of the most active frontier fields of modern sciencesto explore life phenomena and their basic rules. As a guarantee of national population health, grain security, food safety and ecological civilization, life sciences are important support for technological progress and industrial development. Life science research is closely related to national economic and social development, and plays pivotal dual roles in promoting scientific exploration and supporting of national strategic needs.

The Department of Life Sciences encourages researchers to carry out original studies with innovative academic ideas, and novel techniques and approaches, particularly for those playing a pivotal role in promoting the development of related disciplines with original ideas. The Department encourages applications that propose novel theories and novel hypotheses based on long-term research. The Department will continue to pay attention to the cutting-edge frontiers and emerging fields in life sciences, focus on the scientific research aimed at addressing the major national needs, and give priority to support the applicants with high-quality performance in their previous projects under equivalent conditions.

Since 2021, the application codes of all disciplines in the Department have adopted a two-level structure, with the first level application code and the second level application code. A number of research directions have been established under the second level application code. Applicants should pay attentions to the research direction under the second level application codes.

In 2025, the Department totally received 28,886 General Program applications, which is 3,047 more applications than in 2024, with an increasing rate of 11.95%. The Department finally supported 3,616 proposals, with a supporting rate of 12.52% and an average funding of 500,000 RMB for each grant.

In 2025, the Department totally received 23,632of Young Scientists Fund(C) applications, which is 2,638 more applications than in 2024, with an increasing rate

of 12.57%.The Department finally supported 3,302 proposals, with a supporting rate of 13.97% and an average funding of 300,000 RMB for each grant.

In 2025, the Department totally received 7,366 applications of Fund for Less Developed Regions, which is 820 more applications than in 2024, with an increasing rate of 12.88%. The Department finally supported 931 proposals, with a supporting rate of 12.96% and an average funding of 320,000 RMB for each grant.

Funding for General Program\Young Scientists Fund(C)\the Fund for Less Developed Regions of Department of Life Sciences in 2025

Unit: 10,000 yuan

Divisions		General Program			Young Scientists Fund			Fund for Less Developed Regions		
		No. of Projects	Direct cost	Funding rate+ (%)	No. of Projects	Direct cost	Funding rate+ (%)	No. of Projects	Direct cost	Funding rate+ (%)
Division I of Biology	Microbiology	238	11 900	14.09	180	5 400	13.94	51	1 632	12.91
	Botany	247	12 350	15.74	179	5 370	15.48	62	1 984	12.86
	Zoology	149	7 450	17.07	93	2 790	17.78	25	800	13.09
Division II of Biology	Genetics and bioinformatics	170	8 500	17.00	138	4 140	15.49	19	606	14.07
	Cell biology	130	6 500	13.76	106	3 180	14.93	17	544	12.88
	Developmental biology and eproductive biology	85	4 250	18.40	65	1 950	17.86	6	192	12.77
Division of Biomedicine	Immunology	99	4 950	15.28	72	2 160	13.43	11	352	12.50
	Neurosciences and Psychology	166	8 300	14.97	167	5 010	14.66	17	544	12.78
	Physiology & integrative biology	100	5 000	16.23	63	1 890	16.41	9	288	13.04
Division of Interdisciplin ary Research	Biophysics/ Biochemistry	130	6 500	18.71	89	2 670	16.45	11	352	12.79
	Biomaterials/ Imaging/tissue engineering	129	6 450	11.32	133	3 990	14.21	10	320	12.66
	Molecular biology/ Biotechnology	88	4 400	12.36	85	2 550	14.07	8	256	13.79
Division of Environment and Ecology	Ecology	225	11 250	12.98	199	5 970	15.44	87	2 784	12.99
	Forestry	221	11 050	11.66	193	5 790	13.28	75	2 400	13.00
	Grass Science	40	2 000	8.55	38	1 140	10.67	27	864	12.74
Division of Agriculture and Food Science	Agriculture and crop sciences	299	14 950	10.07	309	9 270	12.55	121	3 872	12.98
	Food science	281	14 050	9.45	347	10 410	12.54	92	2 944	12.96
Division of Agricultural Environment and Horticulture	Plant protection	186	9 300	11.40	188	5 640	14.23	72	2 304	12.88
	Horticulture and plant nutrition	213	10 650	10.63	237	7 110	13.68	94	3 008	12.97
Division of Agriculture Animal	Animal husbandry	148	7 400	11.31	146	4 380	12.98	56	1 792	12.93
	Veterinary medicine	167	8 350	11.63	155	4 650	13.32	44	1 408	12.98
	Aquaculture	105	5 250	10.43	120	3 600	13.56	17	544	12.69
Total or Average		**3 616**	**180 800**	**12.52**	**3 302**	**99 060**	**13.97**	**931**	**29 790**	**12.96**
Average direct cost (per project)		50.00			30.00			32.00		

Matters for attentions

(1) Specific explanations on the scope of funding and the research contents that will not be accepted are provided in the section of each divisions of the Department in this Guide. Applicants should carefully read the project

guidelines of the discipline that they plan to submit an application, and ensure that the academic achievement information provided in the application is accurate.

(2) The application code 1 should be specified to the second level code for the applications to General Program, Young Scientists Fund and Fund for Less Developed Regions. Applications that just specify the first level code will not be accepted.

(3) Biomedical research involving the manipulation of highly pathogenic pathogens must strictly comply with the national biosafety requirements, and applications can only be submitted if the relevant biosafety requirements are met.

(4) Biomedical research involving experimental animals must strictly comply with the provisions and requirements of national animal welfare and scientific ethics.

In addition, the Department has the following requirements for the ethics-related research associated applications in biomedical research:

(1) Researchers must comply with the national laws and provisions for scientific research works. To carry out research in the field of biomedicine, researchers must comply with the relevant laws and provisions of the state, respect internationally recognized bioethical norms, and comply with the relevant requirements of the state for ethics research.

(2) Biomedical research involving human tissues, organs, cells, etc. must provide the certification documents reviewed and approved by ethics committees from the supporting units or their higher authorities in the application forms (scanned copies must be attached to the electronic application). Applications that fail to provide the above-mentioned certification as required will not be funded.

(3) Applications involving multi-unit participation in ethical research shall separately provide the certification documents reviewed and approved by ethics committee from each participating unit or their higher authorities.

(4) When overseas institutions or individuals cooperate with domestic medical and health institutions to carry out research projects involving human ethics, theyshall provide certification documents reviewed and approved by ethics committees from the relevant domestic institutions.

(5) For research projects requiring signed informed consent, the procedures for obtaining informed consent shall be described in the application forms..

(6) If an ethics-related project has been approved but its research plan is modified during the implementation period, the revised ethics committee approval document shall be resubmitted to the NSFC in accordance with the above requirements.

Applicants should follow the requirements of this Guide and the application syllabus when writing their proposals. Otherwise, the proposals will not be accepted.

Division I of Biology

The funding scope of Division I covers three disciplines, namely microbiology, botany and zoology.

Microbiology (C01)

The Microbiology discipline supports fundamental and applied fundamental research with microorganisms as the research objects. The Discipline encourages scientists to carry out in-depth and systematic research on virology and pathogenic microbiology, and promote the cutting-edge theory and technology of pathogen-host interaction, co-infection and drug resistance research. The Discipline encourages scientists to carry out microbial diversity and classification research, reveal the systematic evolution and evolution rules of microbial groups with important classification status or application potential, and further strengthen the cultivation of taxonomic talents. The Discipline encourages proposals aiming at study on mycoplasma, rickettsia, chlamydia, spiroplasma, prion and Oomycetes etc. The Discipline encourages research on microbial single-cell, populations, epigenetics, and synthetic biology of microorganisms. The Discipline encourages research on enrichment, isolation , and cultivation of microorganisms which are difficult to culture or uncultured; research on microbiome and its interaction with host and environment; fundamental research on microbial life processes in special environments; fundamental and applied fundamental research on microbiology aiming at the major environmental and health issues in China; encourages systematic, innovative and exploratory research on frontier scientific and technological questions of life sciences using microorganisms as traditional and new model materials.

In order to promote the development and application of novel theories, new technologies and methodology in microbiology, integrate multidisciplinary academic concepts, research methods and techniques, breakdown the barriers of traditional disciplines, and resolve complicated scientific questions, applicants are encouraged to carry out interdisciplinary research combining microbiology with mathematics, physics, chemistry, ecology, electronics, information and engineering, with a particular focus on the application of big data and artificial intelligence in microbiology.

Botany (C02)

Focusing on the national needs and scientific frontiers, the discipline of Botany supports fundamental research projects using plants as the research objects. Research interests include plant taxonomy, plant phylogeny and evolution, plant photosynthesis and nitrogen fixation, transportation and metabolism of water and nutrients, interaction between plant and environment, plant hormones and growth regulators,

plant reproduction and development, protection and utilization of plant resources, phytochemistry, new technologies and methods of botany research, etc.

Based on the applications received and funded in recent years, the development of each sub-branch within the Discipline is imbalanced. Proposal quality and funding rates are generally higher in research areas including plant phylogeny and evolution, photosynthesis and nitrogen fixation, water/nutrient transport and metabolism, plant-environment interaction, plant reproduction and development, and phytohormones/ growth regulators. In contrast, proposals in fields such as plant taxonomy, plant resource conservation and utilization, and phytochemistry tend to demonstrate relatively lower quality and receive fewer grants.

The Discipline prioritizes funding for projects demonstrating innovative scholarly concepts. The Discipline encourages exploratory research on plant species at key evolutionary nodes and botanical phenomena in extreme environments. The Discipline encourages research on plant systematics and evolution, evaluation and conservation of plant resources, plant introduction and domestication, structure and function of plant cells, molecular basis of plant important traits, metabolism and regulation of important active plant components, biosynthesis of plant natural products, plant interactions with other organisms. The interdisciplinary studies of botany with other related fields will be strongly encouraged, especially with mathematics, physics, chemistry, engineering, material science, information, and the application of big data and artificial intelligence in plant scientific research.

In 2026, the Discipline will continue to give priority to support research of plant taxonomy, especially strengthening the support on young taxonomists, encourage applicants to carry out research on worldwide taxonomic revision of certain families and genus, plant resource research in key areas and special environments, and application of novel technologies in plant taxonomy.

Special notice for applicants:

(1) The application code for plant-enticement interaction (C0205) does notaccept applications related to crops and other economic crops.

(2) The application code for Phytochemistry (C0209) does not accept applications related to pharmacological research and synthesis research.

Zoology (C04)

Zoology is the science to study the life phenomena and principles in animal forms, taxonomy, physiology, behavior, development, genetics, evolution, and ecology etc. The effective application of modern scientific theory and techniques has greatly promoted the development of zoology. Animal evolution and development, animal phylogeny and classification, animal physiology and behavior are still the important fundamental theoretical research contents of this discipline. On this basis,

the research on animal resources and protection, marine zoology, wild animal diseases and transmission reflect the national needs. With the deepening and integration of various directions of zoology, the interdisciplinary and compatible development characteristics of zoology have been formed.

Applications accepted by this discipline in recent years demonstrated that research in some fields have already formed their own features and achieved significant international impacts. The scientificity of the topic selection and rationality of design for the submitted proposals, especially the innovation of academic ideas and the forefront of research problems, have been significantly improved compared to the past. However, some problems still exist, for example, the excessive pursuit of hotspots but lack of systematism and continuity of research, too much attention paid to the application of new technologies while ignoring the refinement of scientific issues, the insufficiency demonstration in the justification for proposed research part and feasibility of technical routes, the insufficient accumulation of preliminary work foundations.

In the future, the identification and description of unknown species of animals, and the classification and revision of known species of animals will still be the key funding areas by the branching field of taxonomy. The Discipline of zoology will continue to strength the research of animal phylogeny, zoogeography, species interaction, life history strategy and formation mechanism of key traits centered on evolution; encourage the diversity research of marine animals, especially marine invertebrates; encourage research on the morphology, physiology and behavior of wild animals; strengthen research on the conservation and recovery of endangered animals, the sustainable utilization of important resource animals, harmful animal control, mechanisms of alien animal invasion, wild animal diseases and transmission; encourage integration and mining research on the big data of animal diversity; continually encourage fundamental research of zoology for endangered animals and specific species in China and areas with weak foundations; continually attach great importance to the study of experimental animalization of wild animals and research on experimental animal models. In the future, the Discipline will pay more attention to fundamental research on zoology; encourage original studies and exploration based on animal resources and regional features in China using new theory and technologies; encourage macromicro combined interdisciplinary research and international collaborative research on global zoology.

Special notice for applicants:

This Discipline focuses on scientific questions related to wildlife. It does not accept applications of medical research only using model animals as research materials, applications of research using livestock and poultry as research materials, and applications of agricultural pest related research.

Division II of Biology

The funding scope of Division II covers the following three disciplines: genetics and bioinformatics, cell biology, and developmental biology and reproductive biology.

Genetics and Bioinformatics (C06)

Genetics is to study the inheritance, variation and evolution of organisms on various levels of molecule, cell, individual and population etc. The genetics discipline will give priority support to the following research directions and key layout fields: structure, function and regulation of genetic materials; fundamental principles and molecular mechanisms of gene expression regulation; the study of genetic and epigenetic mechanisms underlying complex biological traits; studies on fundamental principles and the molecular mechanisms of gene expression and regulation; studies on genetic and epigenetic mechanisms underlying complex biological traits; studies on biological evolution and population genetic; genetic and epigenetic basis of human diseases; development and application of novel theories and methodologies in genetics etc. The discipline encourages the in-depth studies on the basic genetic rules and molecular mechanisms of gene expression and regulation using animals, plants, and microorganism **systems**, supports the genetic and epigenetic mechanism studies of human inherited diseases and human microbiota-related diseases based on clinical resources.

Bioinformatics is an interdisciplinary subject which integrates multidisciplinary techniques for the acquisition, storage, analysis and interpretation of biological data to reveal the laws of life. The bioinformatics discipline will give priority support to the following research directions and key layout fields: integration, curation and standardization of biological big data; development of biological resource databases; development and application of artificial intelligence methods for analyzing biological big data ; modeling, prediction and design of biological macromolecular structure; analysis and modeling of biological network and living systems. The Discipline encourages the development of new algorithms and models for bioinformatics addressing fundamental questions in life sciences. The Discipline also encourages research focused on the interdisciplinary research integrating bioinformatics analysis with biological experimental.

In 2025, more applications were received under the secondary codes in C0602 (Gene expression and noncoding sequence regulation), C0603 (Epigenetic regulation) and C0609 (Biological Big Data Analysis), while relatively fewer applications were submitted under these secondary codes in C0601 (Structure and function of genetic material), C0605 (Genetics and Evolution) and C0606 (Genetics and Evolution).

In 2026, the Discipline will continue to encourage multidisciplinary research focusing on areas such as: intelligent curation and knowledge graph construction of

biological data resources; discovery and regulatory mechanisms of functional noncoding genomic elements and repetitive sequences, multidimensional epigenetic regulation in physiological and pathological processes, co-evolution between exogenous genetic material and host genomes, genetic basis and evolutionary patterns of complex traits, development and application of novel omics technologies; the Discipline particularly encourages the development and utilization of artificial intelligence technologies for in-depth mining of life science big data to elucidate fundamental principles of biological activities.

Cell Biology (C07)

Cell biology is a fundamental and cutting-edge discipline to study the principles and mechanisms of cell life activities, mainly aiming at revealing the structure, function, phenotypes and interaction and at molecular, cellular, tissue and individual levels, as well as studies on the precise regulatory networks of cellular activities using diverse technological approaches and model systems to clarify the mechanisms underlying phenotypic and functional abnormalities in organisms.

The Discipline encourages research to focus on the in-situ structural assembly, dynamic changes and functional mechanisms of biological macromolecules in the process of cell life activities, organelle remodeling and organelle interaction, cell fate plasticity, the interactions between cells and the microenvironment, organizational order of cell collectives and the relationship between abnormal cell function and the development of diseases. The Discipline also encourages applicants to address frontier challenges in cell biology and health-related demands, use cell models, organoids, model organisms and pathological samples, integrating interdisciplinary cutting-edge technologies such as artificial intelligence to conduct systematic and innovative fundamental and applied basic research.

In 2025, among the applications accepted, there were fewer applications in areas of cell polarity and cell movement, cellular variation and dysfunction, whereas these areas are pivotal in cell biology that will be given priority to support in the future. In 2026, the key areas of the Discipline lie in the following fields: abnormalities in cellular structure/function and major disease pathogenesis, cell-cell communication and extracellular microenvironment, cell metabolism regulation and homeostasis remodeling, etc.

Developmental Biology and Reproductive Biology (C12)

The funding scope of developmental and reproductive biology includes three fields: stem cells, development, and reproduction. Its research objects include humans, animals, and plants. This discipline is a fundamental and cutting-edge discipline that studies the basic biological laws of gametogenesis, embryonic development, organ formation, homeostasis, and aging in multicellular organisms. Developmental and reproductive biology research emphasizes in vivo, continuity, and

dynamics, emphasizing the use of model organisms to explore the synergistic effects and regulatory mechanisms among multiple genes, cells, and organs during development and reproduction.

In 2025, relatively more applications were received under these secondary codes in C1204 (Tissue and organ development and in vitro construction) and C1205 (Tissue and Organ Steady State Maintenance and Regeneration Repair) , while relatively fewer applications were submitted under the secondary codes in C1202 (Applied research on stem cell) and C1207 (Fertilization, implantation, and maternal fetal interaction) .

In 2026, the Discipline will continue to encourage applicants to addresses global scientific frontiers and national health needs. The Discipline specially encourages research focused on the following fields: basic biological laws governing processes during reproduction and development, including gonad and accessory gland development, meiosis, gametogenesis and maturation, fertilization, pregnancy establishment and maintenance, early embryonic development, cell lineage establishment and differentiation, tissue and organ formation and homeostasis maintenance, regeneration/repair, aging, and evolutionary development. It also examines the regulatory effects of genetic, environmental, and metabolic factors on reproduction and development, as well as stem cell identification, cell reprogramming, pluripotent stem cell induction, and the establishment and application of embryo-like and organoid models. The Discipline encourages research on multidisciplinary cross-species comparative using model organisms; encourages fundamental research on developmental disorders and reproductive dysfunctions encourages fundamental and application research using Embryo-like organoid models, organoids, and digital developmental biology technologies; encourages the development of new vectors and models, new technologies and methods, and exploration of new mechanisms and theoretical frameworks.

Division of Biomedicine

The Division of biomedicine covers the following three disciplines: Immunology, Neurosciences &Psychology, and Physiology and integrative biology.

Immunology (C08)

Immunology studies the composition and function of immune system. It is a pivotal discipline in life sciences and medicine, and also a frontier discipline leading the development of biomedical technologies.

This discipline mainly studies the relevant structures, functions, mechanisms, and interventions of immune responses and their regulation in the body at the molecular, cellular, tissue, organ and systemic levels, which mainly cover research

areas such as innate immunity, adaptive immunity, immune evolution, autoimmune, immune tolerance, infectious and non-infectious inflammation, reproductive immunity, transplant immunity, tumor immunity, vaccines, antibodies, and immune intervention. In 2025, applications were particularly active in innate immunity, tumor immune microenvironment, and vaccine/antibody development, while applications in immune evolution and environmental adaptation as well as immunoinformatics and big data were relatively few.

In 2026, the Discipline continues to encourage the applications with original academic ideas. The Discipline encourages research on novel phenomena, concepts, and hypotheses addressing real-world health challenges; research on immune function and mechanisms based on big data analysis; research on new targets or mechanisms related to immunity in major refractory diseases; mechanistic studies on individual immune variations influenced by factors such as sex, age, and geographic region; investigations into new pathways and mechanisms of multi-tissue, multi-organ and immune system interactions; as well as substantive interdisciplinary research between immunology and other fields, etc..

In 2026, applications involving research on human tissues, organs, or cells must submit ethics review approval documents issued by the host institution or its competent administrative authority as required (for details, please refer to the General Requirements of the Department of Life Sciences)..

Neuroscience and Psychology (C09)

The funding scope of this discipline includes neuroscience, psychology and cognitive science. The core scientific goal of neuroscience research is to analyze the essence of nervous activity, from the primary sensation, movement and instinctive behavior to the advanced language, learning, memory, attention, consciousness, thinking and decision-making, etc. Psychology is the science of studying human psychology and behavior, aiming at clarifying rules and mechanisms of occurrence, development, characterization, and interaction of psychological phenomena including cognition, emotion, motivation, thinking, consciousness, personality. Cognitive science is the science that studies the nature and rule of cognition and intelligence, and its research scope contains the cognitive and intellectual activities at all levels and aspects including perception, memory, induction, reasoning, decision-making, calculation, etc.

Applications submitted in 2025 clearly reflected an imbalance in the development of the three fields. There were a large number of applications focused on molecular and cellular neurobiology, behavior and emotional neurobiology, cognitive neurobiology, structure and function of nervous system, cognitive psychology, developmental and educational psychology, whereas there were fewer applications focused on the fields of novel technology and new paradigm of cognitive simulation, computing and artificial intelligence, neuroscience and psychology.

In 2026, the Discipline will continue to encourage the exploration of the neurobiological basis of sensation, movement, emotion, learning, memory, and behavior, employing systems biology approaches to investigate nervous system function across the lifespan at multiple levels (molecular, synaptic, cellular, and neural circuits/networks);the interdisciplinary studies to clarify the occurrence, development rules and mechanisms of neural and psychiatric disorders; cross-species neuroscience research from an evolutionary perspective; research on the study and development of novel technologies and methods to solve bottleneck problems in neurosciences. Psychology and cognitive sciences will continue to support the dominant areas, and encourage interdisciplinary integration, using neuroimaging, computational models, artificial intelligence, neuro regulation, cognitive regulation, big data analysis, longitudinal tracking, computational models and artificial intelligence based strategies and techniques to promote the in-depth research on neural and computational mechanisms of psychological activities and cognitive processes; applied psychology research focusing on "facing the people‘s life and health"; the proposal and development of new theories, research paradigms and technologies.

Physiology and Integrative Biology (C11)

Physiology and integrative biology is the science to study the phenomena, rules, functions and regulations of life activities, and also the basic discipline of life science and medicine. The funding scope of this discipline mainly focuses on the research of morphological structures, physiological functions, homeostasis maintenance regulation and integration mechanisms from molecule, cell, organ, tissue, to body system levels; underlying mechanism research on structural and functional abnormalities in the body during development, aging, disease occurrence and progression; research on the effects of special environments and stress factors on physiological functions of the body, as well as the regulatory mechanisms of adaptation and injury.

The Discipline encourages applicants to conduct in-depth and systematic research focusing on signal perception, homeostasis maintenance, integrated responses, and their dysregulation mechanisms within and outside living organisms. The research will concentrate on key scientific questions including: sensory signal transduction; cellular communication and tissue-organ interactions; tissue remodeling and regenerative repair; metabolic regulation and metabolite analysis; stress response and adaptation; exercise and proactive health; fertility maintenance; regulation and intervention of aging and major chronic diseases; biological rhythms and sleep; nutrition and microbiom-mediated physiological regulation; effects of special environments (plateau, polar regions, space, deep-sea, etc.) on organisms; and cross-species comparative physiology.

In 2025, the submitted applications tended to be multidiscinplinary integrative research, yet the development of each sub-discipline was imbalanced. There were relatively fewer applications in respiratory and digestive physiology, sensory organ and motor physiology, extreme environmental physiology and comparative physiology, whereas these areas are pivotal in the Discipline that will be given priority to support in the future.

In 2026, the Discipline will continue to encourage the comprehensive and multi-level integrative research using traditional, cutting-edge and original techniques; mechanism study of physiology and pathophysiology using micro to entire and cross-scale integrated methods; the use of China's unique geographical and resource advantages to carry out research on organism adaptation and evolution in extreme environments.

In 2026, applications involving human tissues, organs, cells, etc., must provide the review approvals from ethics committees of the supporting institutions or their higher authorities. (Please refer to the overall requirements of Department of Life Sciences)

Please note that applications using wild animals (except comparative physiology), plants and algae as research objects, as well as the applications concerning traditional Chinese medicine will not be accepted in this discipline.

Division of Interdisciplinary Research

The Division of Interdisciplinary Research covers the following three disciplines: biophysics and biochemistry, biomaterials, imaging and tissue engineering, and molecular biology and biotechnology.

Biophysics and Biochemistry (C05)

Biophysics and biochemistry is a cutting-edge interdisciplinary field combining and applying the theory and method of biology, physics and chemistry to investigate some important life science issues such as the association between structures and functions of muti-level biology, the responsive mechanism of organisms against environmental physicochemical signals, the chemical composition of living organisms as well as their generation processes, etc. The main research objects of this discipline are certain important macromolecules involved in various life activities, and the interaction relationships between various biomolecules to perform specific functions. By exploring the characteristics of bio-molecules and their interactions, the Discipline aims to gradually extend the overall understanding of life activity processes, showing a distinct progressive feature.

The funding scope of the Discipline mainly includes: structural biology,

molecular biophysics, cell sensing and environmental biophysics, physical biology, protein, peptide and enzyme biochemistry, sugar and lipid biochemistry, nucleic acid biochemistry, inorganic biochemistry and environmental monitoring, biological process and metabolism, etc.

Considering the contents of applications received in recent years, there were more applications and supported proposals in the following fields: structural analysis and function of biomolecules and complexes, interaction of biomacromolecule, biochemistry of protein and polypeptide, biochemistry of enzyme, modification of biomacromolecule, etc., and the applications in these areas showed relative high quality. There were fewer applications focused on environmental biophysics, physical biology, systemic biology, environmental biochemistry, glucose and lipid metabolism and regulation, and the applications in these fields showed relative lower quality. The Discipline encourages applicants to submit research proposals focused on heavy environmental pollution, ionization and electromagnetic radiation, etc.

In 2026, the Discipline encourages cross-disciplinary research on biophysics and biochemistry, especially the application of new theory, disruptive ideas as well as novel techniques to understand important scientific issues in life activities using a new perspectives and ideas.

Biomaterials, Imaging and Tissue Engineering (C10)

The discipline of biomaterials, imaging and tissue engineering is an interdisciplinary field of life science with other research areas, with clear features of demand orientation and cross disciplinary. The Discipline covers biomechanics and biorheology, biomaterials and biological effects, tissue engineering and tissue regeneration, organoids and artificial organs, biological imaging, electronics and probe, brain-computer interaction, information processing and bionics, nano-biology, and new biomedical engineering methods and technologies, etc.

The received applications under the Discipline in 2025 indicated that the proposals in biomechanics and biorheology field mainly focused on studies in cellular mechanics, musculoskeletal system biomechanics, tumor biomechanics, hemodynamics and hemorheology, etc. There were relatively more applications in the field of biomaterials, which mainly focused on biomaterials and microenvironment interactions, biological effects of materials, novel tissue regenerative materials, natural-source biomedical materials, and biocomposite materials; in the field of tissue engineering, most applications focused on bone, cartilage, trauma, blood vessels, peripheral nerve research, etc., but there were few applications on complex tissue and organ bionics construction, and artificial organs; the applications in the field of biological bioimaging and electronics, most applications centered on bioimaging probes/technologies, theranostic probes/technologies, bio-opticalimaging, micro/nano sensing, etc; there were relatively more applications in the field of nano biology, which mainly focused on nanocarrier design and efficacy, nanomaterial-cell/organism

interactions and mechanisms, and nano-immunomodulation, while nanotoxicology, nanobiosafety evaluation, and other nanobiology/technology areas generated fewer submissions; Novel biomedical engineering technologies were mainly distributed across cellular and biomolecular engineering, organ chips, micro nano fabrication and micro/nanofluidic technology, biomanufacturing and 3D printing, Applications in the direction of biomimetics and artificial intelligence were concentrated in biomaterials and biomimetics, while there were relatively fewer applications in brain-computer interfaces and neural function repair, brain-computer signal processing.

This Discipline encourages applications to carry out original, systematic, and interdisciplinary basic research in the fields of biomechanics and biorheology, biomaterials and biological effects, tissue engineering andtissue regeneration, organoids and artificial organs, bioimaging, electronics and probes, brain-computer interaction, information processing and biomimetics, nano biology, as well as new technologies and methods for biological and medical engineering. The Discipline will maintain focus on tissue/organ repair and regeneration, nano diagnosis and treatment, biosensing and monitoring, structural and functional imaging, cross-scale molecule-cell-tissueand organ biomechanics, interactions between biomaterial and body, intelligence and biomimetic, brain-computer interfaces and biological interfaces, artificial intelligence-driven biomaterials and biotechnology; the Discipline supports the research of novel methods, new techniques in biomedicine, and supports fundamental research exploring the pathogenesis mechanisms and treatment of diseases.

Special notes for applicants:

This Discipline doesn’t accept materials science and researches that are not associated with the biological and medical fields.

Molecular Biology and Biotechnology (C21)

Molecular biology is a discipline to understand and clarify the essence of life phenomena at molecular level. Biotechnology is a subject aiming at research, development and application of biological technology and methodologies, and can provide novel powerful techniques and tools for the development of life sciences. The prominent features of molecular biology and biotechnology is the interdisciplinary integration of biology, physics, chemistry, engineering and computer science, providing theoretical foundations and methodological innovations for technology breakthroughs and methodological innovations, and providing potential solutions to break through the related technology bottleneck by analyzing and processing, and systemically integrating the existing knowledge.

Funding scope of the Discipline includes: basic theories of cutting-edge technologies, synthetic biology and biological transformation technology, life omics technology, generic biotechnology, cross fusion biotechnology, applied biotechnology, as well as instrument development and reagent research related to life science research.

In the recent two years, most submitted proposals and funded proposals focused on synthetic biology, omics technology, gene editing and biomolecular manipulation, and application of biotechnology, while there were still fewer research focusing on molecular biology, biomolecular detection technology, protein and vaccine engineering, single molecule and single cell and spatial omics technology, stem cell and tissue engineering, bioimaging technologies, big data and artificial intelligence biology, cutting-edge biotechnology, reagent development and new instrument theory studies.

In 2026, the Discipline will continue to support applications focused on interdisciplinary, cutting-edge and original studies, encourage applicants to carry out systemic research in the fields of synthetic biology, gene editing, molecule manipulation, in situ and in vivo analysis of biomolecules, single-molecule/single-cell and spatial omics technologies for complex systems, bioimaging technologies, and integration of biotechnology and information technology. It is important to note that sugar sequence and structure analysis is still the current technical bottleneck of sugar related research. The Discipline will continue to encourage applicants to carry out principle exploration and technology research and development in this field, and will give appropriate preferences to applications focused on these fields.

Division of Environment and Ecology

The Division supports researches in areas of ecology, forestry, and grassland science.

Ecology (C03)

Ecology is a discipline that studies the interactions between organisms and environments as well as the interactions between organisms and other organisms. Ecology plays a pivotal role in solving the national ecological issues and promoting the construction of ecological civilization. The funding scope encompasses fundamental research and applied fundamental research in the fields of environmental and biological evolution, behavioral ecology, physiological ecology, population ecology, community ecology, ecosystem ecology, landscape and regional ecology, global change ecology, micro-ecology, pollution ecology and restoration ecology, soil ecology, conservation biology, sustainable ecology, and urban ecology, etc.

In recent years, significant progresses have been achieved in ecological studies in China with some important progress in the fields of ecosystem response to global change and conservation of important biological species, etc. The applications received by the Discipline in 2025 indicated imbalance in the development of each subdiscipline: there were more project applications in the fields of ecosystem ecology, community ecology, ecosystem ecology, global change ecology, pollution ecology and restoration ecology, soil ecology, while there were fewer project applications in the fields of behavioral ecology, population ecology, and micro-

ecology.

In 2026, the discipline will vigorously support research that addresses frontier ecological issues and serves China's environmental challenges and supporting ecological civilization development. The Discipline will further give priority to encourage and support field of micro-ecology, theoretical ecology, urban ecology, disease ecology, and fundamental ecology related to major engineering projects. Priority will be given to supporting research utilizing new technologies and interdisciplinary approaches to conduct field surveys and monitoring, as well as the integration and mining of ecological big data.

Forestry(C16)

Forestry is to reveal the essence and mechanisms of the biological phenomena by taking forest as research objects. The funding scope of this discipline includes: grass germplasm resources and genetic breeding, grass cultivation, protection and utilization, wood physics, forest product chemistry, tree biology, forest soil science, forest cultivation, forest informatics and forest management, forest protection, forest genetic breeding, economic forestry, landscape architecture, desertification and soil and water conservation, bamboo science.

In recent years, forestry and grassland science have showed sound development tendency, especially for the rapid development of landscape architecture and economic forestry science. Whereas the projects of forest genetics and breeding, tree biology, and economic forestry science exhibit a predominance of follow-up studies, with insufficient investigation into the key scientific questions underlying major technological bottle necks. The studies of forest product chemistry and wood physics are lack of novel theories and methodology to promote industrial development. From the perspective of applications received in 2025, the development of each subdiscipline branch was imbalance: with higher application volumes in landscape architecture, economic forestry science, forest genetics and breeding, grass cultivation, protection and utilization and forest product chemistry, while there were fewer applications in the field of bamboo science, tree biology, forest soil science.

In 2026, the Discipline will keep focusing on the national major needs, continue to vigorously promote relevant fundamental research on forest cultivation, protection and resource utilization; give priority to continuous long-term field research; give priority to support research focused on conventional genetic breeding, the relationship between wood properties and genetic breeding, formation and maintenance mechanism of mixed forest, mechanism of yield and quality formation in economic forests, forest cultivation and quality improvement in arid and semi-arid areas, the process and mechanism of desertification prevention and control; the Discipline encourages research on the construction of efficient genetic transformation system for important tree species, exploring/innovating forest germplasm resources; and also supports research in the field of economic resources and utilization under the forest,

prevention and control of major forest disasters.

In 2026, the research directions under the discipline of Landscape Architecture (C1610) have been revised as follows: the original direction "Landscape Architecture Planning and Design and Forest Therapy" has been changed to "Urban Green Space Planning and Design and Forest Therapy." Accordingly, project applications in the field of landscape architecture planning and design that do not take urban green spaces as their research subject will no longer be considered for acceptance by this discipline.

The Discipline doesn't accept the research in the following fields: (1) Proposals on pharmaceutical functional verification of effective components using animals as research objects，including anti-tumor research. (2)Proposals on the research and development of cutting tools, forest road and bridge design, forest engineering machinery and equipment, forest engineering and civil construction in forest areas, etc. (3)Proposals on forest product chemistry research not using forest biomass as research object，including but not limited to: research on cellulose and its derivatives, lignin and its model compounds, hemicellulose, polyphenolic compounds, etc., without specifying the raw material source; research on various nano-scale cellulose materials such as cellulose nanocrystals, cellulose nanofibrils, etc., without specifying the raw material source; research on biomass-derived platform small molecule compounds such as furfural, 5-hydroxymethylfurfural, 2,5-furandicarboxylic acid, etc., without specifying the raw material source.(4)Proposals mainly focused on paper production processes and the preparation of functional paper.(5)Proposals on forest product chemistry submitted under the wood physics direction.

Grassland Science(C22)

Grassland Science is a discipline focused on grasslands and grass plants as primary research subjects, investigating the fundamental biological phenomena and governing principles of these systems. The funding scope of this discipline includes: basic biology of grass plants, genetic breeding, genetics and breeding of grass plants, cultivation science of grass plants, forage processing and utilization, natural grassland restoration science, grassland protection and sustainable management, turfgrass science, as well as smart grassland industry.

In recent years, grassland science has shown an overall sound development trend. Based on the applications received in 2025, the development across sub-fields was uneven. There were more project applications in grass plant germplasm resources and genetics/breeding, grassland protection and sustainable management, and grass plant genomics and basic biology, while there were fewer applications in grassland informatics and smart grassland industry, and turfgrass science.

In 2026, the Discipline encourages applicants to be guided by the need to serve major national demands, focus on frontier disciplinary issues and industrial

development needs, and identify and propose scientific questions from grassland production practices in China, rather than blindly pursuing hot topics. It will vigorously promote fundamental research on directed grass resource cultivation, grass seed science, degraded grassland restoration and enhancement of grassland productivity Priority support will be given to continuous long-term field studies, as well as innovative, systematic, and distinctive research that leads the development of China's grassland industry. The Discipline encourages research in the following directions: establishing efficient genetic transformation and gene editing systems for China's important grass species, exploration and innovation of grass germplasm resources, forage cultivation and processing/utilization , prevention and control of major grassland disasters, and development of smart grassland industry. It also encourages the development and application of new technologies and methods in grassland science, particularly the application of big data and artificial intelligence in this field.

Special notes for applicants:

(1) This Discipline does not accept project applications using Chinese herbal medicine as the research object.

(2) This Discipline does not accept project applications for functional verification of effective active ingredients from grass plants using animals or animal diseases as research objects.

(3) This Discipline does not support project applications primarily focused on grassland ecology research such as biodiversity, ecosystem multifunctionality, and grassland ecosystem carbon sinks.

Division of Agriculture and food sciences

The Division covers two disciplines: basic agriculture and crop sciences, and food sciences.

Basic agriculture and crop science (C13)

The discipline of basic agriculture and crop sciences mainly supports fundamental research on crops and their growing environments aiming at the major needs and frontier scientific developments of national agriculture. To implement the strategy of "storing grain in land and technology" and "Seed Industry Revitalization Action", while strengthening the fundamental research of crop seed systems, the Discipline focuses on research fields including: the excavation and innovative utilization of crop germplasm resources, formation, regulation, and environmental adaptability mechanisms of important crop traits, ,the theory and method of molecular design breeding, agricultural informatics and smart agriculture, the cultivation physiological mechanism and regional cultivation system improvement for green and

high yield, quality and efficiency enhancement of germplasm crops.

The received applications in 2025 indicated that there was a rising number of proposals with basic issues on topics meeting the national demand of agriculture, an obvious increase in interdisciplinary studies around basic agricultural issues. However, some major problems remain as the following: (1) In agricultural fundamentals, many projects fail to effectively integrate agricultural informatics, agronomy and agricultural machinery, agricultural biological system engineering and agricultural biology, and the scientific problems and application objectives were not clear; (2) Some studies overemphasize trending international frontier, but inadequately align scientific questions of these fundamental research were not performed in close combination with practical issues of our national agricultural production, which therefore couldn't provide strong support for the actual applications; (3) Research contents are often homogeneous with limited innovation. There were lots of applications focused on the gene cloning and gene mining study for the main agronomic traits of crops, but the analysis of gene biological functions was not deep enough; the application in crop breeding need to be further strengthened. Few proposals address innovative breeding technologies or methodologies; (4) Some projects were not systematic and sustainable, and often lack focused in-depth and long-term research on essential scientific issues; (5)Under the tropical crop science code (C1313), some proposals used horticultural crops, trees, etc., as research objects, deviating from the funding scope; (6) Some proposals lack rigor and standardization in their preparation, especially the issues of high similarity and inaccuracies in attribution information for representative research achievements.

The Discipline encourages applicants to align with major national strategic needs, refine scientific issues from the reality of agricultural production in China, and select research directions targeting urgent and challenging scientific problems, avoiding blind pursuit of trending topics while emphasizing original innovation and breakthroughs in fundamental theories and core technologies. The Discipline encourages the close combination of current biotechnology, information technology, intelligent equipment technology and agricultural production to carry out interdisciplinary research; encourages the development of germplasm resources mining and innovative research by using new technologies and methods, and focuses on the research of agronomic characters suitable for mechanized production; encourages in-depth exploration of the breeding utilization potential of crop wild species and their wild relatives, and research on the domestication of wild germplasm resources and crop germplasm innovation; encourages research on analyzing crop resistance mechanisms and intelligent design breeding of environmentally resilient crops to address future agricultural challenges such as global climate change; encourages research on crop cultivation and cropping systems focusing on production theories and technical challenges related to resource efficiency, high yield and quality, and simplified mechanized operations.

In the field of fundamental research of Agronomy (application code: C1301, C1302 and C1303), applications for interdisciplinary research should focus on the organic integration with agricultural biology issues. Applications only focus on studying agricultural materials, agricultural machinery and facilities will not be accepted. Agricultural Biosystems Engineering (C1303) does not accept the application of taking livestock, poultry, aquatic products and other agricultural animals as the research object. In the field of crop science research (C1304 ~ C1313), applications using horticultural crops, trees, forages and lawn grasses, medicinal plants and traditional Chinese medicine, Arabidopsis, etc. as the research object will not be accepted.

Food Sciences (C20)

The discipline of food sciences mainly supports fundamental research in food biology, food chemistry, food safety and quality using food and its raw materials as the research objects. In recent years, the Discipline focuses on the following research fields: the selection, regulation and fermentation of food microbial strains with independent intellectual property rights; the preparation of food enzyme expression system and food enzyme engineering; the changing and interaction mechanisms of food nutrient components and their processing processes; the biological fundamental research of organic food processing and comprehensive utilization; the regulatory mechanism of food storage, transportation, and postharvest quality; formation mechanism, detection methods and control of hazardous substances in food; food authenticity detection and traceability; identification,, analysis and formation mechanism of food flavor substances.

In 2025, the number of applications focusing on the actual scientific problems of food processing and manufacturing in China increased, and the trend of carrying out interdisciplinary research on food production was obvious. Major problems existed in these proposals as following: (1) There were lack of projects with refined scientific problems from the bottleneck of food production in China; (2) Some projects focused on product development, with limited attentions to the scientific problems behind the industrial bottleneck; (3) Under the food quality and safety detection code, many projects focused on detection methods, and ignored the impact of food matrix and practical application goals; (4) Some projects followed the international research hotspots unilaterally, especially the proposals focused on in the fields of food components and nutrition, food and gut microbiota, and food quality and safety detection, but without consideration of the actual needs of Food Science in China; (5) Some applications in food components and nutrition, food and gut microbiota, food raw materials science, food storage and preservation were not closely related to food and beyond the funding scope of this discipline; (6) Some proposals were not standardized rigorously, especially with inaccurate attribution of representative publications.

In 2026, the Discipline will continue to encourage projects that address major

national strategic needs of China, and encourage projects with refined scientific issues from the actual food production based on the funding scope, especially the key technical issues that constrain the food processing and manufacturing in China; encourage applicants to adhere to the guidance of scientific issues, and attach importance to the research fields of food safety control, traditional Chinese food, special food; encourage applicants to conduct fundamental food science research guided by the concept of a diverse food supply system, especially in key areas such as food microbial strains and starter cultures with independent intellectual property rights, preparation of food enzymes, biomanufacturing of bulk food raw materials and high-value ingredients, and preparation of novel food resources and alternative proteins; encourage applicants to focus on interdisciplinary research with food science as the main interest, integrate new theories, methods and technologies of other related disciplines, and analyze the key scientific issues of food science in China.

The Discipline does not accept the following applications: (1) research on disease treatment and drug development, and clinical trials with human; (2) research on product development of health products and medicines; (3) proposals with main research contents focused on the cultivation of animal and plant.

Division of Agricultural Environment and Horticulture

The funding scope of the Division covers two disciplines: plant protection, and horticulture and plant nutrition.

Plant Protection (C14)

Plant protection is a discipline that takes agricultural harmful organisms as its research objects, focusing on the identification, biology and ecology of agricultural pests such as crop pathogens, agricultural insects, farmland weeds, and agricultural rodents, as well as the patterns and mechanisms of their occurrence, damage, migration, dispersal, invasion, and outbreak, and the strategies and technologies for their prevention and control. Research on plant protection should meet the major national needs of agricultural production. The funding scope of the Discipline covers fundamental research and applied research in plant pathology, agricultural entomology, crop immunity and resistance, agricultural weeds, agricultural rats and other pest, plant chemical protection, biological prevention and cure, new techniques of plant protection, crop and biological factor interaction, and ecological regulation etc. In recent years, the development trend of plant protection has been the

comprehensive use of big data and modern biotechnology to deeply reveal the occurrence, damage, and disaster patterns of crop pests, as well as the mechanisms of crop resistance to pests; the application of the principles and methods of plant protection and related disciplines to establish the theoretical and technical system to improve the capacity of agricultural production, protection of biological diversity, and achieve green governance of harmful organisms.

Applications submitted to the Discipline in 2025 showed the following problems: (1) Some of the proposals failed to reflect both the international frontiers of plant protection science and practical production needs; (2) There was insufficient interdisciplinary integration in foundational research areas. Some proposals tracked hotspots while neglecting actual production demands, with a scarcity of applied fundamental research focused on solving China's major diseases, pests, and weeds; (3) Some applicants were accustomed to traditional research approaches and lacked keen insight and exploratory spirit for new problems and perspectives, making it difficult to break conventional thinking patterns and propose innovative academic questions and viewpoints; (4) Some proposals didn't show accurately refined scientific questions, some proposals didn't show prominent key points of research contents, some proposals was not rigorous and standardized.

In 2026, the Discipline will encourage applied fundamental research focused on solving China's major diseases, pests, and weeds. support research focused on mechanisms of pest infestation and evolution in crops, molecular basis and regulation of harmful organisms in crops, interaction mechanisms between crops, harmful organisms, beneficial organisms, and the environment, exploration of molecular targets and scaffolds for the control and treatment of harmful organisms, creation and scientific use of green pesticides, green and sustainable comprehensive prevention and control of harmful organisms, and support for grass and rodent pests in farmland. Special attention shall be paid to the factors of the national crop of ecological features of different regions, to study the new issues in plant protection caused by factors such as global climate change, food security supply, and industrial restructuring. As for the research approaches, the Discipline encourages mutual promotion between fundamental and applied research, coordination between high technologies and traditional technologies, the combination of laboratory research and field experiments. The Discipline will give priority to support research projects with strong innovation, important scientific value, continuity, and systematic work accumulation.

Application to the Discipline shall focus on the research object of crop health and agricultural ecological security as fundamental principles, agricultural pests as the core research subject and taking the prevention and control of pest hazards as the scientific goals, otherwise it will not be accepted. Applications that primarily use forest pests or model organisms (such as arabidopsis and drosophila, etc.) as main research objects will not be accepted.

Horticulture and Plant Nutrition (C15)

The funding scope of the Discipline covers two research subjects, namely horticulture and plant nutrition.

Horticulture primarily involves germplasm resources and genetic breeding, growth-development and cultivation physiology, facility environmental response and regulation, postharvest quality maintenance of horticultural crops and other disciplinary directions. The funding scope of horticulture covers the fundamental and application research in pomology, olericulture sciences, ornamental horticulture, tea science, edible mycology, horticultural facilities, post-harvest biology of garden crops. In recent years, there has been a rapid development of genome research in horticulture in China, and great achievements have been made in the study of gene mining and functional analysis of important agronomic traits, germplasm innovation and new variety cultivation, product organ development and maturity, quality formation control and regulation, stress response and adaptation mechanisms, and harvest quality maintenance of horticulture crops.

Plant nutrition is a discipline to study the migration, transformation, and utilization patterns of nutrient elements in the soil-plant system. The funding scope of plant nutrition covers fundamental research and applied fundamental research focused on the basis of plant nutrition, nutrient resources and recycling, manure and fertilizer science, nutrient management, etc. In recent years, plant nutrition discipline in China has made significant progress in the fields including genetic mechanism of plant nutrition, nitrogen and phosphorus recycling and efficient utilization of soil plant system, and the creation and application of new fertilizers.

In 2025, common problems were found in both horticulture and plant nutrition in the following aspects: (1) The proposed scientific questions were not closely integrated with the new situations and demands of China's industrial development; (2) There was a lack of original innovation and systematic research; (3) There were few studies employing new technologies, new methods, or interdisciplinary approaches. Specific problems with the discipline of horticulture were as following: (1) Imbalanced development across sub-disciplines, with fewer applications in edible mycology, protected horticulture, and postharvest biology of horticultural crops; (2) Insufficient research supporting the synergistic improvement of yield and quality in horticultural crops; (3) Research on the interaction between horticultural crops and the environment need to be strengthened. Specific problems with the discipline of plant nutrition were as following: (1) There was insufficient research on the synergy between nutrients, yield, and quality; (2) There was insufficient research on green new fertilizer; (3) Theoretical and methodological research on efficient fertilization for economic crops needs enhancement.

In 2026, the Discipline will give priority to support innovative, systematic, and distinctive fundamental and applied fundamental research that leads China's industrial

development. The discipline will focus on supporting research on the exploration, utilization, and germplasm innovation of wild and characteristic germplasm resources, theories and technological innovations for high-quality, green, and simplified cultivation, and postharvest quality formation and maintenance; encourage research on intelligent molecular design breeding theories and technological innovations, and on the interaction between horticultural crops and multiple environmental factors.

Plant nutrition will focus on supporting research on nutrient-efficient utilization for green production of grain and economic crops, synergistic enhancement of yield and quality, and theoretical research on nutrient management and new fertilizers; encourage the applied fundamental research plant-soil-biological interactions, carbon sequestration and pollution reduction, etc.

Applications using Arabidopsis and agricultural insects as research objects will not be accepted in the Discipline. Application of medical health research will not be accepted in the Discipline.

Division of Agriculture Animal

The funding scope of the Division covers three disciplines: animal husbandry, veterinary sciences and aquatic sciences.

Animal Husbandry (C17)

Animal husbandry is a discipline that studies the germplasm resources, genetic breeding and reproduction, nutrition, feedstuff and feeding, behavior and welfare, breeding environment and facilities of livestock and poultry, including special economic animals and companion animals.

The applications received and funded in 2025 were mostly focused on animal husbandry foundation, animal genetics and breeding, animal reproduction, animal nutrition and feed science, while fewer applications were focused on animal germplasm resources, animal behavior and intelligent breeding, and beekeeping, etc., showing prominent imbalance issues of applications in some research fields under the secondary codes. Peer review and evaluation of these applications indicated that the innovation of academic ideas had been improved overall, the characteristics and advantages had been formed in animal genetics and breeding and animal nutrition, and the cross research field of livestock and poultry breeding facilities and intelligence showed relatively rapid development. However, there were still some notable shortcomings: insufficient accuracy in understanding scientific problem attributes, some proposals overly focused on various omics techniques but were lack of refined understanding of the core scientific issues; insufficient emphasis on the research of national major needs, and some proposals were disconnected from the

actual animal husbandry production; insufficient efforts had been made in the fundamental theoretical research on the bottleneck technologies, and the applicants need to attach great importance to it.

In 2026, the applicants are encouraged to carry out original, systematic and continuous research guided by the national strategy and industrial needs. The Discipline will continue to encourage research on the evaluation and utilization of germplasm resources in livestock, poultry, bees and silkworms, as well as research focused on important scientific issues related to the creation of new germplasm, the discovery and regulatory mechanisms of excellent characteristic genes. The Discipline will strengthen fundamental research on genetic breeding, reproduction, nutrition, feed and feeding of livestock and poultry, especially large animals. And the Discipline will give priority to support some research fields including fundamentals of animal husbandry, environment and health, behavior and welfare, intelligent breeding facilities and equipment, novel feed ingredients development & bio-manufacturing and interdisciplinary studies.

Special notes for applicants:

Applications submitted to the Discipline shall use agricultural animals such as livestock, poultry, bees and silkworms, as well as companion animals, as research objects. Interdisciplinary studies with other disciplines are not allowed to deviate from the above research subjects, otherwise the proposals will be not accepted.

Veterinary Science (C18)

Veterinary science is to study the occurrence, development, diagnosis, prevention and treatment of animal diseases, which further derives many interdisciplinary disciplines. The main research object of this discipline is animal diseases, and the Discipline supports fundamental research related to animal diseases, zoonotic diseases, veterinary public health, and veterinary medicine.

In 2025, the applications submitted to the Discipline involved all fields in the Discipline, and there were a large number of applications in veterinary virology, clinical veterinary medicine, and basic veterinary medicine. Most of the proposals targeted at the international forefront and emphasized the selection of innovative topic. However, there were still some problems, such as some proposals blindly tracked the research hotspots, but lacked sufficient refinement of scientific issues. The Discipline shall be established in ensuring animal health, food safety, public health, and environmental and ecological safety. Facing the major national needs, the Discipline encourages research in the epidemiology, pathogen biology, pathogenesis, and cross species transmission mechanisms of important animal diseases and zoonotic diseases.

In 2026, applications must aim to control animal diseases, safeguard animal health, and protect public health and biosecurity, with interdisciplinary proposals

required to align with these core objectives. The Discipline encourages fundamental research on important animal diseases(especially zoonotic and new and recurrent animal diseases), , important noninfectious animal diseases, new animal vaccines and diagnostic reagents, pathogen drug resistance mechanisms, veterinary drug development, and interdisciplinary fields guided by industrial and national needs. Simultaneously, it will strengthen related research in veterinary pathology, veterinary toxicology, veterinary public health, veterinary immunology, and traditional Chinese veterinary medicine.

Special notice for applicants:

All studies involving high-pathogenicity pathogens must strictly adhere to national biosafety regulations, with applications permitted only when corresponding laboratory biosafety conditions are met. Projects requiring animal experimentation must comply with national animal welfare standards and research ethics requirements.

Aquatic Science (C19)

Aquatic science is a discipline to study basic rules of the genetics, breeding,development, growth, physiology, immunology and behavior of aquatic organisms and their variety cultivation, nutrition and feedstuff, disease prevention and control, aquaculture ecology, aquaculture engineering, resource protection and utilization, etc.

In 2025, applications received and funded were mostly in areas of fundamental aquaculture sciences, genetics and breeding of aquatic organisms, aquatic organism immunology, aquatic pathogenetics and disease control, aquatic animal nutrition and feed science, and aquaculture science. Whereas there were fewer applications in reproduction and development of aquatic organisms, fisheries resources and conservation biology, and aquaculture and fisheries engineering. From the actual situation of applications and peer reviews, the overall innovation were obviously improved, showing research characteristics and advantages in some areas including genetic mechanisms of economically important traits in aquatic species, infection and immunity mechanisms of major aquatic pathogens, nutrient metabolism and regulation in aquatic animals, etc. However, interdisciplinary integration and some research directions needs to be improved.

In 2026, the Discipline encourages applicants to align with disciplinary frontiers and industry demands, grasp the latest research trends at home and abroad, combine the existing work foundations, and carry out innovative explorations. Key research contents include: genetic mechanisms for the formation and improvement of important economic traits in aquaculture, biological characteristics of reproduction and development, epidemic patterns and pathogenic mechanisms of important pathogens, investigations into host immunity and disease prevention strategies, as well as analyses of nutrient metabolism and regulatory mechanisms.. The Discipline

encourages interdisciplinary integration of aquatic science with other disciplines, and fundamental research on interactions between aquaculture organisms and the environment, protection and utilization of fishery resources, as well as aquaculture engineering and innovative farming models. Applicants shall give full play to regional and characteristic resource advantages to strengthen talent training. Research using model organisms as experimental materials shall be based on solving scientific and technological challenges that constrain the development of the aquatic industry, avoiding overemphasis on new technologies while neglecting the refinement of key scientific questions.

Department of Earth Sciences

Earth science is the discipline that seeks to understand the Earth and uncover the fundamental laws governing the influence of other celestial bodies on it. By exploring the evolution of the Earth and celestial bodies, the origin of life and humans, and the interactions between natural and human processes, earth science provides theoretical foundation, frontier knowledge, and scientific basis for the sustainable utilization of resources, disaster prevention and mitigation, protection and optimization of the living environment. Earth science includes Geography, Geology, Geochemistry, Geophysics and Space Physics, Atmospheric Science, Marine Science, Environmental Geosciences, and Lunar and Planetary Science.

In 2025, the Department received 16,418 applications for the General Program. Among these, 2,388 applications were funded, with an average funding rate of 14.55%. The total direct funding amount reached 1,194.10 million yuan, with an

Funding of the General Program, Young Scientist Fund and Fund for Less Developed Regions of the Department of Earth Sciences in 2025

Unit: 10,000 yuan

Division		General Program			Young Scientist Fund			Fund for Less Developed Regions		
		No. of Projects	Direct cost	Funding rate (%)	No. of Projects	Direct cost	Funding rate (%)	No. of Projects	Direct cost	Funding rate (%)
I	Geography	556	26 810	13.82	598	17 940	18.59	72	2 229	11.04
II	Geology	404	21 067	15.25	317	9 510	18.59	38	1 176	11.08
	Geochemistry	86	4 568	17.92	64	1 920	18.39	12	371	11.11
III	Geophysics and Space Physics	245	12 496	17.12	177	5 310	18.59	10	310	10.75
	Environmental Geosciences	572	28 019	13.04	670	20 100	18.59	73	2 260	10.93
	Lunar and Planetary Science	22	1 111	14.10	25	750	18.80	0	0	0.00
IV	Marine Science	290	14 660	14.40	263	7 890	18.57	11	341	11.22
V	Atmospheric Science	213	10 679	16.68	192	5 760	18.60	14	433	11.02
Total or Average		2 388	119 410	14.55	2 306	69 180	18.59	230	7 120	11.00
Direct cost per project*		50.00			30.00			30.96		

*The General Program and Fund for Less Developed Regions are averaged direct costs, while the Young Scientists Fund implements a lump-sum funding mechanism with a fixed amount.

average direct funding of 500,000 yuan per project. Compared to 2024, the number of applications increased by 1,478, or 9.89%.

In 2025, the Department received 12,406 applications for the Young Scientist Fund. A total of 2,306 projects were funded, with a total direct funding amount of 691.80 million yuan and an average funding rate of 18.59%. Compared to 2024, the number of applications increased by 1,114, or 9.87%.

In 2025, the Department received 2,090 applications for the Fund for Less Developed Regions, of which 230 projects were funded, resulting in an average funding rate of 11.00%. The total direct funding amounted to 71.20 million yuan, with an average of 309,600 yuan per project. Compared to 2024, the number of applications increased by 256, or 13.96%.

The program's proposal selection attaches great importance to fundamental or traditional disciplines, focusing on the accumulation of basic data. It effectively strengthens the development of weak or "endangered" disciplines to promote growth in areas where China is relatively weak but internationally mainstream; it enhances cutting-edge disciplines, encourages interdisciplinary integration and cross-fertilization, particularly between earth sciences and other fields; it maintains the international standing of China's strong disciplines and fields; and supports the development of sub-disciplines closely related to experimentation, observation, data integration, and modeling. While advocating for innovative research, emphasis is also placed on the accumulation of research work. Respecting the exploratory, unpredictable, and long-term nature of fundamental research, scientists are encouraged to boldly tackle highly challenging scientific topics and actively engage in exploratory research.

The Department of Earth Sciences promotes original innovation, expands scientific frontiers, addresses national needs, and fosters interdisciplinary collaboration through the funding of General Programs, laying a comprehensive and solid foundation for the balanced, coordinated, and sustainable development of all earth science disciplines. In 2026, General Program projects will be selected based on the following principles: ① the innovativeness and academic value of the proposal; ② the research capabilities of the applicant; ③ whether the project design is reasonable and the scientific questions are clearly defined; and ④ whether the necessary research foundation and conditions are in place. Priority will be given, under equal conditions, to proposals that have accumulated solid research foundations, achieved high-quality recent research outcomes, and are applying for continued funding, with the requirement that the application articulates the relationship with completed projects.

One of the key objectives of science funding is to consistently and steadily cultivate and nurture outstanding young scientist talent. The Young Scientist Fund (Category C) projects primarily serve as an "incubator," gradually shifting the focus of funding earlier to provide timely support to young scholars who are about to

independently engage in basic scientific research. By offering assistance during their critical career development stages, it helps them grow and advance as quickly as possible.

The Fund for Less Developed Regions projects are positioned as a regional support plan aimed at "addressing weaknesses, promoting balance, and nurturing talent." They focus on supporting universities and research institutions in areas with relatively weak research foundations, such as western, northeastern, and central China. These projects encourage independent topic selection based on regional strengths and characteristics in earth sciences, aiming to cultivate a local research workforce that can be retained and effectively utilized.

Notes:

(1) Please carefully read the list of application codes and the instructions outlined in this Guide, and select the code that best corresponds the content of your application. The selected application code shall generally be specified down to the secondary level.

(2) Please carefully read and strictly comply with the requirements for scientific integrity stated in this Guide. Do not list academic papers at the submission stage in the application.

(3) All scientific research must comply with national laws and regulations. Research activities in the fields of biology and toxicology must additionally comply with relevant national regulations. Projects involving animal experiments must follow national regulations on animal ethics and welfare.

(4) For applications involving ethics-related research across multiple institutions, approval documents from the ethics committee of each participating institution or its competent higher authority must be submitted. If the research plan involving ethical issues is revised after funding is granted, the revised plan must be re-evaluated and approved by the ethics committee, and the updated certificate must be resubmitted to the NSFC in accordance with the aforementioned requirements.

Division I of Earth Sciences

Geography (D01)

The funding scope of this discipline is geographical sciences.

Geographical sciences investigate the spatial differentiation patterns, temporal evolution processes, and regional characteristics of natural factors, human elements, geographic information, and integrated geographic systems. The discipline mainly encompasses Physical Geography (D0101 Geomorphology, D0102 Hydrology and Climatology, D0103 Biogeography and Soil Geography, D0104 Environmental

Geography and Disaster Geography, D0105 Landscape Geography and Integrated Physical Geography, D0106 Cryospheric Science, D0107 Geographical Environmental Change and Civilization Evolution), Human Geography (D0108 Economic Geography, D0109 Urban Geography and Rural Geography, D0110 Human Geography, D0111 Land Science and Natural Resource Management, D0112 Regional Sustainable Development), Information Geography (D0113 Remote Sensing, D0114 Geographical Information Science, D0115 Geodesy and Cartography, D0116 Geographical Big Data and Spatial Intelligence), as well as observation, modeling, and analytical methods and tools in Geographical Sciences (D0117 Geographical Observation and Simulation Technology).

The research object of geographical sciences is the Earth surface system, which is formed by the interactions and mutual penetration among the lithosphere, hydrosphere, atmosphere, biosphere, cryosphere, and anthroposphere. Research in geographical sciences must treat the Earth surface system (also referred to as the integrated "water–soil–air–biota–human" system) as a whole. Oriented toward frontier scientific fields such as integrated studies of terrestrial surface systems, global change, and sustainable development, the Discipline encourages research focusing on the development, reuse, and integration of geographical observation technologies and modeling approaches. It aims to promote the construction of scientific research infrastructures such as integrated geographical modeling and simulation systems and sustainable development decision-support systems, thereby enabling the seamless linkage from geographical data to geographical mechanisms, laws, and decision-making.

At its core, geographical sciences study the human–environment relationship within the Earth surface system and the mechanisms governing their interactions. The comprehensive, interdisciplinary, and regional characteristics of geographical sciences require system-oriented integrative research based on multidimensional and dynamic perspectives that span spatial and temporal scales.

The Discipline encourages applications for comprehensive, exploratory, and forward-looking research projects. It promotes the use of theories, methods, and technologies from mathematics, physics, chemistry, biology, and information sciences to study surface processes, and supports frontier interdisciplinary research addressing major national strategic needs, including ecological civilization construction, the Belt and Road Initiative, rural revitalization, new-type urbanization, territorial spatial planning, and regional and country-specific studies.

In response to paradigm shifts in scientific research driven by big data and artificial intelligence, geographical sciences encourage the development of theories, methods, and technologies for geographical intelligence that integrate big data and artificial intelligence with geographical problems, thereby enhancing human understanding and predictive capabilities of geographical systems. The Discipline also supports the establishment of modern scientific paradigms and technical

frameworks for spatiotemporal big data analysis in geography, leveraging new productive forces.

Division II of Earth Sciences

Geology (D02)

The funding of this discipline is geology.

As an important subject of natural science, geology is the study of material composition, structure, tectonics, geological process and evolutionary history of the Earth. It aims to explore various geological processes, the evolution of environment and life, material cycle and energy exchange processes, unveil the interaction and coupling mechanisms of different layers of our planet, and establish and improve geology theory and model based on geological records. The theory and model can be used to prospect minerals, mineral resources, energy resources, water resource and etc., reveal the relationship between the significant geological engineering and human activities, prevent (alarm) and mitigate geo-hazards, and protect the global environment and human development.

With the development of the fundamental theories and technical advances of multiple disciplines, the discipline of geology has got rapid developments in recent years. The exploration of the earth tectonic system and internal continental dynamical processes brought revolutionary leap on understanding the earth, which become the important direction of deepening and developing plate tectonics theory. With the spring up of earth system science, the exploration of the Earth's internal operation process and the superficial response mechanism has become a frontier field of geology. The applying of new technologies and new methods have greatly promoted the development of geological sciences. The improvement of analytical methods on high-precision, in-situ and real-time constituent structure and geochronology strengthened the resolution on the composition and evolutionary history of the Earth. The development of geophysical probing, space-to-earth observation and geological drilling techniques help people precisely understand the structure and tectonics of the Earth. The application of high technology such as information systems, the internet of things and photoelectron realized the goal of real-time monitoring of crustal movements, earthquakes and volcanic activities. The analysis and prediction of important geological processes can be achieved based on the developments of high temperature and pressure tests and techniques of computational simulation. The development of big data and artificial intelligence techniques promoted the changing of research paradigms in geology.

Geology aligns with global frontiers of science and technology, as well as the major national needs, while committing to original innovation, talent cultivation and

science communication. Geological research, which encourages to stand on solid field works, and real-time observations, actively promotes the interdisciplinary integration of mathematics, physics, chemistry, biology and computational information science, and conducts research on fundamental theory and applied research from a global perspective.

Geochemistry (D03)

The funding scope of this discipline is geochemistry.

Geochemistry is rooted in elemental, isotopic, and organic geochemistry. It employs observational analyses, experimental simulations, and theoretical calculations to investigate the composition, formation, and evolution of the Earth and extraterrestrial materials, as well as the interactions and material cycling among different geospheres. It also focuses on understanding how human activities affect the distribution, state, transformation, migration, cycling, and feedback mechanisms of materials within Earth's surface systems.

The research objects of geochemistry encompass minerals, rocks, ore deposits, petroleum and natural gas, sediments, soils, waters, the atmosphere, organisms, and various volatile components. Its primary emphasis is placed on quantitatively constraining the chemical compositions and their variations within these media to elucidate underlying related chemical processes and evolutionary pathways, ultimately achieving a deeper understanding of the complex processes and mechanisms within the Earth system and extraterrestrial bodies. As a fundamental discipline, geochemistry not only underpins humanity's understanding of the Earth and the exploration of the universe, but also provides critical scientific supports for addressing challenges related to natural resources, ecological environments, and geological hazards, which are essential to human survival and sustainable development.

Major trends in modern geochemical research include:

① Innovations in analytical techniques and methodologies. Emphasis is placed on the development and application of micro-scale, trace-level, high-resolution, high-precision, and high-throughput analytical techniques, as well as high-temperature and high-pressure experimental simulations, numerical modeling, and novel isotopic systems. Integration with emerging technologies such as big data and artificial intelligence is encouraged to drive paradigm shifts in geochemical research. ② Solid Earth geochemistry. Research has expanded from characterizing the chemical composition, structure, and processes of the Earth's deep interior to investigations interactions among different Earth system reservoirs and their resources and environmental implications. Increasing attention is devoted to the links between inter-sphere interactions, plate tectonics, and global change, with research targets extending beyond the Earth to planetary bodies and other extraterrestrial materials. ③ Surface geochemistry. Research addresses both the reconstruction of deep-time

geological processes and the characterization of modern physical, chemical, and biological processes, as well as the simulation and prediction of future environmental changes. ④ National energy and resource security. Research focuses on the formation mechanisms and spatial distribution of mineral resources, fossil fuels, and unconventional and emerging resources, while supporting the development of geochemical theories and methods for exploration and utilization to meet major national strategic needs and economic priorities. ⑤ Ecological health and environmental safety. Attention is given to resources and energy utilization, and to environmental geochemical changes driven by human activities, ultimately serving national strategies for pollution reduction, carbon neutralization, and the protection of public health. ⑥ Interdisciplinary research. Geochemistry actively promotes integration with related disciplines, either by applying geochemical theories and methods to interdisciplinary scientific questions or by incorporation concepts and methodologies from other fields to address core geochemistry problems. Modern geochemistry encourages research that is highly macroscopic, highly microscopic, conducted under extreme conditions, and deeply interdisciplinary, with the aim of innovation and expanding scientific frontiers.

Division III of Earth Sciences

Geophysics and Space Physics (D04)

The Funding scope of this discipline is geophysics, space physics, and geodesy.

Geophysics, space physics, and geodesy aim to understand the structure, dynamics, and evolutionary principles of the Earth, planets, and interplanetary space by applying theories and methods from physics and related disciplines, combined with new technologies and approaches such as observation, experimentation, and artificial intelligence. The Discipline seek to explore the internal resources of the Earth and other planets and reveal the variation features and mechanisms of the habitable environment for humanity.

Geophysics, through observation, experimentation, and theoretical investigation of the Earth and other planets, reveals their internal structures, material components, variations of physical fields and dynamic processes. It investigates the mechanisms of earthquakes and geological hazards, maps the distribution of energy and resources, and advances new understandings in Earth system science.

Space physics, through space borne, airborne, and ground-based observations and experiments, theoretical studies, and numerical simulations, which aims to reveal physical processes and evolutionary patterns in the middle and upper atmosphere, ionosphere, and magnetosphere of the Earth and other planets, as well as in the solar atmosphere, interplanetary medium, and heliosphere, to provide scientific support for

astronautic activities such as aerospace, communication, and navigation.

Geodesy, through the observation and analysis of geometry and physical quantities of the Earth and other planets, studies the geometric shape, gravity field, the state of material movement, and the response of space environment. It determines the precise spatial positions and kinematic states of objects and carriers, as well as geometric shape and deformation of natural bodies and buildings (structures), to provide spatial-temporal datum and information services for the Earth science research, national infrastructure development, and national defense construction.

The Discipline emphasizes fundamental theory, observation, and experimental research. Applicants are encouraged to closely follow the development trends of Earth, space, and planetary sciences; focus on key scientific issues of the deep Earth, deep sea, deep space, and the Earth system science; explore new disciplinary growth points and research areas; strengthen interdisciplinary collaboration; develop new theories, technologies, and methods; and design new instruments and equipment, so as to advance the development of the Earth, space, and planetary sciences.

Environmental Geosciences (D07)

The funding scope of this discipline is environmental geosciences.

With the rapid development of society and economy, humanity is confronted with increasingly prominent environmental problems, such as shortages of water and land resources, frequent disasters, environmental pollution, and ecosystem degradation, which pose severe threats to human health, and constrain the sustainable socio-economic development and construction of ecological civilization. The historical mission of the development of environmental geosciences is to scientifically solve the problem of environmental pollution, disasters, and ecological and health risks.

Based on the theories, methods, and approaches of the geosciences, environmental geosciences take the surface system of the Earth as the object to study the physical, chemical, and biological processes and coupling mechanisms of the pedosphere, hydrosphere, surface lithosphere, atmosphere, biosphere, and their interfaces. The Discipline aims to reveal the occurrence and development laws of global environmental changes and geological disasters, and develop the risk assessment and prevention system for eco-environment and health. It also investigates the evolution behaviors of regional environmental quality and the prediction and response for environmental changes, and reveals the multi-medium and multi-interface environmental behavior, effects, and mechanism of pollutants. The final goal of the Discipline is to unravel the fundamental scientific problems of environmental remediation and ecosystem restoration.

In accordance with the philosophy of the reform and optimization of discipline layout for the NSFC, the Discipline proposes the optimization plan for the application code due to challenges of theory, technology, method, and discipline paradigm faced

by the Discipline, and also establishes the Discipline's framework of environmental geosciences, which includes: ① four basic subjects [Soil Science (D0701 Environmental Soil Science, D0709 Basic Soil Science, and D0710 Soil Erosion and Soil Fertility), D0702 Environmental Water Science, D0703 Environmental Atmospheric Science, and D0704 Environmental Biology]; ② four interdisciplinary subjects (D0705 Engineering Geological Environment and Disasters, D0706 Environmental Geology, D0707 Environmental Geochemistry, and D0708 Ecotoxicology); ③ four frontier areas (D0711 Environmental Behavior and Effects of Pollutants, D0712 Environment and Health Risk, D0713 Quaternary Environment and Environmental Archaeology, and D0714 Environmental Information and Environmental Prediction); ④ one supporting area (D0715 New Technologies and New Methods in Environmental Geosciences); and ⑤ two areas serving major national strategic demands (D0716 Regional Environmental Quality and Safety and D0717 Environmental Protection and Sustainable Development). Combined with the characteristics and advantages of the Discipline, the connotation of environmental geosciences is defined as "polluted environments, ecological environments, disaster environments, and health-related environments".

To meet national strategic needs, the Discipline encourages consolidating the condensation of basic scientific issues in original, interdisciplinary, and cutting-edge fields, highlighting the characteristics of earth sciences; and inspires the innovative applications of new theories, new ideas, new methods, and new technologies in this discipline. Cultivating new growth points of the Discipline, leading major achievement breakthroughs, and promoting discipline development will provide scientific support for sustainable development and ecological civilization construction of a Habitable Earth.

Lunar and Planetary Science (D08)

The funding scope of this discipline is lunar and planetary sciences.

Lunar and planetary sciences focus on the study of the Moon, planets and their satellites, asteroids, and planetary rings in the solar system. This discipline is a cutting-edge interdisciplinary science, aiming to understand the origin and evolution, layered structures, material compositions, surface characteristics and processes, atmosphere and space environment, resource and energy potential of the solar system bodies.

Lunar and planetary sciences emphasize fundamental research and can be categorized into several sub-disciplines: planetary geology, planetary chemistry, physics and dynamics of planetary interiors, planetary space physics, planetary atmospheres and oceans, astrobiology, planetary remote sensing and geodesy; Emerging fields include planetary formation and evolution, Earth-Moon system, and planetary resources; Supporting technologies encompass planetary exploration and simulation.

Oriented towards the national strategies in lunar and deep space exploration, lunar and planetary sciences address fundamental scientific questions such as the origin and evolution of the solar system, planetary habitability, and the search for extraterrestrial life. These studies employ techniques and methods from the Earth sciences, including in-situ and remote sensing exploration, material composition analysis, theoretical analysis and numerical modeling, and laboratory simulations. Through multi-disciplinary, multi-angle, multi-level, and multi-approach methodologies, the Discipline seeks to reveal the mechanisms of fundamental processes on the solar system bodies, understand the primary characteristics and multi -layer coupling properties of planets, and investigate the Earth's formation, operating mechanisms, and habitability evolution from the perspective of comparative planetology.

Division IV of Earth Sciences

Marine Science (D06)

The funding scope of this discipline is marine science and polar science.

Marine science is a knowledge system that studies the natural phenomena and changing rules of the ocean and its interaction with the atmosphere, lithosphere, biosphere, pedosphere, and cryosphere, as well as the exploitation, utilization, and protection of the ocean. It is a comprehensive discipline including the study of the Earth's natural processes and the study of marine social attributes. Meanwhile, marine science is becoming increasingly integrated with the technologies for ocean observation and detection, and the exploitation and utilization of marine resources. On the basis of comprehensive consideration of the development of the discipline, future challenges and the realization of the coordinated development of the three dimensions of science-technology-society, a new version of the application code system for marine science are proposed, including three major directions, namely, "sub-disciplines", "supporting technologies" and "development areas". Sub-disciplines include D0601 physical oceanography, D0602 marine chemistry, D0603 marine geology and geophysics, D0604 biological oceanography and marine bioresources, D0605 marine ecology and environmental science, D0606 estuarine and coastal science; supporting technologies include D0607 ocean remote sensing, D0608 ocean physics and marine observation & detection technology, D0609 marine data science and information system; development areas include D0610 ocean system and global change, D0611 ocean engineering and the associated environmental effects, D0612 marine disasters and disaster prevention and mitigation, D0613 marine energy and resources, D0614 sea-land coordination and sustainable development, and D0615 polar science.

Polar science is the science that studies the various natural phenomena, processes and patterns of change unique to the polar regions and their interactions with units of the Earth system beyond the poles. It includes polar space, polar atmosphere, polar ocean, polar biosphere, polar pedosphere and lithosphere, polar cryosphere, polar observation and detection, polar engineering and environment, polar protection and utilization, and the association of the environmental changes of the north and south poles and the Qinghai-Tibet Plateau.

NSFC implements the Ship-time Sharing Project (SSP) to meet the demands of ongoing research projects in ocean observation. For all kinds of funding projects that apply to participate in the research cruise supported by the SSP, it is necessary to describe the sea area to be surveyed, the needs of the ship (equipment) and the content of the observation, when writing project proposal, so as to prepare for the approval of and selection for the carrying of the SSP. The guidelines and the solicitation notice for investigation demands of the SSP are announced separately every year, so project leaders with needs for sea-going surveys are requested to pay close attention to the relevant notices from the Department of Earth Sciences, and submit the application form timely. Based on the data-sharing agreement among the projects implemented during the same cruise, the SSP expands the data-sharing platform for the observation data with different levels and classifications. Data users can log onto the website of the Ocean Data Center of NSFC (https://www.nsfcodc.cn/) to browse the catalogs of the shared data, and submit data usage applications as needed.

To further enhance China's scientific and technological capabilities in marine and polar fields, the Discipline improves the funding structure of scientific funds, advances interdisciplinary integration, and strengthens talent team development, so as to deliver sustained support for and cutting-edge leadership in fundamental research on marine and polar sciences.

Division V of Earth Sciences

Atmospheric Science (D05)

The funding scope of this discipline is meteorology, atmospheric physics, climate system science, atmospheric chemistry and the atmospheric environment, and other branch disciplines, as well as their corresponding supporting technologies and development fields.

Atmospheric science is the study of various phenomena and their changes in the atmosphere of the Earth and other planets, so as to serve the mankind. The atmosphere is one of the most active spheres of the Earth system. Its changes are affected and controlled by other spheres of the system and celestial bodies such as the

Sun. At the same time, changes in the atmosphere can directly or indirectly impact oceans, the terrestrial surface, the cryosphere, as well as the ecosystem of the earth. The atmosphere plays an important role in the Earth system. The interactions with the other spheres regulate the functions of the Earth system. Besides studying dynamical, physical, chemical, and biological processes within the atmosphere, atmospheric science currently involves comprehensive investigations into the mechanisms underlying atmospheric variability and their interactions with the hydrosphere, lithosphere, cryosphere, biosphere, human activities, and global climate. The main research contents of atmospheric science include: new techniques and methods in atmospheric observation, satellite remote sensing, numerical modeling and data fusion; the evolution of weather and the climate system, and the theory, methods, and techniques of forecasting, prediction, and estimation; technologies and measures interfering weather and climate; the impact of human activities on weather, climate, and environmental systems; and the impact of weather, climate, and environmental system changes on human society. Attention should also be paid to studying the occurrence, variation, mechanisms, and predictions of various disastrous events of weather, climate, and the environment; studying the issues of global climate and environmental changes and their impacts, adaptation, and mitigation; systematic observation, numerical simulation and comprehensive integration of various processes; and interdisciplinary fusion which could lay the scientific foundation for improving the quality of life and the sustainable development of society.

The Division will continue to solicit proposals for exploratory, original and frontier studies in the following areas: the various phenomena, processes, and mechanisms of the atmosphere, and physical, chemical, and biological processes taking place in the atmosphere, and exchanges and interactions of energy and momentum between the atmosphere and other spheres by applying novel ideas, methods, advanced technologies and equipment to study synoptic meteorology, climatology, paleoclimate, atmospheric dynamics, hydrometeorology, atmospheric physics, atmospheric chemistry, the atmospheric environment, the health and meteorology, atmospheric in situ observations and remote sensing, the boundary layer, troposphere, stratosphere, and mesosphere; extreme weather and major climate events; the impact and adaptation of climate change; new theories and methods for weather forecasting, climate prediction, assessment and impact of various complex weather and climate disasters; new theories and methods for numerical modeling and data assimilation; cross disciplinary research on artificial intelligence, data science, computational science, and traditional atmospheric science; fundamental research on satellite and radar meteorology; analysis and applied studies on the data acquired from major scientific experiments and scientific initiatives that have been conducted and are ongoing, as well as from large observation networks established in China and around the world; the principles and methods of meteorological observation, development of meteorological instruments, data analysis, and applications;

interdisciplinary studies of key national interests such as ecology, agriculture, health, among others, as well as national strategic needs such as the Belt and Road Initiatives, carbon peak and carbon neutrality goals, low-altitude economy, and support of major engineering projects, serving the livelihood and sustainable development of society.

Notes:

"D0508 Atmospheric Observation, Remote Sensing and Detection Technology and Methods", "D0509 Atmospheric Data and Information Techniques", "D0510 Atmospheric Numerical Model Development", and "D0511 Earth System Model Development" are suitable for the research of new technologies and methods in the field of atmospheric science. Theoretical and applied research based on existing technologies and/or theories is not suitable for selecting such application codes.

Department of Engineering and Material Sciences

Engineering and material sciences provide scientific and technical support to guarantee national security, promote social progress and sustainable economic growth, and improve people's living standards. By striving to maintain a footing at the frontiers of disciplines, meeting the national strategic demands of social and economic development, and harmoniously combining national objectives with frontier explorations, the Department actively encourages the integration of fundamental research with engineering applications, strengthens indigenous and original innovation, and enhances the sustainable development of interdisciplinary integration, so as to elevate China's scientific and technological development in engineering and material sciences to a higher level and enhance global influence.

The ultimate goal is to elevate China's standing in engineering and material science to a higher level of scientific and technological advancement, with a more extensive global influence.

In 2025, the Department received 35,656 applications for the General Program, with a 10.00% increase compared to 2024. Among these, 3,961 applications were approved with a total direct cost of 1,980,500,000 yuan. The average direct cost was 500,000 yuan, with an average success rate of 11.11% (compared to 11.29% in 2024).

In 2025, the Department received 26,047 applications for the Young Scientists Fund (C), an 8.76% increase from 2024. Among these, 4,116 applications were approved, with a total direct cost of 1,234,800,000 yuan. The average success rate was 15.80%, slightly lower than the 16.61% rate in 2024.

In 2025, the Department received 4,211 applications for the Fund for Less Developed Regions, a 16.39% increase from 2024. Among these, 438 applications were approved, with a total direct cost of 140,160,000 yuan. The average direct cost

Funding of the General Program, Young Scientists Fund (C) and Fund for Less Developed Regions of the Department in 2025

Unit: 10000 yuan

Disciplines	General Program			Young Scientists Fund (C)			Fund for Less Developed Regions		
	Number of Grants	Direct Cost	Success Rate (%)	Number of Grants	Direct Cost	Success Rate (%)	Number of Grants	Direct Cost	Success Rate (%)
Metallic Materials	277	13 850	11.38	320	9 600	15.92	42	1 344	10.58
Inorganic Nonmetallic Materials	331	16 550	11.11	375	11 250	16.09	43	1 376	10.44
Organic Polymer Materials	240	12 000	11.10	283	8 490	16.54	24	768	10.30
Mining and Metallurgy Engineering	477	23 850	11.15	448	13 440	15.82	59	1 888	10.19
Mechanics Design and Manufacturing	680	34 000	11.01	650	19 500	16.03	64	2 048	10.74
Engineering The rmophysics and Energy Utilization	252	12 600	11.06	293	8 790	15.81	19	608	10.33
Electrical Science and Engineering	257	12 850	11.02	281	8 430	15.35	25	800	10.59
Architecture and Civil Engineering	621	31 050	11.07	598	17 940	15.55	77	2 464	10.25
Hydraulic Engineering	139	6 950	11.70	187	5 610	15.97	25	800	10.82
Environmental Engineering	242	12 100	11.02	263	7 890	15.90	31	992	10.10
Ocean Engineering	138	6 900	11.05	122	3 660	15.40	4	128	10.81
Traffic and Transportation Engineering	174	8 700	11.06	165	4 950	15.19	13	416	10.24
New Conceptual Materials and Common Science of Materials	133	6 650	11.06	131	3 930	14.99	12	384	9.92
Total or Average	**3 961**	**198 050**	**11.11**	**4 116**	**123 480**	**15.80**	**438**	**14 016**	**10.40**
Average Funding*	50.00			30.00			32.00		

* General Program and Fund for Less Developed Regions projects adopt the average funding strength of direct costs, while Young Scientists Fund projects (C) implement a lump-sum system with a fixed amount.

was 320,000 yuan, and the average success rate was 10.40%, slightly lower than the 12.11% rate in 2024.

The Department encourages exploration in innovative and cutting-edge research, with a focus on addressing critical scientific problems and fundamental research derived from engineering practices that are highly significant for advancing relevant industries and enhancing China's global influence. Priority is given to research with significant scientific value and application prospects, as well as the potential to become new focal points of knowledge growth. Preference is also given to research that aligns with China's national context, guides discipline development, and has the potential to generate independent intellectual property rights.

Notes:

(1) When completing the section on representative works, applicants must adhere to the instructions and format outlined in the application form, and take into account the scientific integrity requirements specified in the application guidelines. The Department will rigorously scrutinize the representative works provided in the proposals.

(2) Applicants are strongly encouraged to put forward projects that feature

innovative and distinctive ideas, engage in substantial interdisciplinary collaboration, and advance the development of relevant disciplines. Nonetheless, the proposals must include specific scientific problems related to the target discipline.

(3) Please refer to the average funding amount of each type of program and draft a reasonable budget with expenditures in different accounts aligning with actual needs.

Division I of Material Sciences

Metallic Materials (E01)

The discipline of metal materials supports basic research on various materials of related to metal properties. The application project should focus on basic research and applied basic research, propose specific material science problems and distinctive research ideas, with the goal of promoting the cutting-edge displinary development or promoting scientific and technological progress in major national demand areas.

The scope of funding includes: ① the Chemical composition, electronic structure, microstructure, phase diagram, phase transition, surface, interface, impurities and defects of metals and their alloys, metal matrix composites, intermetallic compounds, metamaterials, and other materials with metallic properties, as well as their influence mechanisms on mechanical, physical, and chemical properties; ②Theoretical methods, computational methods, modern analysis and testing methods, materials big data and artificial intelligence; ③Materials science issues related to the control of melt composition and purity, solidification and crystal growth, casting, heat treatment, forging, welding, additive manufacturing, powder metallurgy, and other preparation and forming processes; ④Corrosion and protection, friction, surface modification, fatigue and fracture, creep and other behavior of metal materials; ⑤The interaction between materials and service environment, functional degradation and failure, cyclic regeneration mechanism and related fundamentals; ⑥The behavior of metals under external conditions such as irradiation, high/low temperature, high pressure, high strain rate, electric field, magnetic field and supersonic field, etc; ⑦The structure and properties of metal material surfaces, surface modification and coatings; ⑧The strengthening and toughening, deformation mechanism, and fracture behavior of metal materials; ⑨Mechanical properties, functional characteristics, and structural design of composite materials based on metal as the main element; ⑩The mechanical properties, functional properties, and structure/function integration of metals related to the design, preparation and processing; ⑪metal amorphous, quasi-crystalline, high entropy and metastable materials, low-dimensional metal; ⑫Optical, electrical, magnetic, acoustic, and

thermal functional metal materials; ⑬Energy, environmental, and catalytic metal materials; ⑭metal information materials related to the generation, transmission, storage, conversion, and processing; ⑮Biomedical, intelligent, and biomimetic materials, etc.

This discipline encourages applicants to focus on common scientific problems and research ideas that go beyond the material system itself. While focusing on hotspots and cutting-edge fields, applicants are also encouraged to contribute to the re-understanding of basic scientific problems in traditional materials.

Inorganic Non-metallic Materials (E02)

The Discipline of Inorganic Non-metallic Materials supports fundamental research and applied fundamental research primarily based on inorganic non-metallic materials. With the sustained development of the fundamental theory of materials and the continuous innovation in material design, preparation, processing, and characterization, research on inorganic non-metallic materials has been increasingly active, highlighting their strategic position in the key fields of aerospace, information, energy, life sciences, environment, high-end equipment manufacturing, etc. Presently, functional materials of inorganic non-metallic materials are developing in the direction of designability, high performance, smartness, and multifunction integration. Structural materials are evolving towards light weighting, strengthening/toughening synergy, structural/functional integration, and extreme environment endurance. The green and low-cost preparation as well as high-reliability and long-lifetime service of materials have become key common problems.

Research on inorganic non-metallic materials features broadly-involved aspects and significant intersectionality. According to the proposals submitted in the past three years, the field of functional materials was more active, which formed many subject hotspots, including energy conversion and storage materials, photoelectric information functional materials, low-dimensional carbon, ferroelectric and piezoelectric materials, biomedical materials, etc. 30.8% of those proposals were associated with energy conversion and storage materials (E0208). Proposals on structural materials (E0201~ E0205) accounted for 36.5% of the total, with relatively concentrated organizations. It is worth mentioning that a large number of those proposals fell within the field of composite materials (E0205).

This Discipline supports programs with innovative ideas, substantive interdisciplinary research of inorganic non-metallic materials cross-cutting with other relevant disciplines, and those to develop new material systems, new theories, new characterization methods and technologies for inorganic non-metallic materials. The following areas are encouraged: researches on strategic new materials that meet major national needs, investigations of key novel materials under the carbon peaking and carbon neutrality goals, and exploration of new materials that take the advantages of domestic resources. This Discipline also aims to strengthen the research on green and

low-carbon preparation, as well as high-efficiency recycling of high-performance inorganic non-metallic basic materials.

In 2026, this Discipline will set up a project cluster under General Program supporting basic research on “high-quality raw materials for advanced ceramics” (please select the application code E0204). Proposals for this specific group will be given priority funding under the same conditions. To apply for this project group, the name of the project group should be filled in the "Annotations" column of the application form.

Division II of Material Sciences

Organic Polymer Materials (E03)

The Discipline of Organic Polymer Materials mainly supports the following areas: synthesis and preparation of polymer materials; physics of polymer materials; molding and processing of polymer materials; general polymer materials (plastics, rubbers, fibers, coatings, adhesives, etc.); polymer blends, composites, and organic-inorganic hybrid materials; environmentally friendly polymer materials; intelligent and biomimetic polymer materials; biomedical organic polymer materials; organic polymer materials with optical, electrical, or magnetic functions; other functional organic polymer materials (separation and adsorption materials, flexible and wearable smart materials and devices, low-dimensional and porous functional materials, energy - and information-related materials, self-assembly functional materials, etc.).

The Discipline encourages fundamental and applied fundamental research in the following areas: (1) preparation of polymer materials, such as highly efficient and controllable synthetic methods of polymer materials, and preparation of high-performance polymer materials (new monomers, new routes, and new technologies); (2) theories and simulation of polymer materials and aggregate structure-property relationship of polymers and their composites; (3) new methods and theories for the rheology, processing, and molding of polymer materials; (4) methods and theories for chemical and physical modification, high performance, and functionalization of general polymer materials; (5) polymer materials for extreme environments and their service performance; (6) low-cost, green preparation and structure-property relationship of functional organic polymer materials, along with research on material stabilization; (7) biomedical organic polymer materials oriented toward clinical applications; (8) design and preparation of organic polymer materials with optical, electrical, or magnetic functions, and research on high performance and stability of their devices; (9) new concept design theories and preparation methods of intelligent materials and biomimetic polymer materials; (10) artificial intelligence-based design, preparation, and applications of new organic polymer materials; (11) new methods

for controllable assembly of organic polymer materials and their functionalization; (12) structures, performance, and applications of natural polymer materials; (13) recycling and resource utilization of polymer materials, polymer materials for environmental governance of water, soil, and air, and the stability and aging of polymer materials. The Discipline also encourages enhancing the theoretical guidance for the design of polymer materials and developing artificial intelligence-based new research paradigms for organic polymer materials; fundamental research aiming at common challenges in the preparation, modification, and processing of key varieties of polymer materials; and the development of novel preparation and molding/ processing technologies for new organic polymer materials to meet major national strategic needs.

In 2026, the Discipline will set up a project cluster under General Program named "Organic Polymer Blue-Light Materials" (please select the application code E0309). Research proposals relevant to this specific topic will be given funding priority under the same conditions. To apply for this project, the applicant should select the name of the project group in the "Annotations" column of the application form.

New Conceptual Materials and Common Science of Materials (E13)

The Discipline of New Conceptual Materials and Common Science of Materials mainly supports research in the areas of new methods of material design and characterization, new material preparation technology and digital manufacturing, multi-functional integration of materials and devices, new composite and hybrid materials, new conceptual materials, key materials of advanced manufacturing, key engineering materials, etc.

With the rapid development of material sciences and the constant evolution of new theories, technologies, and applications, the research and application of materials are no longer limited to the existing material system. It has now become a general trend to explore new materials and the cross-cutting integration of material systems to meet higher requirements put forward to the properties and functions of materials. In the paradigm of fundamental research of materials science, it is highly desired to resolve some pending common scientific problems that exist in new materials, such as the design, preparation, characterization, performance regulation, and fracture characteristics. At the same time, many key bottleneck issues encountered in major national projects are also expected to be solved by developing new materials and coordinating multi-material systems. Therefore, to meet the strong demand of national major industrial technology for pure, high-performance, unique, and new materials, this Discipline will focus on the key common scientific problems of materials science, as well as new materials leading future technology and key materials of revolutionary technology. This will promote the integration and development of materials science and engineering technology.

This Discipline focuses on supporting fundamental research and applied fundamental research in three aspects: leading materials and interdisciplinary research, key commonalities, and technical support. Specifically, (1) it focuses on leading materials and interdisciplinary research, such as new conceptual materials, new composite and hybrid materials, multi-functional integration of materials and devices, and new structures and new applications of materials. Through research project, the development of new materials or meta-materials with unique phenomena, outstanding performance, and superior properties compared to traditional materials is pursued. This involves developing composite and hybrid materials with multi-scale, multi-dimensional, and multi-degree-of-freedom synergy; designing multi-functional integrated materials and devices facing intelligence and information; and revealing the principles of collective response and cooperative function of materials, structures, and systems; explore new structures and new applications of materials. (2) It focuses on supporting the research on key commonalities of materials, including new methods of material design and characterization, new material preparation technology, processing methods, and digital manufacturing, etc. Through project research, theoretical models for materials design and performance prediction are established, advanced in-situ and ex-situ characterization technologies for materials electronic structure, surface and interface, defects, etc., are developed, and new paradigms for materials preparation, processing methods, and digital manufacturing technologies are explored. (3) It focuses on supportive technology research, including key materials for advanced manufacturing and engineering. Through research project, critical new materials for high-end manufacturing and supporting major national needs are developed, bottlenecks in the design and preparation of critical materials are overcome, and the overall chain, cross-integration, and practical application level of new materials in key areas of advanced manufacturing and key engineering in the country are improved.

Division I of Engineering Sciences

Mining and Metallurgical Engineering (E04)

The Discipline of Mining and Metallurgical Engineering mainly supports the fundamental research on natural resources exploitation (petroleum, natural gas, and mineral ores), mining and metallurgical safety, mineral engineering and separation science of substances, ferrous and nonferrous metallurgy, materials preparation and processing, resource recycling and utilization, mining and metallurgy environment, etc.

In recent years, driven by major national needs and the world frontier of engineering science, the Discipline has significantly progressed through continuous

innovations. The theory relevant to the Discipline is much deepened and improved by continuously assimilating novel methods and techniques with the changes and expansions of demands for resources, environment, mineral, and metallic materials. Basic disciplines such as earth sciences, mathematics, physics, chemistry, and mechanics are involved in the Discipline more deeply and closely. New research areas have emerged one after another due to further development of interdisciplinary.

Hot research topics of the Discipline include complex oil and natural gas low-carbon and intelligent exploitation, intelligent green mines, safe and efficient exploitation theory and technology of deep mineral resources, flexible development and low-carbon utilization of coals, occupational-safety control theory and technology of mining, environmental management and ecological restoration of mining and metallurgy, fundamental science of industrial and public safety, accurate control of mineral separation process, preparation of high value-added mineral materials, low carbon metallurgy of materials, high-clean and high-homogeneous metal materials metallurgy, precision hot processing for light alloy, integration of production and forming for metallic materials, resource recycling and utilization, etc.

The following research fields are encouraged: (1) new theory and method for enhanced recovery of conventional oil and natural gas resources; (2) theory and method for high-efficiency exploitation of unconventional oil and natural gas resources; (3) safe and efficient intelligent developments in drilling and production for complex oil and gas resources in deep strata and deep sea; (4) safe and efficient operation of oil and gas pipeline network; (5) safe and high-efficiency mining and utilization of geothermal resources in deep strata; (6) theory and technology for safe and intelligent mining of mineral resources; (7) theory and technology for green and low-carbon mining of mineral resources; (8) theory of rock mechanics and strata control under multiple fields; (9) prevention and control of dynamic disasters in deep mines; (10) theory of prevention and emergency of major disasters and accidents in the production process and occupational hazards; (11) treatment and utilization of abandoned mines and ecological restoration of mines; (12) theory and technology of green mineral separation; (13) theory and technology for production of high purity mineral materials; (14) new theory and method for high-efficiency utilization of strategic mineral resources; (15) clean and efficient extraction of mineral resources; (16) new theory, new technology and new process of low- carbon metallurgy; (17) metallurgical theory and technology for high-quality metallic materials; (18) high-efficiency production, processing and near-net-shape forming of metallic materials and special materials; (19) theory and technology for high-quality recycling of metallic materials; (20) cyclic utilization of waste gas and waste water produced in the dressing and metallurgical process; (21) new method and technology for low-carbon emission during the mining and metallurgical process; (22) formation, transportation and control of pollutants produced in the mining and metallurgical process; (23) treatments of solid waste for minimization, reclamation and

harmlessness; (24) efficient utilization of secondary resources; (25) new theory and methods of visualization, digitization and intelligentization for the mining, dressing and smelting and material production processes.

In 2026, the Discipline will set up a project cluster under General Program supporting "Thermodynamics and Phase Diagrams of Metallurgical Systems" (E0410). Research proposals relevant to this specific topic will be given funding priority under the same conditions. To apply for this project, the applicant must select the name of the projects group in the "Annotations" column of the application form.

The Discipline will continuously enhance interdisciplinary research, and pay close attention to new theories, concepts, and methods, and their creative applications. The Discipline will attach importance to ensure the development of the national economy and improving the quality of people's lives. In the context of carbon emission peak and neutrality, basic research will be encouraged to enhance the core competitiveness in China's petroleum, mining industry, metallurgy, materials preparation and processing, and engineering safety. In the aspect of natural resources exploitation and separation, research will focus on addressing the refinement, greenization, and intelligentization of engineering and scientific problems, encouraging reengineering technology and science, improving mining efficiency and safety, accentuating the exploitation and utilization of poor resources, emphasizing source control, cyclic utilization, and environmental protection, and finally both economic and environmental benefits will be achieved. In the aspect of techniques, process, and equipment, emphasis will be placed on structure optimization and adjustment, whole-process pollution control and innovation in greenization, and the applications of big data and artificial intelligence.

Energy and Power Engineering & Engineering Thermophysics (E06)

The discipline of Energy and Power Engineering & Engineering Thermophysics primarily supports fundamental and applied research on the underlying laws and technological theories governing energy conversion and utilization, energy-mass coupling and transfer, as well as energy storage and conversion. It focuses on the technological foundations of energy and power engineering and advances the frontiers of engineering thermophysics by continuously improving the theories and methods in areas such as engineering thermodynamics, internal flow fluid mechanics, heat and mass transfer, combustion science, multiphase flow thermophysics, and thermophysical measurement techniques. The discipline aims to address thermophysical challenges under extreme and interdisciplinary conditions, while promoting technologies related to renewable and new energy, carbon-based energy, power and propulsion, energy storage and hydrogen energy. The research scope under each secondary application code is as follows:

(1) Engineering Thermodynamics: Enhances the performance of thermal

systems including heat-work conversion, refrigeration and cryogenics, heat pumps, and waste heat recovery through research on thermodynamic states, working fluid properties, thermal processes and cycles, and control strategies in energy and power systems.

(2) Internal Flow Fluid Mechanics: Enhances the performance of thermal and fluid machinery in energy and power engineering by investigating flow phenomena, equilibrium processes, fluid-solid interactions, and flow control methods within confined or enclosed/semi-enclosed spaces.

(3) Heat and Mass Transfer: Explores the microscopic mechanisms and macroscopic laws of energy and mass transport through studies on fundamental heat and mass transfer via conduction, convection, radiation and diffusion, as well as transfer phenomena under complex conditions such as multi-physics field coupling. This supports solving heat and mass transfer challenges in energy and power engineering and emerging fields such as thermal management of electronics, biological thermophysics, and seawater desalination.

(4) Combustion: Develops advanced, efficient and clean combustion technologies as well as fire prevention methods through studies on fuel properties, reaction kinetics, flame dynamics, and greenhouse gas and pollutant emissions under laminar, turbulent, supersonic, supercritical and other conditions.

(5) Multiphase Flow Thermophysics: Elucidates interphase interactions and phase distribution mechanisms in two-phase and multiphase flows, providing support for addressing complex multiphase flow problems in energy and power engineering, including particle/bubble/droplet dynamics, interface/wave phenomena, multiphase heat and mass transfer, multiphase flow chemistry, and granular dynamics.

(6) Thermophysical Properties and Thermophysical Measurement Technology: Develops novel principles, methods, technologies and devices for measuring and analyzing thermophysical properties, along with diagnostic instruments, equipment, and software, to enable testing, performance evaluation, and intelligent prediction for energy and thermophysical systems.

(7) Conversion and Utilization of Renewable and New Energy: Investigates the laws of energy and mass conversion, transfer, storage and utilization in the conversion and the utilization of renewable and new energy sources, such as solar, wind, hydrogen, nuclear, biomass, other carbon-based energy, hydropower, ocean, tidal, and geothermal energy and their associated storage technologies. It also advances distributed energy and new energy systems, improves conversion efficiency, innovates theories and methods for multi-energy complementarity and integration, and promotes systematic and large-scale engineering applications.

(8) Power and Propulsion Engineering: Supports the development of low-carbon, green, and high-efficiency power and propulsion technologies through mechanistic research on energy-work conversion, system configuration,

aerothermodynamics, thermal management and protection, multi-system coupling and intelligent control in aerospace engines, gas turbines, internal combustion engines, new power and propulsion equipment, and advanced aircrafts.

Key development trends in the discipline include:

(1) **Increasing depth in scientific complexity and precision:** Research scales are extending from macroscopic to mesoscopic and microscopic levels; parameters are shifting from conventional to extreme conditions; subjects are expanding to random, unsteady, multidimensional, multiphase, and complex thermophysical problems; and methodologies are becoming more digital, accurate, and intelligent.

(2) **Continuous expansion of research domains:** Research fields are continuously expanding, covering energy storage and hydrogen energy, carbon-based energy conversion and utilization, new-domain and new-quality power, multi-energy complementarity and integration, electronic equipment thermal management, interdisciplinarity with artificial intelligence, and thermophysics-related issues under extreme and interdisciplinary conditions. The discipline also integrates deeply with other fields such as physics, chemistry, chemical engineering, life sciences, information science, materials science, electrical engineering, transportation, aerospace, resources, environment, and safety.

In 2026, the discipline will prioritize the support of fundamental research that possesses significant theoretical and practical value, aligns with international scientific frontiers, demonstrates foresight and exploratory potential, is likely to foster new disciplinary growth points, and contributes meaningfully to national economic and social development. Purely technical product development or generally repetitive research will not be supported. To promote emerging directions and enabling technologies, proposals in the fields of ‘E0608 Power and Propulsion Engineering’ and ‘E0606 Thermophysical Properties and Thermophysical Measurement Technology’, as well as applications submitted by researchers with outstanding performance in previously funded NSFC projects, will receive favorable consideration under comparable peer-review evaluation scores. This approach aims to generate original research achievements with independent intellectual property rights in China, advance fundamental and applied research in the field of energy and power engineering and engineering thermophysics, and provide scientific underpinning for ensuring national energy security and supporting the realization of China ‘Dual Carbon’ goals.

Division II of Engineering Sciences

Mechanical Engineering (E05)

The Discipline of Mechanical Engineering primarily supports fundamental

research in the fields of the design, manufacturing, and service of mechanical equipment and systems, as well as that promotes the disciplinary development through interdisciplinary integration.

Mechanics is a fundamental technical science that involves research on the functional integration, quantitative description, and performance control of mechanical products, as well as the development of new theories and methodologies for mechanical design. Its major research areas include robotics and mechanisms, transmissions and drives, mechanical dynamics, mechanical structural strength, tribology and mechanical surface/interface science, mechanical design theory, and mechanical bionics. Manufacturing science is a fundamental technical science that explores the theories, methods, processes, equipment, and systems for high-performance, high-precision, high efficiency, low cost, environmentally friendly, and intelligent manufacturing of mechanical products. Its major research areas include forming manufacturing, machining manufacturing, manufacturing systems and intelligentization, mechanical testing and instrumentation, micro/nano-scale and atomic-level manufacturing, and biomanufacturing, etc.

Key research directions supported by the Discipline include: (1) fundamental research oriented towards national strategic priorities, academic frontier, and potential major engineering applications; (2) integration of sustainable design, manufacturing, inspection and assembly oriented towards environmental friendliness, resource conservation, and green and efficient energy utilization; (3) innovative design, new manufacturing principles, advanced processes, testing theories, and equipment prototypes for ultra-precision, cutting-edge, and in particular, extreme-scale (large/heavy/micro/nano) equipment and instruments; and (4) methodology of design, manufacturing, and testing for components and parts under extreme conditions (e.g., parameters transitioning from conventional to extraordinary or extreme), or complex service environments (e.g., multi-field coupling of electric, magnetic, thermal, force, and fluid), or extremely large or small scales.

In 2026, the Discipline plans to establish two project clusters under General Program supporting "Dynamics of Nano/Sub-nano Precision Manufacturing Equipment" (please select the application code E0503) and "Theory and Methodology of Field-Assisted Forming Manufacturing" (please select the application code E0508). Projects under these two clusters will be prioritized for funding under equal conditions. Applications for these two clusters must select the name of the corresponding project cluster in the "Annotations" column of the application form.

This discipline is grounded in the fundamental missions of mechanical engineering. It encourages in-depth, sustained research in specific fields and high-risk exploratory research that pursues principle-level breakthroughs and disruptive innovations. Priority will be given to research that has already achieved innovative results and shows promise for significant advances, as well as foundational research that deeply integrates with natural sciences and other engineering disciplines and has

the potential to open new directions in the discipline, while ensuring that such research remains within the funding scope of this discipline.

It is advised that principal investigators of ongoing projects devote themselves to their existing work and refrain from hastily submitting new project applications. During project evaluation, this discipline will give priority to new applications submitted by those who have successfully completed previous projects with high quality, under equal conditions. Conversely, new applications from those who have poorly executed their prior projects will be subject to stricter scrutiny.

Division III of Engineering Sciences

Environmental Engineering (E10)

The Discipline of Environmental Engineering, which aims to better understand and solve environmental problems, is an emerging interdiscipline developed on the basis of natural science, engineering science, and humanity and social science. It is also a strategic discipline providing support for building a community of shared future for mankind and nature and implementing sustainable development of human society. The environmental engineering discipline focuses on major national demands on ecological environment protection and related cutting-edge areas, and undertakes fundamental research to develop basic theories, engineering technologies and management methods in the aspects of environmental pollution control, environmental quality improvement, remediation of the contaminated environment, restoration of damaged ecosystem and recycling and safe utilization of waste resources. The distinct feature of this Discipline is problem-oriented and interdisciplinary.

The research areas of the Discipline include drinking water engineering, urban wastewater treatment and reclamation, industrial wastewater treatment and reuse, urban and rural water system and ecological cycle, air pollution control engineering, solid waste recycling and safe disposal, environmental pollution abatement and remediation, regional and urban eco-environmental system engineering, and eco-environmental risk control. To avoid application mistakes, applicants should carefully understand the funding scopes of the Discipline, and correctly select and fill in the application code with corresponding research directions and keywords. The adoption of new theories, new technologies and new methods in interdiscipline should be integrated with related cutting-edge areas, national strategic demands, and industrial bottleneck challenges in the field of environmental engineering.

Proposals in the Discipline emphasizes identifying, analyzing, and resolving key scientific problems encountered in environmental pollution control, ecosystem restoration, waste resource utilization and collaborative control of carbon and

pollutants. It is encouraged to develop innovative theories and disruptive new technologies in high-level fundamental and interdisciplinary research in the field of environmental engineering. Innovative research is preferentially encouraged in the fields including “eco-environmental monitoring and intelligent sensing”, “collaborative control of pollutants and carbon with resource and energy conversion”, “environmental and ecological risk prevention and integrity restoration”, “environmental health and risk control”, “environmental modeling and smart governance”.

Ocean Engineering (E11)

Ocean Engineering investigates the fundamental science and enabling technologies that support the use of engineering facilities and equipment systems in marine environments. It is an emerging interdisciplinary field that integrates engineering with oceanography, information science, materials science, and environmental science. The discipline is strongly mission-oriented and characterized by practical, application-driven research. It targets three strategic priorities: offshore resource development, maritime security and rights protection, and integrated coastal management and sustainable development. Key foci include marine resource development equipment and technologies; ships and underwater vehicles; blue-carbon and resilient coastal engineering infrastructures; marine observation and sensing systems; and ocean engineering materials, underwater acoustics, and navigation-safety technologies. The discipline seeks to clarify how complex marine conditions interact with engineering systems through coupled multi-physics processes. It also aims to overcome challenges in extreme-environment reliability, green and intelligent design and operation and maintenance, autonomous cooperative operations, and smart navigation. These advances are expected to strengthen original innovation and core technologies, serving national needs in deep- and far-sea development, the blue economy, and maritime security.

Ocean Engineering covers Coastal and Ocean Engineering, Ship Engineering, Marine Technology, and Navigation and Maritime Technology. The funding scope includes the following. ①Marine environmental loads and dynamics; coastal and offshore structures; marine equipment and systems; marine geotechnical engineering; development of marine resources (oil and gas, minerals, hydrates, biological resources, and marine space); offshore renewable energy; ports, waterways, and coastal engineering; polar engineering; marine disaster prevention and mitigation. ②Fundamental theories of ship mechanics; ship design and manufacturing; vibration and noise reduction; ship reliability and operation/maintenance; propulsion technologies and equipment; maneuvering systems and equipment; ship auxiliary systems and equipment; marine power engineering; unmanned underwater vehicles; manned submersibles; cross-domain vehicles. ③Ocean sensors and instruments; multi-physical characteristics of the ocean environment; ocean environment

observation; target characterization and control; detection and recognition; underwater positioning and navigation; marine communications and networking; seawater resource utilization; marine ecological protection; anti-corrosion and anti-biofouling materials; marine energy technologies; underwater operation technologies; ④Fundamental theories for navigation and maritime; intelligent and autonomous navigation; safety assurance and emergency response; optimization and coordinated control of modern shipping systems; intelligent empowerment of shipping system; maritime supervision. Applicants should carefully review the discipline's research domains and funding priorities to ensure accurate selection of application codes, research directions, and keywords for proper submission.

Priority areas supported by this discipline include the following. ①Coastal and ocean engineering: protection and utilization of coastal resources; technologies to enhance ocean carbon sinks; disaster prevention and mitigation under extreme sea states; technologies and equipment for marine resource development, marine renewable energy development, and polar resource development; digital twins for offshore engineering equipment and smart operations and maintenance. ②Ship engineering: nonlinear ship hydrodynamics; design and manufacturing of green, intelligent ships; ship safety in extreme environments; informatization and intelligentization of ship systems; coordinated control of underwater-vehicle swarms; novel marine power systems; novel underwater energy and resupply technologies. ③Marine technology: environmental effects of ocean engineering; multi-source monitoring in ocean; marine information connectivity; ocean big data and artificial intelligence; acoustic and non-acoustic sensing with intelligent recognition; utilization of chemical resources from seawater; the prevention, control, and remediation of marine pollution; emergency response for offshore oil spills; marine specialty materials. ④Navigation and maritime technology: intelligent sensing, communication, and navigation; maritime big data and intelligent analytics; intelligent ship navigation; polar navigation; smart water transportation systems; maritime early warning, emergency prevention and control; maritime safety, and offshore search, rescue, and salvage.

In 2026, the discipline will establish a project cluster under General Program supporting “Intelligent Marine Sensing” (Application Code: E1103), which will be prioritized for funding under equivalent evaluation conditions. Applicants for this cluster should specify the project cluster name in the "Annotations" column of the application form.

Division IV of Engineering Sciences

Architecture and Civil Engineering (E08)

This discipline mainly supports fundamental research in the field of architecture

and civil engineering, as well as fundamental research that promotes the development of this discipline through interdisciplinary integration. From the perspective of the harmonious coexistence between humans and the resource environment, the field of architecture focuses on the historical and morphological evolution and multi-dimensional development of buildings, urban and rural areas, and regional spaces, and explores the basic theories, methods and technologies of architecture, planning, landscape and their built environments based on the concept of sustainable development. Civil engineering is the cornerstone for humans to construct physical space carriers. Facing the needs of high-quality and sustainable development, it explores the performance evolution and multi-scale response laws of civil engineering materials, structures and natural media, and develops cutting-edge and basic theories and key common technologies for the whole life cycle of various engineering structures, including design, materials, construction, diagnosis and treatment, disaster prevention and protection, and resource recycling.

The disciplinary directions related to the field of architecture include Architecture, Urban and Rural Planning and Landscape, and Building Physics; the disciplinary directions related to the field of civil engineering include Structural Engineering, Engineering Materials, Engineering Construction and Diagnosis/ Treatment, Geotechnical and Foundation Engineering, Underground and Tunnel Engineering, Road and Rail Engineering, and Engineering Disaster Prevention and Protection. This discipline encourages interdisciplinary integration within the fields of architecture and civil engineering, and supports the innovative application of artificial intelligence, new materials, low-carbon technologies, etc. in fundamental research. Applicants are requested to carefully understand the disciplinary directions and funding scope, and correctly select and fill in the application code, corresponding research direction and keywords to avoid misapplication.

Applications in the field of architecture should focus on the new scientific problems faced in China's urban and rural construction, emphasize the research on scientific methods in architectural design, urban-rural and landscape planning and design, and focus on the research and innovation of basic theories in building physics, healthy environment creation and low-carbon energy conservation; it encourages innovative research in related directions such as sustainable and healthy habitation environments, urban renewal and heritage conservation, and intelligent design and planning. Applications in the field of civil engineering should focus on in-depth innovative research such as the synthetic design of low-carbon, durable and high-performance engineering materials and structures, the diagnosis and improvement of the service performance of existing structures, the catastrophe theory and prevention/ control of geotechnical structures and foundation engineering under complex environments, and the life-cycle design theories and methods of civil engineering; it encourages research on key scientific problems in related directions such as material-structure integration, intelligent design of engineering structures, failure mechanisms

and performance control of engineering structures under extreme loads and severe environments, multi-hazard effects and disaster resilience improvement of civil engineering, intelligent construction and maintenance of engineering, new energy infrastructure, and polar and extraterrestrial engineering construction.

In 2026, this discipline will establish three project clusters under General Program supporting "Architectural Heritage Conservation" (E0801), "Tunnels and Caverns in High-Altitude and Alpine Regions" (E0808), and "Extraterrestrial Engineering Structures" (E0804). Applications for these clusters will be given priority in funding under equal conditions. Applicants should accurately select the name of the corresponding project cluster in the "Annotations" column of the application form.

Transportation and Vehicle Engineering (E12)

This discipline encompasses two major domains: Transportation Engineering and Vehicle Engineering.

A transportation system is defined as an inherently complex and highly time-varying system, composed of participants, vehicles, infrastructure, spatio-temporal resources, the environment, and information. Research in transportation engineering focuses on the interactions and intrinsic mechanisms among these elements and across systems, as well as on planning and design, operation and control, organization and services, operation and maintenance, and safety and sustainability. The objective is to enhance safety and resilience while advancing economic efficiency, energy savings, and environmental sustainability in transportation operations.

Vehicle engineering investigates the interactions and intrinsic mechanisms between vehicles and other components of the transportation system. Core research areas include system design, motion and operation control, powertrain integration, human–machine–environment interaction, and operation and maintenance assurance. It aims to innovate transportation modes, vehicle configurations, and control approaches; push the limits of capacity and speed; and improve the reliability, mobility, maneuverability, ride comfort, handling stability, energy efficiency, sustainability, adaptability to diverse environments, and autonomous operational capabilities of vehicles, thereby enhancing both safety and efficiency in transport processes.

Priority funding will continue to focus on the following areas:

(1) Integrated Multi-Modal Transportation Networks. In alignment with the National Comprehensive Three-Dimensional Transportation Network plan, and supporting the ultimate goal of “smooth mobility for people and efficient flow of goods,” research will address intermodal connections, operational optimization, and element integration across rail, road, water, air, and pipeline systems. Key priorities include: collaborative planning and design of integrated networks; fundamental

theories and enabling technologies for “multi-network fusion”; integrated passenger transport services; coordinated multimodal freight operations; pipeline–cargo joint transport; integrated planning of low-altitude vehicle routes with ground transportation networks; and efficient drone–ground vehicle collaboration for precise emergency logistics.

(2) Pipeline Transportation. Responding to national strategic demands for energy security and the transport of bulk industrial raw materials, and to the evolution of pipeline transport toward multiple media, research will focus on physicochemical property variations of diverse transported materials, as well as theories and technologies for multi-medium, multi-mode, and multi-energy integration, complementarity, and smart interconnection of pipeline transport systems. The goal is to ensure safe and efficient pipeline operations and to establish a modern disciplinary system for pipeline transportation.

(3) Next-Generation High-Performance Vehicles. Research will advance key technologies in the design and control of new high-performance vehicles. Efforts will address requirements for high energy efficiency, enhanced mobility, adaptability to complex operating conditions, and special application scenarios (e.g., oversized cargo transport, planetary exploration, mining operations, emergency response, and military logistics). Priority will be given to challenges in stability under complex operating conditions, driving safety, precision motion control, adaptability to unstructured environments, and vehicle dynamics optimization. Breakthroughs are expected in innovative and reconfigurable vehicle architectures, chassis design, steer-by-wire systems, wheel-end integration and control, software-defined and architecture-driven control systems, AI-empowered vehicle control, and advanced automated driving evaluation and validation.

(4) Space Transportation. To support the development of new in-orbit refueling and orbital transfer systems, research will be funded in system design, autonomous docking, refueling mechanism design, cryogenic propellant transfer and management, multi-spacecraft cooperative pose control during refueling, long-term on-orbit protection, and reusable spacecraft design.

(5) High-Speed Maglev Transportation. Research will continue on the stability of conventional high-speed maglev systems at the 600 km/h class. Focus areas include electromagnetic suspension, guidance, and traction control systems, enhanced by emerging technologies such as edge computing and artificial intelligence. Priority funding will support design theories, methodologies, and validation techniques that ensure operational stability, high energy efficiency, compatibility with atmospheric and geological environments, and long-term durability.

(6) Aeronautics and Astronautics. To advance aerospace transportation science, research will address aerial transport of oversized, irregular, and ultra-heavy equipment as well as wide-range aerospace mobility needs. Emphasis will be placed on blended-wing-body aircraft and wide-range aerospace vehicle design theories and

methods. Key challenges include multidisciplinary optimization of configuration and aerodynamics, lightweighting of irregular structures, payload performance of aerospace vehicles, propulsion–airframe integration, and unconventional flight and control methodologies.

In 2026, proposals in the above areas will be prioritized for funding with higher-than-average success rate and funding intensity. Grants will be managed as project clusters.

Division V of Engineering Sciences

Electrical Science and Engineering (E07)

The Discipline of Electrical Science and Engineering includes two main fields: electrical (magnetic) energy science and the interaction between the electromagnetic field and matter. The funding scopes include fundamental research and applied fundamental research with objects or means of electric (magnetic) phenomena and principles, orienting the related scientific problems in electric (magnetic) energy generation, transformation and conversion, transmission and utilization, as well as the mechanisms and laws of the interactions between electromagnetic field and matter. The discipline is established in the fields of electrical science such as electromagnetic field, circuits (electrical networks), and electrical materials, focusing on electric machines and their systems, power system and integrated energy, high voltage and insulation, electric apparatus, pulse power, discharge plasma, power electronics, electrical energy storage, superconducting electrotechnics, bio-electromagnetics technology, and other electrical engineering fields. Researches on new phenomena, new theories, new models, new methods, new devices, and new equipment are encouraged.

The areas of the electromagnetic field and circuit mainly include the electromagnetic field, circuit (electric network), static electricity, electromagnetic measurement and sensing, new energy conversion and power transmission technology, electromagnetic environment, and electromagnetic compatibility. The areas of superconducting and electrical materials mainly include superconducting conductors and magnets, superconducting power technology, engineering dielectrics, conductor/semiconductor/insulation/magnetic/energy storage/sensing materials, and other new electrical materials. The areas of electric machines and their systems mainly include analysis and design of the electric machine, conversion and control of electric machine system, integration of electric machine system, as well as electric transmission and drive. The areas of power system and integrated energy mainly include power system analysis, power system control, power system protection, electricity market, electricity information, integrated energy system, and energy

internet. The areas of high voltage and discharge mainly include high voltage and large current, electrical equipment insulation, overvoltage and its protection, arc and electric contact, electrical apparatus, pulse power technology, and discharge plasma technology. The areas of power electronic mainly include power electronic devices and their applications, and power electronic systems and their control. The areas of electrical energy storage mainly include principles of electric energy storage and conversion, devices, equipment, and systems. The areas of bio-electromagnetic technology mainly include bio-electromagnetic phenomena and mechanisms, the biological effect of electromagnetic fields, electromagnetic diagnosis and treatment of disease.

In recent years, the discipline has presented new development trends: (1) constantly broadened research scopes, such as integrated energy systems, independent power systems, electrical materials, devices and equipment under extraordinary environments and extreme conditions, etc.; (2) continuously expanded application fields, such as electric machines used in robots and servo systems, electrified traffic, new energy transport equipment, multi-electric ships and aircraft, power supply, storage, and conversion in the fields of aeronautics and astronautics, electric transmission and drive (propulsion), electromagnetic launch, metallurgy, environmental protection technology, etc.; (3) increasingly prominent interdisciplinarity, such as smart grid, energy and electricity market, electrical safety, intellisense, electric energy storage, pulse power, plasma and bio-electromagnetic technology and other fields have been intercrossed deeply with the disciplines like physics, chemistry, materials, information, management, and biomedicine, etc.

The discipline encourages free exploration and interdisciplinary research tracking and leading the frontiers of this discipline and solving the scientific problems that exist in current technical bottlenecks. Interdisciplinary research on fundamental theory and key techniques are particularly encouraged, e.g., interactions between electromagnetic energy and materials, electrical equipment, power electronic devices, and bio-electromagnetic technology.

Applicants are advised to carefully understand the field direction and funding scope of the discipline and correctly select or fill in application codes and the corresponding research directions and keywords to avoid misinformation.

Hydraulic Engineering (E09)

The discipline of Hydraulic Engineering encompasses two major scientific domains: hydraulic sciences and hydraulic engineering. It is fundamentally oriented toward ensuring water security and promoting the sustainable and efficient utilization of water resources. The discipline seeks to advance scientific understanding of watershed hydrological processes and engineering hydrology under natural and anthropogenic influences; water–sediment regime evolution and river dynamics at the basin scale; hydraulic engineering and hydropower utilization; and watershed, river,

and reservoir ecology. It also addresses engineering-oriented scientific challenges, including sustainable and efficient water resource utilization; mechanisms and risk mitigation of floods and droughts; high-efficiency agricultural water use; sediment transport and riverbed evolution; ecological restoration and environmental governance of rivers, lakes, reservoirs, and estuaries; water network planning and inter-basin water transfer; safe and stable operation and intelligent regulation of hydraulic machinery and electromechanical systems; and the construction, operation, maintenance, and disaster risk management of water conservancy, hydropower, and water network infrastructures. Characterized by the integration of fundamental theoretical research and engineering technological innovation, Hydraulic Engineering is both a foundational and strategic discipline for enhancing national water security.

The primary research areas of this discipline include Engineering Hydrology and Water Resources Utilization, Agricultural and Rural Water Conservancy, Hydraulics and River Dynamics, Hydraulic Machinery and Water Conservancy Electromechanical System, Hydraulic Geotechnical Engineering, Hydraulic Structures and Hydraulic Materials, and Water Network and Waterway Engineering. Applicants are requested to carefully review the research directions and funding scope of this discipline, and to correctly select and fill in the application code, and the corresponding research area and keywords to avoid misclassification. Proposals whose key scientific problems and main research contents do not fall within the funding scope of this discipline, or projects lacking a background in hydraulic science and engineering, should be submitted under other appropriate disciplines.

Applications for funding in this discipline should align with national strategic demands and global scientific and technological frontiers, focus on the identification, analysis, and resolution of key scientific problems, and emphasize theoretical innovation in addressing related scientific challenges. Applications in the field of Engineering Hydrology and Water Resources Utilization should focus on the evolution of watershed hydrological cycles under the influences of climate change and anthropogenic activities; ecohydrological processes and their effects; the evolution and regulation of water resources systems; principles and methodologies of engineering hydrology; monitoring, early warning, and mitigation of flood and drought hazards; spatiotemporal allocation of water resources; and the sustainable and efficient utilization of water resources. Applications in the field of Agricultural and Rural Water Conservancy should focus on water conservation and protection in agricultural and rural areas; agricultural water–soil ecological environments; irrigation and drainage engineering technologies and equipments; improvement of low- and medium-productivity farmland; and the development of intelligent irrigation districts and agricultural and rural water network systems. Applications in the field of Hydraulics and River Dynamics should focus on hydrodynamics and sediment transport processes and their engineering regulation; variations in water and sediment regimes and their implications for engineering safety; transport and transformation of sediments and environmental constituents in rivers, lakes, reservoirs, and estuaries;

maintenance and restoration of aquatic ecosystem health; and the evolution and regulation of watershed aquatic ecosystems. Applications in the field of Hydraulic Machinery and Water Conservancy Electromechanical System should focus on the safe and stable operation of hydraulic machinery systems, as well as intelligent monitoring and regulation technologies. Applications in Hydraulic Geotechnical Engineering should address experimental and numerical methods for geomaterials, multiphase flow coupling mechanisms in geotechnical media, monitoring and early warning technologies, and disaster risk prevention and control in geotechnical engineering. Applications in Hydraulic Structures and Hydraulic Materials should emphasize innovative structural systems for water conservancy and hydropower hubs and water diversion projects, high-performance hydraulic materials, intelligent construction technologies, safe operation and maintenance, and disaster risk prevention and control. Applications in the field of Water Network and Waterway Engineering should focus on water network engineering and systems; the planning, design, construction, maintenance, and operation of canals, waterways, ports, estuaries, and waterway structures, as well as their safety, resilience, and intelligent monitoring and control. Intelligent hydraulic engineering, ecological water conservancy, and safe hydraulic engineering are emerging frontier directions in the development of the hydraulic engineering discipline.

To address the challenges posed by climate and environmental change and the safety of critical water conservancy infrastructures, this discipline encourages innovative research on the following fundamental scientific problems: the evolution of watershed hydrological processes under complex conditions; optimized allocation and efficient utilization of water resources on the basin scale; mechanisms and risk prevention of floods and urban waterlogging; drought monitoring, early warning, and mitigation; high-efficiency agricultural water use and intelligent irrigation and drainage systems; integrated watershed and urban–rural water networks; inter-basin water transfer and regulation; aquatic ecological security in rivers, lakes, and reservoirs; water–sediment regime shifts and associated engineering safety risk prevention and control; safe operation and intelligent control of hydraulic machinery systems; intelligent construction and coordinated regulation of large water conservancy and hydropower infrastructure clusters, together with cascading disaster risk management; intelligent and efficient operation and maintenance of modern canals and waterway systems; and interdisciplinary integration of artificial intelligence with hydraulic engineering and related fields.

Department of Information Sciences

The Department funds researches in areas of the generation of signals, acquisition, storage, transmission, processing and utilization of information. Information science is based on informatics, control theory and system theory, and its

main method is information methodology, and its main platform and means of research are computer, integrated circuity and photo electric devices.

Based on the trends of disciplinary development and social progress, we give priorities on funding research on electronics, communication and network, electric devices and integrated circuit, computer science, automation, AI, photo electronics and microelectronics, network security, quantum information. Preferential support will be given to basic researches that meet national demands and have far-reaching importance in promoting the national economic and disciplinary development.

Scientific and technical problems in information sciences are increasingly interdisciplinary in nature. Therefore, the Department pays great attention to proposals for interdisciplinary researches between information science and mathematics, physics, chemistry, life sciences, medical sciences, materials sciences, engineering, geo-sciences and management sciences, and so on. The Department encourages cooperative research among scientists with different backgrounds and knowledge to put forward cross-disciplinary research proposals in smart city, smart agriculture, health, service and education information technology sciences. It also encourages scientists to combine theory with practice and explore basic theory and key technical issues that have important application potentials for national economy and security. Research on basic theory and key technology driven by national need is also encouraged to promote deep integration of industry and research. The

Funding of General Program, Young Scientists Fund (C) and Fund for Less Developed Regions in Department of Information Sciences in 2025

Unit: 10,000 yuan

Divisions		General program			Young Scientists Fund (C)			Fund for Less Developed Regions		
		Number of Grants	Direct cost	Success rate (%)	Number of Grants	Direct cost	Success rate (%)	Number of Grants	Direct cost	Success rate (%)
I	Information and communication system	187	9 348	13.25	208	6 240	20.45	13	416	11.02
	Information acquisition and Processing	177	8 848	10.95	211	6 330	16.50	22	705	11.46
	Electronics and technology	200	9 998	10.99	240	7 200	16.46	22	705	11.11
II	Computer science	502	25 097	11.64	554	16 620	17.55	65	2 074	11.27
	Artificial intelligence	372	18 598	11.64	397	11 910	17.52	67	2 142	11.24
	Education information science and technology	53	2 650	11.55	49	1 470	17.50	8	259	11.11
III	Control theory and technology	165	8 254	11.64	204	6 120	17.57	15	484	11.03
	Automation system and applications	131	6 553	11.63	139	4 170	17.53	11	355	9.09
	Smart system	146	7 304	11.61	171	5 130	17.54	10	322	11.76
IV	Semiconductor science and information devices	227	11 346	11.64	263	7 890	17.55	15	489	11.03
	Information optics and photoelectric devices	136	6 780	11.66	157	4 710	17.48	8	255	11.27
	Laser and technical optics	180	9 004	11.63	221	6 630	17.54	11	324	12.22
Total or average		**2 476**	**123 780**	**11.63**	**2 814**	**84 420**	**17.54**	**267**	**8 530**	**11.25**
Average funding amount* (10,000 yuan per project)		49.99			30.00			31.95		

* The average funding amount for General Program and Fund for Less Developed Regions refers to the average direct cost, while lump sum system is adopted for Young Scientists Fund (C) projects with a fixed funding amount.

Department will continue to encourage scientists to conduct substantive international cooperative research with scientists abroad in frontier areas of information sciences.

In 2025, the Department received 21,284 applications for General Program, and funded 2,476 projects with a total direct cost funding of 123.78 million yuan, average funding amount was 499,900 yuan per project, and success rate was 11.63% (11.81% in 2024).

In 2025, the Department received 16,043 applications for Young Scientists Fund (C), and funded 2,814 projects with direct cost of 844.20 million yuan. The success rate was 17.54% (20.17% in 2024).

In 2025, the Department received 2,373 applications for Fund for Less Developed Regions, and funded 267 projects with direct cost of 85.3 million yuan. The success rate was 11.25% (13.15% in 2024).

Please note:

1) For applications related to research ethics and security issues such as bio and information security, an evaluation paper from host institution or its oversight organization must be included in the application.

2) The requirements relating to research integrity stated in this Guide must be strictly observed, and information and representative work of the applicant included in the application must be real and accurate.

Division I of Information Sciences

Electronics and information system (F01)

This discipline mainly funds basic research in areas of electronic science and technology, information and information system, information acquisition and processing and related interdisciplinary areas. Researches funded in areas of electronic science and technology include circuit and system, electronic science and technology, magnetic field and wave, as well as electronics and applications. Researches funded in information and information system include information transmission, exchange and application in fields information of and communication. Researches funded in information acquisition and processing include applied technology of information sensing, acquisition and processing.

In 2026, this discipline will give key support to researches in areas of electromagnetic information, electromagnetic scattering and propagation in complex environment and targets, regulation of new electro-magnetic media field/waves, new antenna and array technology, radio sensing and positioning, tetra hertz theory, wireless energy acquisition and transport, advanced radio packaging and micro system integration, integrated sensing and communication radio front and core circuit, radio circuit based on paper and fiber materials, micro photon front end and

integration system, high performance vacuum superconductivity micro nano devices, high performance sensors and integrated micro systems, circuit and system design in extreme and complex conditions, bio-medical data acquisition and application, medical image processing and analysis, biomedical and TCM information acquisition and processing, interpreter-able deep learning information theory, advanced coding near the limit, general computation coding for computation power network, communication system and network security, syntax communication, high speed mobile communication and network, integrated communication, sensing, computation and storage network, 6G and low space smart network, embodied intelligent communication network, space earth and sea information network theory and technology, underwater information acquisition and processing, communication across media, integrated optical and wireless communication, quantum communication, magnetic spectrum cognition and controls, acoustic signal and acoustic field sensing and smart processing, new radar theory and method, spectra information acquisition and processing, multi mode remote sensing information processing, space information acquisition and processing, deep space detection, marine information acquisition and processing, under water multi physical field imaging and integrated identification, new principle and method of radar, new mechanism and method for multi source detection and imaging, computational imaging, and multimedia information processing. The innovative and interdisciplinary research and exploratory studies with good prospects will be supported, and preferential funding will be given to the projects which have scored outstanding achievements in previous research. It is especially encouraged to combine theory with practice, to highlight prospectiveness, innovation and interdisciplinarity, and to study and solve basic problems in important application areas, so as to improve China's research capabilities in this discipline.

Division II of Information Sciences

The Division mainly funds researches in computer science, artificial intelligence, education information science and technology.

Computer science (F02)

This discipline mainly funds researches in areas of basic theories, basic methods and key techniques related to computer science and technology and relevant interdisciplinary areas. It mainly covers software technology, data base, computer architecture, computer network, network and system security, graph and image and multi media technology, big data, bio information and digital health, and other new and interdisciplinary areas related to computer. The important trend of computer science and technology development is to obtain super speed, large storage, high

performance, high reliability, mobile applicability and integration of sensing, and hetero parallel computing.

In 2026, we welcome research proposals with creative ideas and reasonable plans in basic and prospective areas and interdisciplinary subjects. We encourage and support the studies on difficult and important basic problems, encourage studies focusing on strategic national goals, and collaborations with researchers in areas of mathematics, life sciences, medical sciences, and social sciences to make joint explorations on new theories, new method and technology in interdisciplinary areas. In addition, we encourage integration with home made platforms in carrying out the research.

Artificial intelligence (F06)

The AI area (F06) will focus on key scientific problems and technology in AI theory, technology and system. It mainly covers basic theory of AI, machine learning, machine sensing and patter recognition, data mining and knowledge finding, natural language processing, smart system and complexity science, brain-like intelligence and brain machine interface, AI security and management, AI enabled science and engineering, and AI driven by interdisciplinary research. We encourage researchers to conduct disruptive and use-inspired researches.We support close cooperation between AI researchers and those in other disciplines and humanities and social sciences to explore new concepts, theory, method and technology. We encourage original explorations in model coordination, embedded intelligence, space intelligence, cognitive intelligence, intelligent agent, and scientific intelligence.

Education information science and technology (F0701)

For education information science and technology F0701, we focus on knowledge generation, cognition laws and learning mechanism, and original, fundamental, prospective and interdisciplinary research, encourage research on basic theory and method of AI driven education, education assessment method and models supported by big-data, online and mobile learning environment and key technology. We encourage collaborations with natural sciences, humanities and social sciences to explore new concept, theory, method and technology to solve education problems in China.

In 2026, the Division will prioritize the funding for research on software theory and engineering, information security, network and system security, quantum computation, basic theory of AI, intelligence system and AI security, machine learning, natural language processing, science and technology in education related areas.

Division III of Information Sciences

Automation (F03)

The Division mainly funds research in areas of control theory and technology, automation system and application and related interdisciplinary areas. It includes control theory and technology, control system and engineering, automatic checking technology and devices, navigation, guidance and control, biomedical system and technology, robotics and intelligent system, smart manufacturing and automation system theory and technology, AI driven automation and other novel automation theory and systems.

In 2026, we encourage researchers to 1) select projects with application background of national interests, and provide scientific and technological support to the promotion of the economy and living standard; 2) select interdisciplinary projects and collaborate with scientists in medicine, biology, mathematics and physics, material science, humanity and sociology, so as to promote development of the discipline; 3) select internationally challenging problems or creative problems so as to increase the influences of Chinese scientists in international academic community.

Division IV of Information Sciences

The funding scope of the Division covers two disciplines, namely, semiconductor science and information devices, and optics and photo-electronics.

Semiconductor science and information devices (F04)

This division support mainly semiconductor physics, materials and devices, new information functional materials and devices, IC design, fabrication, packaging and equipment, EDA (electronic design automation) algorithm and tools, and micro-nano electromechanical devices and system.

In 2026, we give priorities to funding of new semiconductor physics, materials and devices and integration of multiple functions, wide band gap semiconductor material and devices of GaN, SiC, gallium oxide, diamond, etc., large range, high precision smart materials and self repair sensing devices, bio-sensing devices and integrated sensing devices, new nano sensing, storage and computing chips, micro energy harvesting devices, integration of energy harvesting devices and chips, high back off efficiency power amplifier, high linear low noise amplifier, super wide band low oscillation frequency source, low spurious frequency variation circuit, digital radio technology,multi channel phase array chips, multi dimensional information detection imaging devices, single photon detection devices and array, high speed photo electric devices and integration, photo electric devices for AI, high power

semiconductor laser, new luminescent and display devices, quantum materials and devices such as quantum point, quantum line, quantum well and new AI quantum structure, atomic fabrication of low dimensional semiconductor materials, organic semiconductor materials such as small molecule, polymer, conjugated oligomer and electronic and photo electric devices, flexible electronic devices and systems such as flexible display and sensing, and wearable equipment, new electronic information device and integration in post Moore era, new principle logic devices of super low energy consumption and high speed high performance surpassing CMOS (complementary metal oxide semiconductor), non volatile storage devices and its 3D integration, in memory computing devices and array architecture, in memory sensing and computing smart recognition system, multi temporal scale synaptic devices and integration, high density restructuring neuron cell devices and circuit, self adaptive learning brain like computing system, low consumption high performance IC, high speed data interface, AD/DA chips, multi dimensional isomorphism/isomerism IC and system, 3D integrated packaging, IC analysis and automatic design method, IC reliability studies, etc. Studies on improving performance, reliability and testing method for materials and devices, including device physics, structure and technology, and encourage multi disciplinary innovative studies are particularly encouraged.

Optics and photo electronics (F05)

This discipline includes information optics and photoelectric devices and laser technology and technical optics, focusing on the generation, acquisition, transport, storage, processing and display of optical information, the generation, transport, regulation, detection and application of laser, and related research on devices and system integration; and supports exploration on photonic principles and new optical materials, and promote interdisciplinary research on new energy and bio medical research, high precision manufacturing, climate and environment, and support research on applications in space, on land and on the sea, as well as common issues and core technology breakthrough related to high end optical design and manufacture. It mainly covers basic research and applied basic research on optical devices and integration technology, inferred and tetra hertz physics and technology, photon quantum information technology, nonlinear optics, laser, spectrum informatics, applied optics, micro nano optics.

For this discipline, the aim is to consolidate the basic research in photonics and photo electronics, emphasizing on explorations in interactions of light and matter, optical information regulation and processing, explorations new principles, new method of regulation and detection in photo electronics in extremely microscopic, extremely weak and extremely strong scenarios, emphasizing on certain basic areas having potential objectives, especially the integration and merging of photo electric information and smart manufacturing, high end instrument, biomedical, Eco and environmental and IC industries, developing new technology of laser photo

electronics, develop new devices, promoting technology transfer and making greater contributions to socioeconomic development and national security.

In 2026, the Division will give priority to researches on new photon research for next generation of core devices, prospective integration technologies, and precision instrument and smart equipment; and encourage interdisciplinary research, especially extreme performance laser, multi dimensional optical field regulation and information detection, optical sensor and technology, new types of optical fiber and optical wave guide devices, light communication technology, optical transmission and optical exchange devices, precision measurement of optical spectrum, smart optical computation and information processing, computational optics, high resolution and 3D imaging, new types of display and interaction, hetero photo electric integration, large scale photon integration, photo quantum devices and chips, new optical material and devices, micro nano photo electric devices, visible light and inferred photon devices, tetra hertz photon devices, microwave photon devices and integration, photo electronic chips and technology, energy photonics, biomedical photonics, super fast optics, marine optics, advanced optical design, new nano photo lithography, extreme optical processing and checking, etc.

Department of Management Sciences

The Department of Management Sciences supports fundamental scientific research on the objective law of management and economic activities in various complex social and economic organizations, aiming at providing theories and methods to optimize the utilization of limited resources. The Department consists of three divisions, handling proposals of four disciplines, which are Management Science and Engineering, Business Administration, Economic Sciences, and Macro-Management and Policy.

The Department encourages scientists to be oriented to the frontier of management and economic sciences, as well as the needs of the nation's economic growth and social development, so that to propose their research topics, promote the innovation on theory and methodology, and enhance the capability of serving the national strategy and economic and management practices. Meanwhile, it also encourages multidisciplinary integration and innovation with Mathematical Sciences, Information Sciences and etc. to drive the emergence and development of new fields in science.

The Department emphasizes applying scientific method to explore the objective laws of management and economic activities, and encourages the revolution of research paradigm. The Department supports research that observes and describes the management phenomena based on data obtained from experiment, observation, investigation, measurement and etc. The Department also supports research that aims

at addressing management issues by analyzing and explaining management phenomena through modeling, computation, etc.

The Department encourages interdisciplinary research, and supports scientists from diverse academic backgrounds to take an active part in management science research and contribute to the development of Management Sciences from basic law and theoretical method. However, applications focusing on social science and humanities, as well as those within the funding scope of other scientific departments of NSFC, will be returned without review by the Department.

Funding for Projects of General Program, Young Scientists Fund (C) and Fund for Less Developed Regions in Department of Management Sciences in 2025

Unit: 10,000 yuan

Divisions		General Program			Young Scientist Fund projects (C)			Fund for Less Developed Regions		
		Projects	Direct cost	Success rate (%)	Projects	Direct cost	Success rate (%)	Projects	Direct cost	Success rate (%)
Division I	Management science and engineering	298	11,988	15.27	314	9,420	15.15	30	817	11.07
Division II	Business administration	190	7,714	15.21	259	7,770	12.33	35	953	15.49
Division III	Economic sciences	203	8,322	15.59	276	8,280	14.38	35	953	13.26
	Macro-management and policy	255	10,352	11.69	297	8,910	11.02	40	1,091	12.08
Total or average		**946**	**38, 376**	**14.16**	**1,146**	**34,380**	**13.04**	**140**	**3, 814**	**12.82**
Average funding amount* (10,000 yuan per project)		40.57			30.00			27.24		

* The average funding amount for General Program and Fund for Less Developed Regions refers to the average direct cost, while lump sum system is adopted for Young Scientists Fund (C) projects with a fixed funding amount.

In 2025, the Department received a total of 6,683 applications for General Program, an increase of 427 applications from 2024, with a growth rate of 6.83%. A total of 946 projects were funded, with a success rate of 14.16%. The average funding amount (direct cost) was 405,700 yuan per project across various disciplines.

In 2025, the Department received a total of 8,787 applications for Young Scientists Fund projects (C), an increase of 488 applications from 2024, with a growth rate of 5.88%. A total of 1,146 projects were funded, with a success rate of 13.04%. The average funding amount was 300,000 yuan per project across various disciplines.

In 2025, the Department received a total of 1,092 applications for Fund for Less Developed Regions, an increase of 85 applications from 2024, with a growth rate of 8.44%. A total of 140 projects were funded, with a success rate of 12.82%. The average funding amount (direct cost) was 272,400 yuan per project.

General requirements for applications are as follows:

1. No repetitive funding with the National Social Science Fund of China

To optimize the allocation of the National Natural Science Fund and to ensure that principal investigators invest adequate time and energy in their on-going national projects, the Department will decline proposals by the following applicants in 2026

(except for the applications of Young Scientists Fund projects (B) and Young Scientists Fund projects (A)), except for otherwise indicated in this *Guide*:

(1) Applicants who were supported by the National Social Science Fund of China as a principal investigator within the past 5 years (from January. 1, 2021), and have not yet received the project completion certificate awarded by the National Planning Office of Philosophy and Social Science by the deadline of this year's fund application.

Notes: If an applicant has gained the project completion certificate from the National Planning Office of Philosophy and Social Science, and is applying for an NSFC project with the application codes starting with G in 2026, he/she must provide a scanning copy of the certificate with an official signature and seal of his/her host institution, and submit the copy of this certificate online.

(2) Applicants who apply for a project under the Department of Management Science, and also apply for a National Social Science Fund of China as the PI in the same year.

2. Accuracy, completeness and authenticity of information

Applicants are responsible for the accuracy, completeness and authenticity of the contents of their applications, and their home institutions are obligated to undertake serious check on the relevant information. The following requirements should be complied with when applicants prepare and submit the project proposals:

(1) Applicants are required to give a detailed description on their previous research work related to the proposed work, as well as the publications published in previous work. The five representative works should be papers and books that have already been published (including those published online).

(2) Proposals submitted to more than one science funding agency with the same or similar content will be deemed ineligible. Applicants who propose new research topics based on their previous NSFC projects are required to describe the progress of the previous NSFC projects and clarify the relations and differences between the newly submitted proposal and the previous ones. For applicants who are undertaking projects funded by other agencies, such as MOST, MOE, NSSF or local science funding organizations, they are required to clarify the similarities and differences between their on-going projects and the new proposal submitted to NSFC.

3. Special requirements for principal investigator starting NSFC projects in recent years

To ensure that principal investigators invest adequate time and energy in their on-going projects, the applicants in 2026 who has been approved any kind of NSFC projects as a principal investigator in 2024 or 2025 (especially for the year of 2025) will be reviewed and assessed through more rigorous procedures.

4. Consideration of the performance of accomplished projects

The Department conducts performance evaluation for all projects of General Program, Young Scientists Fund (C), and Fund for Less Developed Regions one year

after conclusion. Researchers with good performance evaluation results will be given priority for funding when they apply for new projects. By contrast, for researchers with poor performance evaluation results, their proposals will be reviewed more rigorously when they apply for new projects.

Division I of Management Sciences

Management Science and Engineering (G01)

The Division mainly supports basic research on management theory and method, including Complex Systems Management, Operations Research and Management, Decision-making Theory and Game Theory, Evaluation and Forecasting Theory and Method, Management Statistics Theory and Method, Management Psychology and Behaviors, Management System Engineering, Industrial Engineering and Quality Management, Logistics and Supply Chain Management, Service Science and Engineering, Data Science and Management, Information System and Management, Risk Management, Financial Engineering, Engineering Management and Project Management, Transportation Management, Digital Platform Management Theory, etc.

The orientation of the Division is more focused on basic theoretical research, emphasizing innovative research on management theory and method integrated with China's management practices. The Division encourages interdisciplinary research and international frontier theoretical research.

Over the past few years, the Discipline has experienced rapid development in China. Its performance, reputation and influence in the international scientific community has been unceasingly raised up in many research areas. The number of applications has exhibited a relatively rapid growth trend. Among them, fields such as Operations Research and Management, Logistics and Supply Chain Management, Industrial Engineering and Quality Management, Transportation Management, and Information Systems and Management have attracted a higher number of applications, while areas like Management Statistics Theory and Methods, as well as Service Science and Engineering, have seen relatively fewer applications.

In 2026, the Division will continue to encourage and support basic theoretical research on management science, method on frontier as well as original studies based on China's management practices, which includes as follows: 1) supporting pioneering research to explore the frontiers of management science and achieve innovative research findings with international influence; 2) supporting the integration of management science with Mathematics, Economic Sciences, Behavior Sciences, Information Sciences and etc., as well as other disciplines; 3) seeking breakthroughs of theories, methods and techniques for the development of the

Discipline, and encouraging the frontier research facing to the complex social systems and complex engineering systems; 4) providing support for scientists to link the frontier theory and method with problems within China, so as to solve the common and important issues from management practices in China and propose the general management theory and method; 5) supporting the frontier research oriented toward the important national demand, encouraging the scientists to pay more attention to the scientific management problems in emerging areas like intelligent manufacturing, artificial intelligence, digital economy, life sciences and etc.; 6) supporting the research on management science issues behind the "bottleneck" technical problem.

Division II of Management Sciences

Business Administration (G02)

The Division mainly supports basic research and applied basic research on management theories and new management techniques and methodologies, taking micro-level organizations (including all types of industries, enterprises, institutions, and nonprofit organizations) as research objects. The funding areas of the Division include Strategic Management, Theory of Firm, Enterprise Technology Management and Innovation Management, Human Resource Management, Financial Management, Accounting and Auditing, Marketing, Organization Theory and Organization Behaviors, Business Intelligence and Digital Business, Corporate Finance, Enterprise Operation Management, Corporate Governance, Entrepreneurship, International Business Management, Tourism Management and etc.

In recent years, all fields of Business Administration have been well developed. The number of applications in some fields was relatively large, which includes Marketing, Financial Management, Accounting and Auditing, Enterprise Technology Management and Innovation Management, Enterprise Operation Management, Organization Theory and Organization Behaviors, and etc.. Correspondingly, the number of funded projects in these fields was also much larger than that in other fields. In general, basic research expanding the frontier theories, adopting new techniques and methods has been on the rise, so has the applied basic research on the national strategic demands and Chinese firms' practical needs.

In 2026, the Division will continue to support the innovative basic research aiming at the national strategic demands and scientific frontier. The Division will give priority to the proposals that will bring out new theory and discovery, to the pioneering research employed various research methods including behavioral experiments, quantitative models, machine learning, text mining, and etc., from different disciplines including Information Science, Data Science, Behavioral and

Psychological Science, and etc., verified by different sources of data, and being backed by multidisciplinary studies. The Division advocates scientific spirits, encourages original exploration, and supports original research that focuses on the management theory and research paradigm shift based on the practices of Chinese enterprises, so as to facilitate the high-quality development of Chinese firms.

To promote the sustained and sound development of the discipline, the Division will continue to support fundamental research across 15 disciplinary code areas that advances the frontiers of business administration. The Division actively encourages theoretical and methodological studies that address scientific problems embedded in managerial processes and activities related to firm organization, production, operations, services, and commerce, particularly in the context of the dual-circulation paradigm, Chinese firms' internationalization, the "Dual Carbon" goals, the digital economy, and generative artificial intelligence.

Division III of Management Sciences

The Division supports two basic research areas: Economic Sciences and Macro Management and Policy.

Economic Sciences (G03)

The Economic Sciences Discipline mainly supports basic research on revealing laws of economic activities, explaining economic phenomena, and deriving economic theories through scientific research methods, such as empirical study, mathematical modeling, simulation, and behavior study. The funding scope covers 14 different areas, including Econometrics and Economic Statistics, Behavioral Economics and Experimental Economics, Mathematical Economics and Computational Economics, Microeconomics, Macroeconomic Management, International Economics and Trade, Financial Economics, Public Finance and Public Economics, Industrial Economics, Economic Development and Economic Institutions, Agricultural and Forestry Economics and Management, Regional Economics, Population, Labor and Health Economics, Resources and Environment Economics, etc..

In 2025, a relatively large number of projects were funded in the fields of Econometrics and Economic Statistics, International Economics and Trade, Financial Economics, Industrial Economics, Agricultural and Forestry Economic Management, Population, Labor and Health Economics, and Resources and Environment Economics. Due to the adjustment of discipline application codes in 2021, the number of both applications and funded projects in some new disciplines was relatively small, such as Mathematical Economics and Computational Economics, Microeconomics, Behavior Economics and Experimental Economics. On the whole, the research on exploring new methods and technologies is growing rapidly, and the

research on new problems such as digital economy and practical demands in China is also increasing steadily.

In 2026, this Discipline will be oriented to the main national social and economic battlefield, manly support innovative and cutting-edge basic research, emphasize theoretical innovation, method innovation and research on new knowledge discovery and creation, and give priority to supporting quantitative research methods such as mathematical modeling and empirical analysis, interdisciplinary approaches, and scientific discoveries that highlight China's national context and contribute to long-term knowledge accumulation. Priority will be given to supporting research on scientific problems derived from China's economic practices with potential application value, as well as those with prospects of substantive international cooperation. It advocates the spirit of science, encourages free exploration and gives priority to the original theoretical exploration based on China's economic practices.

In order to promote the development of the discipline, this Discipline will provide appropriate funding priority to established fields such as Econometrics and Economic Statistics, Financial Economics, Macroeconomic Management, and International Economics and Trade, as well as to emerging areas such as the Digital Economy, Science and Technology Finance, and Behavioral Economics in 2026. Meanwhile, the use of artificial intelligence technology to conduct innovative research in the field of economic science is encouraged.

Macro-Management and Policy (G04)

The Macro-Management and Policy Discipline is a group of disciplines that study the behavior of government and related public sectors in formulating macro policies and implementing comprehensive governance, in order to achieve the social and economic development goals. It covers 15 areas of basic research, including Public Administration and Public Policy, Theories and Methods of Policy Science, Governance and Policy of Science and Technology, Governance and Policy of Innovation, Governance and Policy of Public Health, Governance and Policy of Medicine, Governance and Policy of Education, Governance and Policy of Culture, Public Safety and Emergency Management, Social Governance and Social Security, Governance of Environment and Ecology, Governance and Policy of Resource, Regional Management and Urban Governance, Digital Governance and Information Resource Management, Global Governance and Sustainable Development, etc..

In 2025, the field of Governance and Policy of Public Health received the largest number of proposals, accounting for approximately 30% of the total applications in this discipline. However, its success rate remained relatively low. Established fields such as Innovation Management and Policy, Public Safety and Emergency Management, Resource Management and Policy, as well as Environmental and Ecological Management, secured a relatively large number of funded projects. In contrast, areas including theoretical and methodological studies in Policy Science,

Global Governance, and Sustainable Development saw fewer applications and funded projects.

The Discipline aims to facilitate discipline development, promote academic innovation, and support talent scientists and research teams. In particular, the Discipline encourages researchers to provide scientific support and evidences for macro policy makers while developing theories and methods. It encourages researchers to provide scientific support and evidences for macro policy makers while developing theories and methods. The applications should take China's practical governance issues as the main research objects, accurately identify core scientific problems from the research objects accurately, and use scientific and normative research methods. Applicants are advised to differentiate between management science research and practical management work, differentiate between an NSFC project and a project on humanity and social science in terms of research methods. The scope of the research topic needs to be appropriate. The research goal should be concentrated. The research content should be specific and concrete. The research method and technical route, as well as how to address the key scientific problems, should be clearly elaborated in the proposal. Meanwhile, the use of artificial intelligence technology to conduct innovative research in the Discipline of Macro-management and Policy is encouraged. **In the field of Governance and Policy of Public Health, research on the pathology, and clinical aspects or nursing care of specific diseases will not be funded. Relevant proposals should select the appropriate application codes under the Department of Health Sciences.** In 2026, this discipline will prioritize support for research directions such as policy intelligence, smart healthcare, digital and intelligent education, intelligent social governance, safety and emergency management, data governance, and policy studies related to the "dual-carbon" goals.

Department of Health Sciences

The Department of Health Sciences adheres to the strategic positioning of four orientations, i.e. the global S&T frontiers, the main economic battlefield, the major needs of the country, and the health of the people. It mainly supports basic research that aims at scientific problems in disease prevention, control and treatment, and focuses on the structural, functional, developmental, genetic and immune abnormalities of human body, as well as the occurrence, development, outcome, diagnosis, treatment and prevention of diseases. It also guides researchers to conduct innovative research in basic medicine, clinical medicine, preventive medicine, material medica, pharmacology, Traditional Chinese Medicine, Chinese Materia Medica and interdisciplinary fields of medicine and engineering, so as to improve the levels of medical scientific research in China.

The Department encourages in-depth basic research on scientific problems deriving from clinical practices using innovative academic ideas and methodologies; systematic and original research on key scientific problems; translational medical research combining basic medicine with clinical medicine; integrative medical research on the occurrence, development and prognosis mechanisms of diseases at different levels ranging from molecular, cellular, tissue, organ to individual and population by using multidisciplinary, multilevel and multiscale new techniques,

Funding for General Program, Young Scientists Fund (C) and Fund for Less Develop Regions of the Department of Health Sciences in 2025

Unit: 10,000 yuan

Division		General Program			Young Scientists Fund (C)			Fund for Less Develop Regions		
		No. of projects	Direct cost	Success rate (%)	No. of projects	Funding cost	Success rate (%)	No. of projects	Direct cost	Success rate (%)
I	Respiratory system, circulation system, hematologic system	600	29 466	10.51	608	18 240	11.67	106	3 391	10.28
II	Digestive system, urinary system, endocrine system/metabolism and nutrition support, ophthalmology, otorhinolaryngology head and neck science, oral and craniofacial science	739	36 243	9.47	820	24 600	10.25	118	3 775	8.40
III	Nervous system, mental health and psychological health, gerontology	496	24 337	9.40	496	14 880	10.14	65	2 083	7.06
IV	Reproductive system/perinatal medicine/neonatology, medical immunology, medical genetics	307	15 075	9.63	339	10 170	10.99	43	1 376	7.40
V	Special medicine, forensic medicine, medical imaging/nuclear medicine, biomedical engineering/regenerative medicine	311	15 316	8.32	325	9 750	8.41	37	1 184	7.51
VI	Locomotor system, emergency and intensive care medicine, trauma/burns/plastic surgery, rehabilitation medicine, medical virology and virus infection, medical pathogens and infection, laboratory medicine	508	24 895	7.76	511	15 330	9.26	88	2 816	7.33
VII	Oncology	991	48 532	9.40	1 146	34 380	12.23	157	5 022	8.30
VIII	Dermatology, radiation medicine, preventive medicine	274	13 403	9.99	307	9 210	12.09	59	1 887	10.99
IX	Materia medica, pharmacology	294	14 390	9.91	395	11 850	14.63	65	2 079	11.13
X	Traditional Chinese medicine, Chinese material medica, integrated Chinese and western medicine	743	36 273	7.08	864	25 920	8.74	255	8 157	9.84
Total or average		**5 263**	**257 930**	**8.92**	**5 811**	**174 330**	**10.55**	**993**	**31 770**	**8.84**
Average funding amount* (10,000 yuan per project)		49.01			30.00			31.99		

* The average direct cost is shown for the General Program and Fund for Less Develop Regions; the Young Scientists Fund (Category C) adopts a lump-sum funding system and the cost is fixed.

methods and paradigms; interdisciplinary research with other fields to explore new growth points for the disciplines; and substantive international exchange and collaborative research. The Department will give priority to funding basic research on major diseases, novel/emerging infectious diseases, and common and frequently occurring diseases. The Department will also highlight research in distinctive fields, support relatively weak research fields, and ensure balanced, coordinated and sustainable development in all fields.

In 2025, the Department of Health Sciences received a total of 58,992 applications for General Program, with 7,194 more applications than in 2024 and an increasing rate of 13.89%. Among them, 5,263 applications were funded, the average success rate was 8.92%, and the average direct cost was 490,100 yuan per project.

In 2025, the Department of Health Sciences received a total of 55,073 applications of Young Scientists Fund (C), with 6,219 more applications than in 2024 and an increasing rate of 12.73%. Among them, 5,811 applications were funded, the average success rate was 10.55%, and the average cost was 300,000 yuan per project.

In 2025, the Department of Health Sciences received a total of 11,233 applications of Fund for Less Developed Regions, with 1,600 more applications than in 2024 and an increasing rate of 16.61%. Among them, 993 applications were funded, the average success rate was 8.84%, and the average direct cost was 319,900 yuan per project.

Instructions:

1. Specific instructions for applicants

(1) Applicants are encouraged to perform in-depth basic research on scientific problems with an emphasis on originality. For applications with satisfactory preliminary research results, further and more in-depth research is encouraged. Applications that blindly pursue the use of new high-technology, or follow hot topics should be avoided.

(2) Applicants are expected to elaborate on the scientific and potential clinical values of the anticipated research results. Applicants are suggested to propose a defined scientific problem or a specific hypothesis based on analysis of the relevant latest research trends and progress in the field, and to elucidate the theoretical and applicable value of the research.

(3) Applicants are expected to elaborate on whether the proposed research and the technical route will solve the specific scientific problem or verify the hypothesis with an emphasis on the scientific quality, logic and feasibility. Furthermore, applicants are expected to propose adequate research contents, detailed research designs, clear technical route and reasonable budgets.

(4) Applicants are expected to provide detailed information on relevant previous research. For research results that have been published, please list all the published papers; for those that have not been published, relevant experimental data, tables or graphics, pictures etc. should be provided. In case of the extension of previously

funded project, please elucidate the scientific problems and innovative ideas to be further investigated.

(5) Applicants should ensure that the information they provide and the content of the application are accurate and reliable. Applicants are expected to carefully write the application in accordance with the relevant requirements with a scientific and realistic attitude. Applicants should truthfully fill in the resumes of themselves and major participants, previous grants information and relevant publications. The published academic papers and other representative achievements and academic awards should be filled in according to the application regulations of this *Guide* and the instructions and outlines of the application form.

(6) Applicants are expected to provide a signed institutional certificate or approval (the scanning copy should be attached to the electronic proposal) to meet the related ethical or clinical research requirement. Applications that do not provide certificate or approval as required above will not be funded.

(7) Applicants are expected to follow all appropriate guidelines for the use and handling of pathogenic microorganisms, including the *Bio-safety Administrative Rules of Pathogenic Microorganism in Lab* released by the State Council. For applications involving life sciences and medical research, applicants should strictly follow the *Measures for Ethical Review of Life Sciences and Medical Research Involving Human Beings*. For applications involving human genetic resources, applicants should strictly follow the *Regulations on Management of Human Genetic Resources*. Additionally, a commitment letter to guarantee bio-safety should be provided by the host or collaborative institutions along with the application when the study of highly pathogenic microorganisms are involved. Applications that do not provide certificate or approval as required above will not be funded.

(8) Further emphasis will be placed on grant management, such as performance assessment, continuous funding for systematic and continuing research projects, etc. Applicants with good performance in their previous grants will be given priority for funding under equal conditions.

(9) Applicants should notice that: in 2026, the Department will generally give no further funding for General Program to applicants who either received intensive funding in 2025 from NSFC [such as Key Program, Key International (Regional) Joint Research Program, International (Regional) Cooperation Programs under Agreements/MoUs with funding amount of above 2 million yuan, Major Program, Key Program or Integrated Program of Major Research Plan or Programs of Joint Funds, Special Fund for Research on National Major Research Instruments], or are applying for repetitive or similar research to their ongoing national scientific projects funded by other governmental agencies.

2. Overview of applications in recent years and instructions to host institutions

The number of applications has been increasing in the Department ever since its

establishment. In 2025, a total of 129,052 applications were received from 1,179 host institutions during the concentrated reception period, accounting for 29.77% of the total applications (433,426) at NSFC. Rapid growth in applications brings a substantial rise in costs of peer review and grant management. To enable the healthy, stable and sustainable development of both NSFC and medical research in China and ensure the quality of peer review and grant management, the host institutions should further strengthen the main responsibility of management in the process of NSFC grant applications, and endeavor to improve the quality of applications and reduce the number of substandard applications under the guidance of the *Requirements of NSFC for Host Institutions to Improve Management of Scientific Projects*.

3. Specific explanations on application codes

The application codes of the Department are composed of 35 primary application codes (H01 to H35) and their corresponding secondary codes. The basic characteristics of the application codes system are as follows: ①The primary application codes, which are mainly arranged in the order of organs or systems, addressing scientific problems, integrating basic medicine and clinical medicine, and putting the common scientific problems of each "discipline" and "department" into one application and review system. ②The secondary application codes, which are arranged in the order from basic to clinical research and from structural, functional and developmental abnormalities to diseases, taking into account disease related basic research.

The applicants are expected to carefully choose the primary application code and the relevant secondary one.

Special instructions for applicants are as follows:

The Department of Health Sciences sets up the Oncology Discipline separately. Please select the corresponding secondary application code under Oncology (H18) for all kinds of tumor-related medical scientific researches except for hematological tumor, epidemiology of tumor, oncological pharmacology, medical imaging of tumor and Traditional Chinese Medicine oncology. For applications on hematological tumor, please select the corresponding secondary application code under Hematological System (H08); for applications on tumor epidemiology, please select the Epidemiology of Noncommunicable Diseases (H3010); for applications on oncological pharmacology, please select Anti-tumor Pharmacology (H3505); for applications on medical imaging and biomedical engineering of tumor, please select the corresponding secondary application code under Medical Imaging/Nuclear Medicine (H27) and Biomedical Engineering/ Regeneration Medicine (H28); for applications on Traditional Chinese Medicine oncology research, please select the corresponding secondary application code under Traditional Chinese Medicine (H31), Chinese Materia Medica (H32), or Integrated Chinese and Western Medicine (H33).

The field of Radiation Medicine (H29) mainly covers the research of radiology pathology, protection, and non-oncology radiotherapy, and does not fund applications

of radio diagnostics and oncology radiotherapy. For the applications on radio diagnostics, please select the corresponding secondary application code under Medical Imaging/Nuclear Medicine (H27). For the applications on tumor radiotherapy, the application code (H1816) should be selected.

The field of Gerontology (H19) only funds research on the pathogenesis and intervention of diseases related to the mechanisms of aging. For applications that focus on aging of single organ or system, and gerontology researches that do not involve pathophysiological mechanisms of aging, please select appropriate application code in accordance with the organs or systems..

Applications that focus on neonatal diseases should be submitted to Reproductive System/Perinatology/Neonatology (H04). For other scientific problems in pediatrics, application code of the corresponding system should be selected.

Applications that focus on sexually transmitted diseases should be submitted to the application code (H2208) under Human Pathogens and Infections (H22).

4. Special Program of General Program: Guidelines for "Exploration of Scientific Problems Derived from Clinical Practice"

The aim of the Special Program of General Program—Exploration of Scientific Problems Derived from Clinical Practice is not only targeting major medical scientific problems and original innovations, but also focusing on promoting translational medicine research that applies the basic research outcomes to clinical practice and people's health. Emerging from clinical diagnostic and therapeutic practices, innovative research are launched based on new phenomena or critical clinical problems, aiming to reveal new patterns, elucidate novel mechanisms, and address the scientific problems behind clinical challenges. Such endeavors are pivotal for elevating medical innovation, bridging the gap between basic research findings and clinical practice, and refining the landscape of medical research funding.

The Department encourages the combination of clinical practice and basic research, the interdisciplinary research and the innovation of clinical research methods. In 2026, the Special Program—Exploration of Scientific Problems Derived from Clinical Practice in General Program will continue to be operated, with about 130 projects to be funded and an average funding amount of 650,000 yuan in direct cost. The following researches are to be supported: ①important scientific problems derived from clinical phenomena or clinical diagnosis and treatment bottlenecks, utilizing clinical samples and clinical information and other resources to carry out innovative research that has important guiding significance for disease diagnosis, treatment and prevention; ②exploratory research on clinical translation based on the innovative results obtained from previous basic research of the applicants or their teams; ③exploring the new paradigm of clinical research and novel techniques and methods for clinical translational research. The research should be in line with one of the above-mentioned three directions. Application that does not meet the requirements will not be funded.

In 2025, a total of 1,895 applications were received for the Special Program. After correspondence peer review and panel review, 130 projects were funded with an average funding amount of 589,500 yuan each in direct cost. Based on the previous applications received under this Special Program, the common issues that do not comply with the requirements of this "Guide" mainly include: ①scientific problems not derived from clinical practice of the applicants or their team but primarily derived from literature; ②having preliminary basic research achievements, but lacking translational research design integrated with clinical application; ③absence of rigorous clinical research design or high-quality preliminary data.

In 2026, applicants should choose the secondary application code under the primary application codes of H01～H35 according to their research field, and indicate—Exploration of Scientific Problems Derived from Clinical Practice in the "Annotation" column of the application form. **Before the "Project Basis" section of the main body of the proposal, applicants are required to add concise explanations (within 800 Chinese characters) addressing the following three questions:** ①the proposed clinical scientific problem and its innovativeness; ②the clinical value and potential for translational application of the proposed project; ③how the proposed project utilizes clinical resources to conduct integrated clinical-basic scientific exploration. This Special Program does not fund clinical trials being carried out by hospitals and enterprises. Projects involving clinical research must comply with relevant regulations and ethical requirements in China and provide corresponding approval materials. The Special Program is only available under the General Program.

5. Special Program of General Programs: Guidelines and points for attention for "Research on the Biological Effects of Key Acupuncture Variables"

The Department encourages the integration of basic research with clinical practice, as well as interdisciplinary collaboration and innovation in research paradigms. In 2026, the Special Program entitled "Research on the Biological Effects of Key Acupuncture Variables" will be established under the General Program to **encourage interdisciplinary applications**. The Special Program plans to fund 5–10 projects, with funding amount equivalent to those of General Program. The following research directions are supported: ①Using acupuncture-responsive diseases supported by high-quality clinical evidence as a research platform, investigators should select a single effective acupoint and integrate its local anatomical characteristics to study the effects, information encoding mechanisms, and neurobiological basis of two to three key variables, such as needling depth, stimulation intensity, and intervention frequency. Research should address local sensory receptors of acupoint, target-organ responses, and systemic reactions, and include exploratory clinical validation studies. ②Using acupuncture-responsive diseases as a platform and focusing on a single effective acupoint, researchers should integrate biological rhythms and disease-progression patterns to investigate the effect

characteristics and biological mechanisms associated with different acupuncture intervention timings, together with exploratory clinical validation studies. ③Based on a single effective acupoint, researchers are encouraged to develop novel acupuncture techniques or methods using emerging technologies or materials, systematically investigate changes in effect characteristics and mechanisms resulting from variation in key parameters, and explore their potential for clinical translation. **The research should be in line with one of the above-mentioned three directions. Application that does not meet the requirements will not be funded.**

In 2026, applicants should select a secondary application code under the primary application code H31 according to their research field, and indicate “Research on the Biological Effects of Key Acupuncture Variables” in the "Annotation” column of the application form. **Before the “Project Basis” section of the main body of the proposal, applicants are required to address the following three questions (within 800 Chinese characters)**: ① The scientific problem to be addressed and its innovativeness; ② The value of the study for clinical translation;③ How the study integrates basic and clinical scientific investigation. **The Special Program will not fund clinical research already conducted by hospitals or enterprises**. Projects involving clinical research must comply with relevant Chinese regulations and ethical requirements for clinical studies and must provide the approval documentation.

6. Requirements for Pilot Reform of General Projects in the Oncology Field (H18)

In order to strengthen the innovativeness of basic research in oncology and guide applicants to identify the frontier scientific problems and the key scientific problems derived from clinical practices, a pilot reform of project applications in the field of oncology will continue to be implemented in 2026. Applicants selecting H18 and its secondary codes as the application code for General Program (except for the Special Program of “Exploration of Scientific Problems Derived from Clinical Practice”) are **required to add an explanation of "Innovative Ideas and Key Research Clues" (within 800 Chinese characters) before the "Project Basis" section in the main body of the application**. This explanation should highlight the innovation and previous discoveries of the proposed project, mainly including: ①the most prominent innovative ideas and scientific value of the proposed research; ②the important research clues and scientific evidence that have been obtained.

Division I of Health Sciences

The Division mainly supports basic research in the fields of respiratory system, circulatory system, and hematological system.

Respiratory System (H01)

Respiratory diseases are common conditions that seriously impact human health.

Their etiology, pathogenesis, diagnosis, and treatment have long been key funding areas within the respiratory discipline. This primarily involves basic and clinical basic research related to the lungs, airways, pulmonary circulation, mediastinum, pleura, chest wall, diaphragm, sleep, and their associated diseases. The scope of funding for this discipline includes: abnormalities in respiratory structure, function, and development; respiratory infections, inflammation, and immunity; environmental factors and airway diseases; bronchial asthma; chronic Obstructive Pulmonary Disease (COPD); bronchiectasis; pulmonary circulation and pulmonary vascular diseases; interstitial lung disease; acute lung injury (ALI), and Acute Respiratory Distress Syndrome (ARDS); sleep-disordered breathing and respiratory regulation; respiratory failure and respiratory support; diseases related to the pleura, mediastinum, chest wall, and diaphragm; respiratory intervention, airway reconstruction, and lung transplantation; new technologies/methods for respiratory research, etc..

The respiratory discipline continues to encourage and support research in the following areas: 1. Basic and clinical research on respiratory infections, specifically host pulmonary immune responses and pathogenic mechanisms caused by pathogens. 2. Mechanisms of immune imbalance and physiological/pathological changes in the airways or lungs. 3. Lung microenvironment, the alveolar-blood barrier, the occurrence and evolution of pulmonary nodules, lung stem cells, lung regeneration, injury repair, and lung fibrosis. 4. Sleep-disordered breathing and its resulting target organ damage. 5. Pulmonary arterial hypertension and other pulmonary vascular diseases. 6. Identifying potential biomarkers and intervention targets to establish new methods for precision diagnosis and treatment. 7. The impact of air particulates (PM), harmful gases, smoke, and allergens on the airways and lungs, and the resulting pathophysiological changes. 8. Mechanisms of respiratory diseases mediated by dysbiosis (microbial imbalance). 9. Research on the interaction between the lungs and other organs. Applicants are particularly encouraged to identify scientific problems from clinical practice and conduct relevant research.

The application of new technologies is vital for driving respiratory research. Applicants are encouraged to use new models and methods, such as multi-omics, big data, Artificial Intelligence (AI), novel animal models, and organoids to solve basic and clinical problems. Regarding research on pulmonary nodules, this discipline will not accept applications where the condition has already developed into lung cancer or where lung cancer is the primary object of study.

Circulatory System (H02)

The circulation discipline primarily funds scientific research related to various cardiac and vascular (including lymphatic vessels) diseases, as well as microcirculation and shock. In recent years, the largest number of applications was in the fields of myocardial/vascular injury and protection, followed by atherosclerosis,

heart failure, coronary heart disease, aortic disease, and arrhythmia.

The circulation discipline encourages original researches focusing on cutting-edge fields of cardiovascular system. Specific directions include: Interdisciplinary research integrating clinical medicine and biology, genetics, basic medicine, regenerative medicine and other related disciplines to jointly investigate the underlying mechanisms of the onset and progression of cardiovascular diseases as well as the intervention strategies; Research on the mechanisms of bioactive substances in regulating cardiac and vascular function as well as in the development of cardiovascular diseases to facilitate the discovery of potential diagnostic markers, intervention targets and innovative therapeutic technologies; Studies on molecular etiology, regulatory networks and intervention targets of the metabolic disorder-related cardiovascular diseases; Studies on the impact of other systemic diseases on the cardiovascular system and their crosstalk; Infection-related cardiovascular diseases, immune-related diseases of the circulatory system, lymphatic circulatory diseases and microcirculatory diseases; Studies on cardiovascular diseases in children, the elderly, pregnant women as well as in cancer patients; Basic research and applied basic research of novel techniques, methods and materials in the cardiovascular field; Basic research on important clinical problems in interventional cardiovascular therapy and perioperative care of cardiovascular surgery.

Hematological System (H08)

Hematological system diseases are extremely harmful to human beings. The etiology, pathogenesis, diagnosis and treatment of such diseases have always been the key funding areas of the hematology discipline. The Hematology Discipline supports basic and clinical research of the hematopoietic tissues/organs and their related diseases, including hematopoiesis and its regulation and microenvironment; erythrocyte and its related diseases; leukocyte and its related diseases; megakaryocyte, platelet and their related diseases; bleeding, coagulation, fibrinolysis and thrombosis; aplastic anemia and bone marrow failure; myelodysplastic syndromes; myeloproliferative diseases; leukemia; lymphoma and lymphocytic diseases; myeloma and plasma cell diseases; infectious diseases associated with hematological system and their treatment; hematopoietic stem cell transplantation and its complications; immunotherapy, cell and gene therapy for hematologic diseases; blood transfusion, blood regeneration and blood products; new research technologies and methods for hematological diseases.

The Discipline will encourage and support research in the following areas: ①studies related to hematopoietic stem/progenitor cells, hematopoietic microenvironment, heterogeneity of blood cells and their functions;②platelet alterations and functional abnormalities;③bleeding/coagulation and thrombotic disorders; ④blood cell development, metabolism, and the pathogenesis of hematologic malignancies; ⑤precise classification and diagnosis of hematopoietic

disease; mechanism of drug resistance and recurrence;⑥immunotherapy and gene therapy for blood diseases, including exploring new targets and methods or approaches; methods to improve clinical efficacy and to alleviate clinical side effects; ⑦basic and clinical research in hematopoietic stem cell transplantation.

Hematologic ecology refers to the homeostatic balance maintained under physiological conditions within the blood system following the exchange of substances and energy between the human body and the external environment. The composition of this homeostatic balance and its maintenance mechanism, as well as the early warning of major diseases in the state of blood ecological imbalance, are the main research contents of this discipline. The Discipline encourages applicants to focus on this field and actively submit proposals.

New technologies and methods have greatly promoted the advancement of hematology research in both depth and breadth. Thus, the Discipline strongly encourages applicants to carry out basic and clincial applied basic researches using new methods to study normal or abnormal blood cells.

In 2025, the proposals were mainly focused on leukemia, lymphoma and lymphocytic diseases, myeloma and plasma cell diseases, with a remarkable increase in immunotherapy and cell therapy for hematological diseases, while the number of applications in other areas was relatively small. Thus, the Discipline encourages applicants to conduct studies in areas of pathogenic infections, the occurrence of hematopoietic diseases, and infections during blood disease treatment.

Given the excellent foundation of basic and clinical research in the hematological field in China, and the close link between the two, applicants are thus encouraged to make full use of the rich clinical resources to identify more scientific problems derived from clinical practices, and to strengthen relevant basic and translational research.

For project involving research contents of pulmonary circulation and pulmonary vascular diseases in Division I, applicants shall choose the appropriate application code from the respiratory system (H01) and the circulatory system (H02) based on their specific research direction. Division I does not support the applications on non-hematological malignancy. For details, please refer to the general introduction of the Department of Health Sciences.

Division II of Health Sciences

The Division mainly supports basic research in the fields of digestive system, urinary system, endocrine system/metabolism and nutritional support, ophthalmology, otorhinolaryngology head and neck science, and oral and craniofacial science.

Digestive System (H03)

This discipline primarily supports research on scientific problems concerning non-neoplastic digestive system diseases, focusing on structural, functional and developmental abnormalities, immune-related disorders, gastrointestinal dysmotility, mucosal barrier dysfunction, gastric acid-related diseases, neuroendocrine abnormalities, infectious diseases, hepatic metabolic disorders, drug- and alcohol-induced injuries, liver injury and regeneration, hepatoprotection, biliary diseases, pancreatic diseases, organ transplantation and novel research technologies.

In 2025, applications were concentrated in liver diseases, especially hepatic metabolic disorders, liver injury and regeneration, and inflammatory liver diseases. Gastrointestinal applications focused on microenvironmental disturbance, immune diseases and dysmotility. Applications for pancreatic diseases remained stable, while those for hepatoprotection, biliary diseases and gastric acid-related diseases were relatively few. This discipline encourages cutting-edge basic and clinical research in the aforementioned fields, studies on organ crosstalk within the digestive system, interactions between the digestive system and other systems, and translational research targeting major digestive diseases in China.

Urinary System (H05)

This Discipline mainly supports non-tumor researches in relation of the structural and functional disorders, injury repairs, etiologies, urolithiasis and obstructions of the kidney, ureter, bladder, prostate and urethra. Supported areas include the structural, functional and development disorders of urinary system; injuries and repairs of urinary system; primary kidney diseases; secondary kidney diseases; chronic kidney diseases and its related complications; hemodialyses and renal replacement therapies; kidney transplantations; urolithiasis and urinary tract infections; benign diseases of prostate and bladder; voiding dysfunction; new techniques and methods for the study of urological diseases.

In 2025, the majority of the proposals were still concentrated in areas of the prevention and treatment of acute kidney injuries and chronic kidney diseases. The areas with the largest number of proposals were injuries and repairs of the urinary system, secondary kidney diseases, and chronic kidney diseases and its related complications, followed by primary kidney diseases, kidney transplantations, urolithiasis and urinary tract infections and benign diseases of prostate and bladder. The number of applications on hemodialyses and renal replacement therapies, voiding dysfunction and the structural, functional and development disorders of urinary system was still small. More extensive and in-depth researches on these areas are encouraged. Interdisciplinary research using new technologies and methods further attracted researchers' attention, however, the quality needed to be improved. The Discipline encourages the innovative basic and clinical researches on the cutting-edge problems and clinical demand in areas related to urinary system.

Endocrine System/Metabolism and Nutritional Support (H07)

This Discipline mainly supports researches on abnormalities of endocrine organ structure and/or function and relative non-neoplastic diseases. The funding scopes include endocrine system immune-related diseases; pineal gland, hypothalamus, pituitary and related diseases; thyroid, parathyroid and related diseases; adrenal gland and related diseases; gonads and related diseases; physiological regulation and dysfunction of islets; imbalance of glucose homeostasis and insulin resistance in target organs; diabetes mellitus; abnormal regulation of energy metabolism and obesity; abnormal lipid metabolism; physiological regulation and dysfunction of adipose tissue; bone turnover, abnormal bone metabolism and abnormal calcium and phosphorus metabolism; abnormal metabolism of amino acids and nucleic acid; abnormal metabolism of water, electrolyte, trace elements and vitamins, acid-base imbalance; malnutrition and nutritional support; new technologies and methods in the field of endocrine system diseases/metabolic abnormalities and nutritional support.

In 2025, the majority of the proposals were still concentrated in diabetes mellitus, abnormal regulation of energy metabolism and obesity, abnormal lipid metabolism, bone turnover, abnormal bone metabolism and abnormal calcium and phosphorus metabolism. There were few applications on adrenal gland and related diseases, gonads and related diseases, malnutrition and nutritional support, abnormal water metabolism, electrolyte, trace elements and vitamins, acid-base imbalance. The Discipline encourages the basic and clinical researches on the cutting-edge problems in the above-mentioned research fields, and also encourages studies using new technologies and methods in the field of endocrine system diseases/metabolic abnormalities and nutritional support. Exploratory researches on the new phenomena and new problems identified in clinical practice will be encouraged.

Ophthalmology (H13)

The discipline of ophthalmology mainly supports the research on the structure, function, and vision formation of eyeball and ocular adnexa, as well as researches on the occurrence, development, diagnosis and prevention strategies for ocular diseases.

The field of ophthalmology is focused on corneal and ocular surface related diseases; lens and cataract; sclera, uvea and ocular immunology related diseases; glaucoma, optic nerve and visual pathway related diseases; retina, choroid and vitreous related diseases; vision, optometry and myopia, amblyopia and ocular muscle disorder related diseases; ocular manifestations due to systemic disease; systemic-ocular interactions and disease; orbital diseases; ocular tissue transplantation; innovative technologies and methods in ophthalmic research.

In 2025, ophthalmology project applications continued to focus on fundus diseases, such as retinal, choroid and vitreous-related diseases, followed by corneal and ocular surface related diseases; glaucoma, optic nerve and visual pathway related

diseases; vision, optometry and myopia, amblyopia and ocular muscle disorder related diseases, lens and cataract. Diabetic retinopathy, retinal and choroidal neovascularization, age-related macular degeneration, refractive errors and visual abnormalities, corneal injury and repair, optic nerve injury and regeneration, eye-multi-organ interaction and related diseases remain the hot fields of ophthalmic research. This discipline encourages extracting the scientific problems around the prediction, diagnosis, treatment, rehabilitation, environment and vision of ocular diseases; combining the innovative theories and technologies in neuroscience, molecular medicine, digital technology, biomechanics information science, and materials science to conduct multidisciplinary and interdisciplinary integration research; obtaining original scientific achievements and promoting basic research to guide the clinical diagnosis and treatment for diseases.

Otorhinolaryngology Head and Neck Science (H14)

The discipline supports scientific basic researches in related fields such as morphology, physiology and pathology etc., as well as innovative technology researches on disease pathogenesis, targeted prevention, treatment and rehabilitation. The scope includes olfactory, nasal and anterior skull base diseases, throat and neck diseases, ear and lateral skull base diseases, auditory abnormalities and balance disorders, otorhinolaryngology head and neck development related diseases, systemic interactions in otorhinolaryngology head and neck diseases, new technologies and methods of otorhinolaryngology head and neck scientific research.

In 2025, the auditory abnormalities and balance disorders, olfactory, nasal and anterior skull base diseases, throat and neck diseases were still the focus of proposed researches. The mechanisms involved in various types of auditory and balance disorders, as well as the reconstruction of auditory function are the key issues of otology, mainly including pathogenesis research on genetic-environmental interactions, and development of novel therapeutic strategy. In the field of rhinology, researches mainly focus on mechanisms underlying the pathogenesis and development of rhinitis, rhinosinusitis and nasal polyp, and innovative diagnostic and therapeutic technologies. Researches on laryngopharyngeal diseases focus on obstructive sleep apnea, laryngopharyngeal reflux, phonation disorders and functional reconstruction. The mechanisms and interventions of auditory development and degeneration, deafness, tinnitus, hyperacusis, vertigo, allergic rhinitis, chronic rhinosinusitis, olfactory disorder are the important research directions, and the interdisciplinary studies with information science, life omics technology, new imaging technology, biomaterials, biomechanics, simulation technology, biotherapy and intelligent technology have attracted more and more attention, and will be continuously funded. Further attention is required in the mechanism of tinnitus and central plasticity disorder, nerve injury, olfactory disorder, obstructive sleep apnea, phonation and swallowing disorders.

Oral and Craniofacial Sciences (H15)

The Discipline mainly supports researches on oral organs, craniomaxillofacial soft and hard tissues, temporomandibular joint, salivary glands and other oral craniomaxillofacial related non-neoplastic diseases. Supported areas include diseases related to the development of oral craniomaxillofacial tissues and organs; the defect restoration and regeneration of oral craniomaxillofacial tissues and organs; dental pulp and periapical tissue diseases; periodontal and oral mucosal diseases; saliva, salivary glands, oral and maxillofacial, nerves and jaw benign diseases; taste, oral and maxillofacial pain, occlusion and temporomandibular joint diseases; restoration of tooth defects or missing and correction of dentognathic deformities; biomechanics and biomaterials of oral craniomaxillofacial tissues; new technologies or methods of oral craniomaxillofacial scientific research.

In 2025, the majority of the proposals were concentrated in periodontal and oral mucosal diseases, the defect repair and regeneration of oral craniomaxillofacial tissues and organs, restoration of tooth defects or missing and correction of dentognathic deformities. Biomechanics and biomaterials of oral craniomaxillofacial tissues, and dental pulp and periapical tissue diseases also attracted attention. The number of applications in taste, oral and maxillofacial pain, occlusion and temporomandibular joint diseases; diseases related to the development of oral craniomaxillofacial tissues and organs; new technologies or methods of oralcraniomaxillofacial scientific research; saliva, salivary glands, oral and maxillofacial vessels and nerves and jaw benign diseases was relatively small. Research proposals concerning the pathogenesis and therapeutic strategies of periodontitis received more attention. Hot topics such as oral biomaterials, bone tissue regeneration, the relationship between oral diseases and general health, oral microecology, oral immunity, peri-implantitis, and oral digitization were also involved. The Discipline encourages long term and systematic basic research or applied basic research that already has a good foundation or new investigation direction. The interdisciplinary researches converging different directions of stomatology or with other related research fields will be encouraged in the future.

The Division does not support cancer research. Please refer to the general introduction of proposal guidance from Department of Health Science for details.

Division III of Health Sciences

The Division mainly supports basic research in the fields of nervous system, mental health and psychological health, and gerontology.

Nervous System (H09)

The disciplines mainly support researches on the etiology, pathogenesis,

diagnosis, treatment, and prevention of various non-neoplastic neurological diseases, including neurodevelopmental and metabolic abnormalities; disorders of consciousness and cognitive dysfunction; sensory disorders, pain and analgesia; dyskinetic diseases; anaesthesia and sedation; abnormalities of cerebrovascular structure, function and related disorders; neurological immune abnormalities and related diseases; diseases associated with neurological barrier and cerebrospinal fluid circulation disorders; inflammation, infection and related diseases of the nervous system; nerve injury, repair and regeneration; neuromuscular junction and muscle diseases, autonomic nerve diseases; neurodegeneration and associated disorders; abnormal neural electrical activities and paroxysmal diseases; protection and regulation of neurological function; new technologies and methods for neurological diseases.

In 2025, the proposals in the field of nervous system predominantly were focused on cerebrovascular diseases, cognitive dysfunction, injury and rehabilitation of nervous system, neurodegenerative disorders, pain and analgesia. In recent years, there has been a sustained increase in proposals on glia, neurocyte fate, exosomes, and microecology. However, the quality of research needed to be improved. The Discipline prioritizes innovative basic research on important scientific problems originated from clinical phenomena and clinical problems, new model and interdisciplinary studies using non-human primates, drosophila, zebrafish animal models and/or mankind organoid models, and the critical techniques and mechanisms of strengthening neural modulation and stem cell transplantation to promote neurological rehabilitation after injury. Investigations on cerebrovascular diseases around clinical concerns are encouraged, especially on key mechanisms, early intervention, functional reconstruction and precise diagnosis and treatment of neurovascular injury. Research still needs to be strengthened on the mechanisms and interventions of pain (especially on chronic pain, the transition from acute to chronic pain) and neuropsychiatric comorbidity of pain. It is encouraged to strengthen the basic research on mechanisms of general anesthesia and anesthesia-related complications. Investigations on related diseases of the nervous system in children are encouraged. In addition, interdisciplinary researches involving big data, artificial intelligence, brain-computer interface and tissue engineering are also encouraged.

Mental Health and Psychological Health (H10)

The Discipline mainly supports researches on biological rhythm disorders and associated diseases; sleep and sleep disorders; organic mental disorders; substance dependence and other addictive disorders; schizophrenia or other psychotic disorders; anxiety disorders, obsessive-compulsive disorders and stress-related disorders; mood disorders; psycho-behavioral disorders in children and adolescents; other behavioral and psychiatric disorders; psychological assessment and intervention of psycho-behavioral disorders; new technologies and methods for mental disorders and

psychological health.

In 2025, the proposals in the field of mental and psychological health were predominantly focused on mood disorders, schizophrenia, and anxiety or fear-related disorders, while less in related diseases of biological rhythm disorders or psychological assessment/intervention of mental disorders. The research foundation was relatively weak in the field of psycho-behavioral disorders in children and adolescents. It is encouraged to investigate the role of genetic, environmental, metabolism, immunity and other multiple factors in the occurrence and development of mental disorders, to identify potential etiologies and interventional targets, to establish biological markers that can monitor the occurrence, development and prognosis of mental disorders, to optimize psychological and behavioral examination techniques, in order to achieve early detection and diagnosis of mental disorders. The Discipline encourages multidisciplinary research using non-human primate models and organoids. It will be strengthened for researches on the comorbidity of mental disorders and its impact on physical health. The interdisciplinary researches involving big data and artificial intelligence, brain–computer interface, tissue engineering, and related fields are encouraged. The interdisciplinary collaboration of psychiatry and other disciplines are also encouraged, aiming to improve the diagnosis and treatment of mental and behavioral disorders through early intervention utilizing psychoactive substances and pharmacological agents, as well as non-pharmacological approaches such as neuromodulation in China.

Gerontology (H19)

The Discipline mainly supports researches on mechanisms and interventions of aging and aging-related diseases. The research mainly focuses on the aging mechanisms, biomarkers, aging clock, and intervention strategies at the population, individual, system, organ, tissue, cellular, subcellular, and molecular levels, aiming to elucidate the relationships between aging and aging-related diseases and various factors (e.g., genetics, epigenetics, metabolism, stress, immunity, inflammation, and microorganisms).

In 2025, the proposals in the field of gerontology were mainly focused on aging mechanisms and regulation, as well as aging and related diseases in the nervous system, circulation system, and motor system. There are relatively few projects related to aging and related diseases in other systems, aging biomarkers, aging evaluation and intervention, aging models, and new technologies and methods in gerontology research. It is encouraged to utilize new techniques, methods and models to carry out investigations into mechanisms of aging and aging-related diseases, and interdisciplinary researches, as well as investigations into aging interventions of drugs, cells, genes, and proactive health, thus providing theoretical basis for the early warning, prevention and treatment of aging related diseases.

The Division does not fund tumor related research, for which please refer to

the general introduction of the Department of Health Sciences. The field of gerontology does not fund applications for geriatric disorders in organs or systems unrelated to the aging mechanisms, for which please select other corresponding application codes.

Division IV of Health Sciences

The Division primarily funds basic research and clinical foundational research in the fields of the reproductive system/perinatal medicine/neonatology, medical immunology, and medical genetics.

Reproductive System/Perinatal Medicine/Neonatology (H04)

The main funding areas include: structural, functional, and developmental abnormalities of the reproductive system; injury and repair; inflammation and infection; reproductive endocrine disorders and related diseases; breast structure, function, and developmental abnormalities; sexual dysfunction; gametogenesis and fertilization; embryo implantation, maternal-fetal interaction, reproductive immunity and related diseases; placental structure, function, and developmental abnormalities; pregnancy-, delivery-, and puerperium-related disorders; fetal development and fetal-origin diseases; assisted reproductive technologies; neonatal-related diseases, and novel technologies/methods for research on reproductive system/perinatal medicine/neonatal diseases.

This discipline encourages research in the following areas: multidisciplinary innovative technologies and methods to study human germ cells, tissue/organ development, reproductive organ injury/remodeling/fertility preservation, sperm-egg recognition/fertilization mechanisms and abnormalities, early embryonic development and anomalies, regulatory mechanisms of pregnancy establishment/maintenance and related pathologies, impacts of gametes, maternal factors, and intra-/extra-uterine environments on pregnancy outcomes and offspring health, mechanisms and therapeutic strategies for major neonatal diseases. Applications of regenerative medicine, organoids, artificial intelligence, and other novel technologies in assisted reproduction and safety studies are encouraged. Studies that leverage China's clinical disease resources to identify and refine scientific problems from clinical practice, conduct original and transformative research, and establish new paradigms through interdisciplinary integration to create distinctive research frameworks in reproductive system/perinatal medicine/neonatology are encouraged.

In 2025, applications for reproductive system/perinatal medicine/neonatology projects were predominantly concentrated in the following areas: neonatal-related diseases, pregnancy-related disorders , female reproductive endocrine abnormalities

and related diseases, spermatogenesis abnormalities and male infertility, female reproductive system injury/repair, endometriosis and adenomyosis, and embryo implantation/maternal-fetal interaction/immunity-related diseases. Less attention was given to: puberty initiation, perimenopausal disorders, reproductive system inflammation/infection, breast structure/function/developmental abnormalities, impacts of prenatal nutrition/environment/genetics/diseases on pregnancy outcomes and offspring health, and labor initiation/abnormalities. The main problems in applications included: 1) Insufficient preliminary experiments, weak scientific hypotheses, or reliance on literature speculation/omics data without robust evidence chains; 2) Some proposals merely describe phenomena without in-depth mechanistic exploration; 3) Overlap with published work or previous grants; 4) Formulaic, prescriptive, or derivative research.

Research projects related to oncology are not funded under Reproductive System/Perinatal Medicine/Neonatology (H04).

Medical Immunology (H11)

This discipline funds research on the structure, function, and developmental abnormalities of the immune system, organs, tissues, and cells; immunological mechanisms of diseases; and strategies for immune diagnosis, therapy, and prevention.

This discipline encourages research in the following areas: immunological mechanisms of human diseases, fundamental questions such as immune cell development/differentiation/migration/homing/ senescence/death, discovery of novel immune cell subsets/functions, immune-related roles of non-immune cells, structural basis/activation mechanisms of immune recognition, dynamic balance between immune protection and injury, immune tolerance/evasion, formation/maintenance of immune memory, immunoepigenetic regulation immunometabolic regulation, microbiome-immune interactions, neuro-endocrine-immune crosstalk, reproductive immunology, trauma/stress and immunity, mechanisms of immunotherapies, novel therapeutic targets, vaccines/adjuvants; and studies using immunological theories and technologies to investigate the immunopathogenesis, immunological diagnosis, and intervention strategies for diseases across various systems, including infectious diseases, autoimmune diseases, tumors, allergic diseases, organ transplantation, and major chronic diseases. The discipline encourages researches on the interactions between the immune system and different tissues and organs, as well as the exploration of the effector mechanisms of immune senescence in the occurrence and progression of diseases. Interdisciplinary studies integrating immunology with synthetic biology, biomechanics, nanoscience, bioinformatics, or artificial intelligence, as well as imaging/multi-omics approaches to investigate immune homeostasis/response, are encouraged. The discipline encourages the crystallization of immunological scientific problems arising from preliminary studies and clinical

practice, and the exploration of immunological characteristics of major human diseases, and the innovative basic and translational research.

In 2025, applications were focused on autoimmune diseases, inflammation/infection/immunity, and immunotherapies. The main problems in applications included: 1) weak preliminary data and hypotheses, reliance on literature/omics without causal evidence; 2) lack of mechanistic depth; 3) overlap with published work or previous grants; 4) formulaic, prescriptive, or derivative research.

Medical Genetics (H23)

The discipline funds research on the pathogenesis, diagnosis, and prevention/treatment of human genetic and rare diseases, as well as novel technologies/methods in medical genetics.

This discipline encourages to leverage China's human genetic resources and clinical disease resources to identify disease-causing genes and genetic rules of hereditary diseases, reveal the structures and functions of gene-encoded proteins as well as the mechanisms underlying the occurrence and progression of diseases induced by genetic variations, investigate the epigenetic mechanisms of genetic diseases, and discover new genetic diseases and their genetic patterns. The full exploration and utilization of China's rare disease resources to conduct in-depth basic research on the etiology, pathological mechanisms, diagnostic methods, therapeutic targets, and prevention and intervention strategies of rare diseases; as well as the strengthening research on the etiology, pathogenesis, diagnosis and treatment of intractable undiagnosed diseases are also encouraged. Moreover, interdisciplinary research integrating emerging genetics, computational biology, artificial intelligence, multi-omics and other fields is advocated to carry out innovative studies on genetic diseases and rare diseases.

In 2025, main problems in applications included: 1) weak preliminary data, such as superficial clinical analyses without hypotheses, or with hypotheses based on insufficient evidence; 2) focus on pathogenic gene/variant screening without in-depth exploration of pathogenesis.

Division V of Health Sciences

The Division V mainly funds basic research in the fields of special medicine, forensic medicine, medical imaging/nuclear medicine, and biomedical engineering/regenerative medicine.

Medical Aspects of Specific Environments (H24)

This Discipline focuses on the unique demands for healthcare protection under special or extreme environments (aviation, aerospace, navigation, deep diving,

plateaus, polar regions, etc.), studies and solves various special medical problems, and provides theoretical and technical support for major national strategic needs. These studies aim to understand the physiological and pathological changes and related mechanisms on the molecular, cellular, tissue, organ, and organism levels, revealing the regulatory mechanism of the body's adaptive changes and pathological damage under special environments, as well as the critical factors of the body's tolerance to extreme environments. On this basis, it conducts research on risk prediction, injury assessment, and the development of novel protection technologies for body damage in extreme environments.

The Discipline mainly supports research on pathophysiological changes, mechanisms, and prevention methods of related diseases in special and/or extreme environments such as weightlessness, hyper gravity, radiation, weak magnetism, moondust, hypoxia, hyperbaric, hyperthermal, high humidity, cryogenic, and narrow confined space. It is encouraged to apply physics, chemistry, biology, and biomedical engineering to carry out in-depth and systematic research on specific medical problems under extreme environments in the above-mentioned fields, and to explore new theories, techniques and models for maintaining and enhancing body functions and vitality under special environments. Convergence of different directions within special medicine and interdisciplinary research involving other disciplines are also encouraged.

Forensic Medicine (H25)

This Discipline mainly funds research studies of using human body and other related forensic biological evidence as the research object, aiming at solving medical problems through technical and theoretical research in judicial practice. The funding areas mainly include the identification of the complicated cause of death, estimation of postmortem interval, mechanisms and forensic biomarkers of stress injury and death, analysis of injury mechanisms, and evaluation of craniocerebral trauma; mechanisms and assessment of personal injury caused by environmental pollution, toxicant (drug) abuse and dependence, toxicant metabolism and analysis, objective evaluation of the behavior capacity and the criminal responsibility of mentally disabled individuals; the individual identification and complex kinship analysis of challenging forensic samples, identification of tissue source and ethnic origin inference, multiomics identification of identical twins, identification of mixed stains and high-resolution characterization of human phenotypic traits; and mining of biomolecular identification functions and evaluation of their application value in forensic expertise, etc.. Applications of new theories, technologies and methods integrating multiple disciplines such as biology, physics, chemistry, law, psychology, and information science are encouraged, with a focus on applying innovative multi-omics frameworks and frontier techniques to systematically investigate key scientific problems in forensic identification. Interdisciplinary studies between forensic

medicine and other disciplines are strongly encouraged.

Medical Imaging/Nuclear Medicine (H27)

This Discipline mainly funds research studies on the application of medical imaging and other medical imaging related medical issues. The funding areas include diagnostic radiology (such as conventional X-ray imaging, computed tomography, and magnetic resonance imaging), ultrasound medicine, nuclear medicine, interventional medicine, etc. The Discipline encourages multidisciplinary research exploration in the fields of multimodal cross-scale imaging, molecular imaging, optical imaging, bioelectriomagnetic imaging, functional imaging, intelligent imaging, precise intervention, theranostics, and frontiers of the related translational medicine. The Discipline supports the development and application of new imaging technologies in the subjects of pathogenesis, early diagnosis, treatment planning and monitoring, treatment efficacy and prognosis evaluation, and drug screening of various diseases. The Discipline encourages basic research exploration, advanced pre-clinical application research, and translational application of diverse imaging techniques.

Biomedical Engineering/Regenerative Medicine (H28)

Biomedical engineering and regenerative medicine devote to use engineering principles and designing concepts to solve biology and medical issues for the purpose of improving the capability of diagnosis and treatment of diseases and the healthcare management. The Discipline includes cross-disciplinary biomedicine studies that integrate knowledge from electronic information, instrument science, material science, etc. The Discipline mainly funds basic research related to medical electronic engineering, regenerative medicine, and nanomedicine for the prevention and early warning of disease, test and diagnosis, minimally invasive/non-invasive treatment, and clinical rehabilitation. The projects are expected to target biomedical sensing, biomedical photonics, biomedical system modeling and simulation, medical information systems, artificial intelligence/digital healthcare, brain-computer interaction, treatment planning and navigation, medical robotics, medical nanostructured reinforced materials, pharmaceutical nanotechnology, gene/cell labeling and delivery systems, biomedical materials, tissue engineering and regenerative medicine, neural engineering and rehabilitation engineering, organoids and artificial organs, etc. The Discipline encourages the frontiers exploration of interdisciplinary research for the biomedical development of novel methods, systems, and mechanisms. Special emphasis is put on creative research guided by clinical problems in developing clinically translatable medical devices and core components, biomedical materials and nanomedicine.

The Division is committed to promoting a comprehensive and balanced development of special medicine, forensic medicine, medical imaging/nuclear

medicine, and biomedical engineering/regenerative medicine. The Division encourages the collaboration of interdisciplinary researchers to conduct interdisciplinary studies to promote the rapid development of research fields such as medical imaging and physical therapy, etc. The Division also encourages and supports theoretical research and hardware development in the interdisciplinary research fields such as biomedical sensing, signal detection, medical instruments, brain-computer interaction, and rehabilitation engineering, etc. The Division also emphasizes on clinically oriented imperative and translatable research studies to develop imaging probes, nanomedicine and biomedical materials. Special support would be given to young scholars who conduct research with high originality in the above-mentioned fields.

The medical imaging/nuclear medicine and biomedical engineering/ regenerative medicine Disciplines does not fund applications on radiation oncology or radiation protection which instead should be submitted to the corresponding codes under Division VII (H18) or Division VIII (H29) respectively. The Division does not fund applications related to pharmacology and drug administration which instead should be submitted to the corresponding codes under Division IX (H34, H35).

Division VI of Health Sciences

The Division mainly supports basic research in the fields of locomotor system, emergency and critical care medicine, trauma/burns/plastic surgery, rehabilitation medicine, medical virology and viral infection, medical pathogen and infection, and laboratory medicine.

Locomotor System (H06)

The Discipline mainly supports researches on basic scientific problems related to the structure, function, dysplasia, pathogenesis, diagnosis and treatment of bone, joint, muscle, tendon, ligament and related tissues, including metabolism, immunity and infection, injury and repair, transplantation and reconstruction, fatigue and recovery, degenerative disease, sports injury, deformity and correction, biological treatment, and other related scientific problems. Meanwhile, researches on the emerging scientific problems, such as medical biomaterials and artificial intelligence in musculoskeletal fields, are highly encouraged. In 2025, applications were mainly focused on the research fields in the degenerative diseases of bone, joint and soft tissue, and the musculoskeletal damage and repair. Osteoarthritis, Osteoporosis, intervertebral disc degeneration, fracture, and bone healing are hot research topics in the field of locomotor system. In contrast, there were a small number of applications in infection immunity, fatigue and recovery of bone, joint, muscle and soft tissue. The

Discipline encourages the innovative research based on clinical needs, the systematic and original research on major scientific problems in locomotor system, the interdisciplinary research using new techniques and methods, and the crosstalk research between locomotor system and other organs and tissues. Translational researches are encouraged.

Emergency and Critical Care Medicine (H16)

The Discipline mainly supports researches on new theories, technologies and methods in the field of emergency and critical care medicine, including sepsis, organ function failure and support, cardiac-pulmonary resuscitation, poisoning, and heatstroke. The pathogenesis, accurate diagnosis and treatment and scientific prevention in the field of emergency and critical care medicine are highly focused. Meanwhile, researches on pathophysiological changes, regulation mechanism of inflammatory immune response and metabolism, organ system interaction, systems biological changes, and applications of big data and artificial intelligence in this field are also encouraged.

Trauma/Burns/Plastic Surgery (H17)

The Discipline mainly supports researches on trauma, burns and chimatlon, wound healing and scar management, surface tissues and organs malformation, injury and repair, regeneration, transplantation and reconstruction of surface tissues and organs, craniomaxillo-facial deformity and its correction, new technologies and methods in the field of trauma/burns/plastic surgery. The pathophysiological process, accurate diagnosis and treatment and scientific prevention in the field of trauma/burns/plastic surgery related diseases are highly focused. Meanwhile, researches on the following aspects are also encouraged, including injury mechanisms, prevention and treatment of complications of trauma and burns, surface tissue repair and function reconstruction, surface tissue aging and wound healing, repair and reconstruction of body surface tissues and organs malformation and defect.

Rehabilitation Medicine (H20)

The Discipline mainly supports researches on rehabilitation mechanism of structural abnormalities, function impairments, activity and participation limitations caused by system damage/disease of neural, locomotor, circulatory, and respiratory systems, the researches on standardization and intellectualization of rehabilitation assessment, development and application of new evaluation methods of rehabilitation, and the researches on the basic scientific problems and related new strategies of physiotherapy, occupational therapy and speech therapy. The Discipline also encourages interdisciplinary research oriented towards rehabilitation needs and centered on functional improvement reconstruction.

Medical Virology and Viral Infection (H21)

The Discipline mainly supports researches into the pathogenic mechanisms underlying disease development induced by medical viruses and their infections, including respiratory viruses and infections, digestive tract viruses, picorna viruses and infections, hepatitis viruses and infections, retroviruses and infections, herpes viruses and infections, arboviruses and infections, hemorrhagic fever viruses and infections, human papilloma virus, rabies virus, parvovirus, prion and other viruses and infections, and the new technologies and new methods of medical virology and viral infection. The main focus is on etiological characteristics, genetic variation, mechanism of virus transmission, virus-host interaction, and mechanisms of pathogenesis. The Discipline encourages researches on highly pathogenic infectious diseases, highly transmissible viral infections and other emerging viral infections.

Medical Pathogens and Infection (H22)

The Discipline mainly supports research into the pathogenic mechanisms underlying disease development induced by non-viral pathogens and their infections, including pathogenic bacteria and infections, pathogens fungi and infections, parasites and infections, mycoplasma, Chlamydia, rickettsia, spirochetes and infections, infectious diseases and vectors, mutation and drug resistance of pathogens, hospital-acquired infections, sexually transmitted diseases, and the development of new technologies and methods for the study of nonviral medical pathogens and their infections. It is focused on biological characteristics, genetic variation and evolution of non-viral pathogens, mechanisms of persistence and drug resistance, and pathogen-host interaction and pathogenic mechanisms. The Discipline also encourages researches on rare infectious diseases, tropical diseases and opportunistic infectious diseases.

Laboratory Medicine (H26)

The Discipline mainly supports researches on biochemical test, microbiological analysis, cytological examination, hematological examination, immunological test, molecular biology test, and new technologies and methods in the field of laboratory medicine. It is focused on new theories, new strategies, new technologies and their clinical application researches for rapid, sensitive and accurate inspection, as well as the discovery, identification and verification of new biomarkers of diseases. The Discipline also encourages interdisciplinary researches that are closely aligned with the clinical needs, encompassing fields such as chemistry, physics, material science, biosensing and artificial intelligence.

The fields of Locomotor System (H06), Emergency and Critical Care Medicine (H16), and Trauma/Burns/Plastic Surgery (H17) do not support

oncology-related research, please select the appropriate secondary application code under Oncology (H18). The field of Rehabilitation Medicine (H20) does not support researches that are not directly related to the mechanism, assessment and treatment of rehabilitation, but are purely related to pathological mechanisms such as the occurrence and development of diseases, for related research, please select the corresponding application code of other systems. Rehabilitation engineering or Traditional Chinese Rehabilitation Medicine are also not supported under Rehabilitation Medicine (H20), please select the corresponding secondary application code under Biomedical Engineering/ Regenerative Medicine (H28) of the Division V of Health Sciences, and Traditional Chinese Medicine (H31) of the Division X of Health Sciences. The field of Laboratory Medicine (H26) does not support research purely on pathogenesis and regulation pathways of diseases, it also does not fund researches on clinical laboratory reference system and standardization. In addition, please refer to the general introduction of the Department of Health Sciences for any research involving genetic resources, ethics and biosafety.

Division VII of Health Sciences

The Division mainly funds oncology research.

Oncology (H18)

The Division mainly funds basic and applied basic research on the mechanisms of tumor initiation, progression, and outcomes, as well as tumor prevention, diagnosis, and treatment. For proposals on basic scientific problems including tumor etiology and pathogenesis, applicants should select the corresponding application codes for tumor etiology, tumorigenesis, tumor cell-fate, tumor genetics and evolution, tumor epigenetics, tumor immunology, tumor metabolism, tumor microenvironment, tumor recurrence and metastasis, tumor stem cells, and interdisciplinary oncology (H1801~H1811). For proposals on translational research and clinical scientific problems including cancer prevention, diagnosis, and treatment, applicants should choose the corresponding application codes for cancer prevention, cancer diagnosis, cancer chemotherapy, targeted cancer therapy, cancer radiotherapy, cancer physical therapy, cancer immunotherapy, cancer biotherapy, comprehensive cancer therapy, cancer therapy resistance, cancer rehabilitation, rare tumors and cancer with special characteristics, solid tumors in children, big data and artificial intelligence for oncology, clinical translational research in oncology, and novel technologies and methods in oncology (H1812~H1827).

Oncology research is one of the most active fields in medical science. In recent years, the number of proposals on tumorigenesis, tumor recurrence and metastasis,

targeted cancer therapy, and cancer therapy resistance have maintained at a high level, and the number of proposals on tumor immunology, tumor metabolism, tumor microenvironment, cancer immunotherapy, comprehensive cancer therapy, big data and artificial intelligence for oncology have been growing rapidly as frontier research areas.

As the understanding of cancer continues to deepen, there are some emerging features and trends in this field. First, the research paradigm of oncology has evolved from the micro to macro perspective, from the local to the systemic level, and from static to spatiotemporal dynamics. Oncology research has transitioned from focusing solely on tumor cells to encompassing the tumor microenvironment and the internal and external environment of the body, emphasizing a layered exploration of the interactions and influences between tumors and various organ systems within the body. Second, advances in oncology research increasingly depend on the close cooperation of basic research and clinical practice. On the one hand, clinical prevention, diagnosis and treatment remain to be innovated and improved, and translational and clinical research in oncology urgently depends on the progress and breakthrough of basic research in oncology. On the other hand, the diversity and complexity of tumor clinical features, as well as treatment responses, continue to generate new scientific problems for basic research. Only when basic research and clinical practices are closely integrated, can the advancement of oncology basic research and the translation of research outcomes to benefit clinical application be strongly promoted. Given the complexity of the mechanisms underlying tumorigenesis and progression, multidisciplinary integration becomes increasingly important in cancer research. Advanced techniques from other frontier fields have been applied to basic tumor research, clinical diagnosis and treatment. Thus, paradigm of oncology research switches from a model mainly based on medicine and life science toward a new one which is featured by the integrated and coordinated development of multiple disciplines. The new paradigm emphasizes the employment of interdisciplinary methods, including biochemistry, immunology, neurobiology, developmental biology, bioinformatics, as well as clinical medicine, preventive medicine, pharmacology, radiology, engineering and materials science, informatics, mathematics, physics, chemistry, etc., to promote the systematic advances in oncology research.

Applicants are encouraged to conduct original research and explore the temporal and spatial dynamics of tumors from multiple levels and dimensions, to integrate interdisciplinary technologies of scientific frontiers, so as to develop new insights into the mechanisms of tumor initiation, progression, and prognosis, driving a paradigm shift in cancer research. This will ultimately provide novel theoretical foundations for the effective prevention, diagnosis, and treatment of tumors. Applicants are encouraged to discover and refine important scientific problems from preliminary research and clinical practice, and conduct fundamental research aimed at

solving clinical problems. Applicants are also encouraged to leverage the clinical resources in China to carry out innovative studies based on clinical data or cohorts, particularly focusing on high-incidence, common, and rare tumors in the Chinese population. The establishment of new technologies and methodologies in the field of oncology research is also encouraged. Furthermore, research focusing on new strategies for tumor prevention, diagnosis, treatment, rehabilitation, and survivorship care is promoted, aiming to improve the survival rate and quality of life of cancer patients.

The Division does not support tumor epidemiological research, which should be submitted to Division VIII (H30). Proposals on hematological malignancies such as leukemia and lymphoma should be submitted to Division I (H08).

In 2026, the ongoing pilot reform will continue in the field of Oncology. Specific requirements can be found in Section 6: Pilot Requirements for General Program in the Field of Oncology (H18) of the 'Guidelines', located under the General Introdcution of the Department of Health Sciences.

Division VIII of Health Sciences

The Division mainly supports the basic research in fields of dermatology, radiation medicine, and preventive medicine.

Dermatology (H12)

The funding scope of the Discipline is basic research on structural, functional, and developmental abnormalities of skin and its appendages, as well as immune-mediated, infectious, hereditary, metabolic, traumatic, and disfiguring skin diseases. Statistics on recent years' proposals and grants show that the level of basic research on skin-related diseases has improved rapidly, especially on skin and its appendages. The basic research on epidemiological, diagnostic and therapeutic techniques and methods, as well as the relationships between the skin and systemic diseases, should be strengthened. Interdisciplinary research involving life science, physics, chemistry, computer science, and other disciplines should be encouraged.

The Discipline (H12) does not support oncology-related research, which should be submitted to Division VII (H18).

Radiation Medicine (H29)

The funding scope of the Discipline is basic research on radiation injury and intervention, radiation toxicology and radio pathology, radiological hygiene and protection. In recent years, the number of projects application and the quality of funded projects indicate that great progress has been made in scientific research and

some studies have reached the internationally advanced levels, although the number of the researchers engaged in Radiation Medicine is small. The funded projects were mainly focus on radiological injury and intervention, basic research on early diagnosis and prevention of radiation damage should be further strengthened. The Discipline emphasizes the biological effects and bystander effects of low-dose radiation, encourages the fundamental research on medical radiobiology and the prevention and treatment of tissue and organ damage, and promotes the development of a more comprehensive and well-established disciplinary system.

The Discipline (H29) does not support cancer radiotherapy, which should be submitted to Division VII (H18); while those on medical imaging and radiological diagnosis should be submitted to Division V (H27).

Preventive Medicine (H30)

The funding scope of the Discipline is basic research on environmental hygiene, occupational health and diseases, food hygiene, human nutrition, children and adolescent health, maternal and child health care, hygienic toxicology, hygienic analytical chemistry, infectious disease epidemiology, epidemiology of noncommunicable diseases, epidemiological methods and health statistics, behavior/psychological factors and health, and endemiology. In recent years, the number of projects application and the quality of funded projects indicate that the level of basic research related to preventive medicine keeps on increasing. Expanding disciplinary fields and research directions is an inevitable requirement for the development of preventive medicine. Interdisciplinary and integrated research needs to be further strengthened, and the combination of laboratory mechanism research with population research is encouraged to adapt to new health needs.

Food Hygiene (H3004) does not fund the study on food processing, which should be submitted to the Department of Life Sciences (C20).

Maternal and Child Health Care (H3005) and Child and Adolescent Health (H3006) do not fund projects related to obstetric/gynecological diseases or pediatric diseases, which should be sumitted to Division IV (H04). Proposals on pediatric diseases should be submitted using appropriate application codes based on the disease systems.

Hygienic Toxicology (H3007) does not fund drug toxicology projects. Relevant projects should apply under codes in Division IX (H35).

Hygienic Analytical Chemistry (H3008) does not fund clinical testing projects (apply under Division VI, H26) or drug analysis/testing projects (apply under Division IX, H34).

Epidemiology (H3009, H3010) does not fund non-population-based pure laboratory research projects. Non-Communicable Disease Epidemiology (H3010) excludes health economics, health policy, hospital management, and related administrative projects (apply under codes in the Department of

Management Sciences). Communicable Disease Epidemiology (H3009) excludes non-population-based pure pathogen studies or research on disease pathogenesis, treatment, and prognosis (apply under other relevant codes in the Department of Health Sciences).

Behavioral/Psychological Factors and Health (H3012) does not fund non-population-based clinical/experimental studies on mental/psychological disorders (apply under corresponding codes in relevant departments).

Endemiology (H3013) does not fund research on diseases without geographical characteristics, which should be submitted using the application code of the corresponding disease system.

Division IX of Health Sciences

The Division mainly supports basic researches in the discipline of materia medica and pharmacology targeting human diseases.

Materia Medica (H34)

The funding areas of Materia Medica include synthetic medicinal chemistry, the medicinal chemistry of natural products, microbial drugs, biotechnological drugs, marine drugs, special drugs and orphan drugs, drug design and drug informatics, pharmaceutics, pharmaceutical materials, pharmaceutical analysis, drug resources, new technologies and methods in pharmaceutical research, etc..

The Discipline puts emphasis on interdisciplinary researches, basic researches of innovative drugs and druggability. Funding in synthetic medicinal chemistry (H3401) focuses on the researches of active molecules based on new targets, new mechanisms, new technologies or new structures. Funding in medicinal chemistry of natural products (H3402) and microbial drugs (H3403) mainly supports innovative theories, technologies and approaches for drug discovery from plants, animals and microorganisms. Funding in biotechnological drugs (H3404) mainly supports researches on innovative biotechnologies or approaches to obtain biotechnological drugs; meanwhile, exploratory researches on new types of expression systems and large scale culture techniques will also be supported. Funding in marine drugs (H3405) mainly supports the discovery of marine bioactive substances and researches on their druggability. Funding in special drugs and orphan drugs (H3406) mainly supports researches on the discovery of active substances and their druggability for diseases related to special environments (e.g., aviation, aerospace, deep-sea, radiation, military) or rare diseases, as well as basic researches on the discovery of radionuclide-based therapeutic drugs. Funding in drug design and informatics (H3407) mainly supports researches on novel theories, methodologies, or software systems for target discovery, drug design and druggability prediction, along with their

applications in drug discovery. It highly encourages the application of advanced computational approaches, such as artificial intelligence and quantum computing, to the design and development of innovative drugs. Funding in pharmaceutics (H3408) mainly supports researches in physical pharmacy, biopharmaceutics, molecular pharmaceutics, industrial pharmaceutics, and related fields. Researches on nano-based drug delivery systems should focus on their druggability and clinical applications. It also encourages the exploration of administration route for different diseases and the study of new theories and methods. Funding in pharmaceutical materials (H3409) mainly supports basic researches on the establishment, disposition and safety evaluation of new pharmaceutical excipient. Funding in pharmaceutical analysis (H3410) mainly supports researches on novel analytical technologies and methodologies for investigating active pharmaceutical ingredients (APIs), metabolites, drug impurities, excipients, drug targets, and their interactions, with a focus on addressing analytical challenges in pharmaceutical and pharmacological studies. Funding in drug resources (H3411) mainly supports researches on key scientific problems associated with the discovery, exploration, sustainable utilization, and other critical scientific problems in pharmaceutical resource development. New technologies and methods in pharmaceutical research (H3412) mainly supports researches on establishment of innovative technologies and methodologies to solve key pharmaceutical challenges.

Pharmacology (H35)

The funding scope of Pharmacology covers researches on new mechanisms of action and the discovery of new drug targets for therapeutic drugs, drug candidates, and bioactive substances. This encompasses studies on the mechanisms of drug action across diverse diseases, drug metabolism and pharmacokinetics, clinical pharmacology, drug toxicology, and innovative technologies and methodologies in pharmacological research, etc.

The Discipline emphasizes the application of multidisciplinary technologies and methods to systematically reveal the action patterns of drugs on the body and the disposal patterns of the body towards drugs, elucidate their key mechanisms and action targets, and promote theoretical innovation in pharmacological research. The funding scope of the sub-disciplines of pharmacology (H3501-H3509) mainly support researches on novel action characteristics and patterns of drugs or bioactive substances, the elucidation of their action mechanisms, target discovery and validation. These sub-disciplines encourage basic researches on new drug intervention mechanisms and treatment protocols targeting major clinical diseases, newly emerging infectious diseases, and rare diseases, as well as studies on new clinical combination therapy schemes and strategies to overcome drug resistance based on clinical needs. Drug metabolism and pharmacokinetics (H3510) mainly supports researches encompassing drug in vivo processes, drug-target binding

kinetics, and the interactive regulation between drugs and human metabolic molecules or microbial metabolic processing. Clinical pharmacology (H3511) mainly supports researches on drug-human interaction patterns and individualized medication, covering clinical medication challenges, rational drug use in special populations, new mechanisms and applications of marketed drugs, and biomarker research related to drug efficacy or safety. Drug toxicology (H3512) mainly supports researches on the mechanisms of drug toxicity and their metabolites, as well as intervention strategies for drug-induced toxicity. It also encompasses exploratory studies on new models for drug safety evaluation and systems toxicology. New technologies and methods for pharmacological research (H3513) mainly supports researches on basic research of novel technologies and methods to address developmental bottlenecks in pharmacology.

The Division encourages applicants to conduct high-level and high-quality basic research of innovative drugs; it also encourages collaboration with clinicians to conduct in-depth mechanistic investigations and basic research on novel drugs that address safety and efficacy issues identified in clinical practice. Peer review focuses on theoretical, methodological, and technological breakthroughs, along with innovative drug development potential. It also emphasizes the novelty and uniqueness of structures, mechanisms and targets of drug, prospect of clinical application and social value.

For innovative basic research with a great prospect for new drug development, applicants should provide the entire chemical structures or backbone of compounds, attend to the protection of intellectual property and carefully handle the relationships between application and confidentiality. If key technical details (including chemical structures) cannot be disclosed in the application due to confidentiality constraints, applicants should send these details directly to Division IX via confidential letters and explain them in proposals. The applicant should seek the consent of the supervisor and attach the authorization letter signed by the supervisor to the proposal, if the research proposal is closely related to the supervisor's research work or is the follow-up work of the appliacnt’s postgraduate or postdoctoral research.

Division X of Health Sciences

Division X aims to inherit the essence of traditional Chinese medicine (TCM), innovate the theory of TCM, highlight the original advantages and characteristics of TCM, and promote the high-quality development of TCM. The Division funds basic research programs in the fields of TCM, Chinese materia medica (CMM) and integrative medicine (IM).

Traditional Chinese Medicine (H31)

The Discipline mainly supports: ① basic theory of TCM: zang-fu organs, qi, blood and body fluids, constitution, etiology and pathogenesis, the basis of syndromes, treatment principles and methods, TCM prescriptions, TCM diagnostics; ② the clinical basis of TCM: internal medicine of TCM, surgery of TCM, orthopedics of TCM, gynecology of TCM, pediatrics of TCM, ophthalmology of TCM, otolaryngology of TCM, stomatology of TCM, oncology of TCM, geriatrics of TCM, health preservation and rehabilitation of TCM; ③ acupuncture and tuina: Acupoints and Meridians, acupuncture and moxibustion of TCM, tuina massage; ④ethnic medicine; ⑤ New technologies and methods in TCM research.

Chinese Materia Medica (H32)

The Discipline mainly supports: ① CMM: resources, identification, substances in pharmacodynamics, quality evaluation, processing, pharmaceutics and theories in the properties of Chinese herbs; ② pharmacology of CMM: neuropsychopharmacology, cardiovascular and cerebrovascular pharmacology, antitumor pharmacology, endocrine and metabolic pharmacology, anti-inflammatory and immunopharmacology, anti-viral and anti-infective pharmacology, digestive and respiratory pharmacology, urinary and reproductive pharmacology, metabolism and pharmacokinetics, toxicology of CMM; ③ ethnopharmacy; ④ the novel techniques and methods in CMM research.

Integrative Medicine (H33)

The Discipline mainly supports: ① basic theory of integrated traditional Chinese and Western medicine; ② the clinical basis of integrated traditional Chinese and Western medicine; ③ new technologies and methods in research on the integrated traditional Chinese and Western medicine.

In recent years, the funded projects in the fields of TCM, CMM and IM have exhibited the following characteristics: ① Based on the clinical efficacy, the funded projects explored the overall law of human life activities and the integrated and regulated role of TCM with the guidance of the theory of TCM, combination of the macroscopic and microscopic; ② Modern scientific theories, methods and technologies are applied in the frontier fields of medical science and other sciences to constantly innovate research ideas and methods; the basic research of TCM is organically combined with the theories and research ideas of related emerging disciplines , and to promote the development of TCM; ③ Attention is paid to the basic clinical research of TCM and ethnic medicine in the treatment of major and complicated diseases such as functional, metabolic, senile, immune and infectious diseases, etc., to explore mechanisms responsible for the clinical efficacy.

Under the guidance of the basic theories of TCM, based on the key scientific

problems of TCM, the Division supports in-depth research on its modern scientific connotation, promotes new scientific discovery, and emphasizes its standardized and rational use of modern science and technology and methods. All the above is for promoting inheritance and innovation of the essence of the basic theory of TCM and clinical practice. The research proposals will mainly be supported in the below areas: the theory of Zangxiang (visceral organ function), the theory of disease prevention and the biological basis of syndromes, animal models for the combination of diseases and syndromes, the law of compatibility of classical prescriptions and the material basis of drug effects, and the combination of macroscopic and microscopic differentiation of syndrome, the basis of the dominant diseases and the crucial links for which TCM treatment is indeed effective, the methodology of efficacy evaluation in line with the clinical characteristics of TCM, the specificity of acupoints, the rules of acupoint compatibility and acupuncture manipulations, the basis for the prevention and treatment of diseases by acupuncture, massage, and rehabilitation; the methodological research of data mining based on ancient documents and big clinical data; the basic theory, diagnosis and treatment law, and mechanism of action of integrated traditional Chinese and western medicine in the prevention and treatment of major, refractory, rare diseases and emerging infectious diseases, the basic theory and scientific connotation of combined use of Chinese and western medicine; germplasm selection, ecological planting, wild tending and bionic cultivation of traditional Chinese herb and substitutes for rare and endangered Chinese herbs, principles and methods of Chinese medicine identification, Chinese medicine quality evaluation methods and their principles, Chinese medicine processing principles, Chinese medicine preparation principles and new drug delivery systems that reflect the overall efficacy, medicinal properties of traditional Chinese herbs, efficacy substances of traditional Chinese herbs, internal process of traditional Chinese herb and the regulation mechanism responsible for its TCM effects, pharmacological action and mechanism of traditional Chinese herb, correlation between toxicity, toxicology and toxicity-effect of traditional Chinese herb; ethnic medicine; innovative technologies and methods of Chinese medicine research etc.

The Division is dedicated to supporting basic research that reflects the clinical advantages and explains the modern scientific connotation of original theories and unique concepts of TCM. The main tasks and responsibilities of the Division include: encouraging continuous and in-depth research on mechanisms by which acupuncture and moxibustion exhibited definite clinical effects on some diseases, advocating innovative research on the compound preparations such as classic prescriptions and empirical prescriptions with precise clinical efficacy using novel technologies and new methods to analyze their pharmacodynamic material basis, compatibility principle and mechanism of action. encouraging interdisciplinary integration, integrates multiple cutting-edge technologies and methods, and explains the pharmacodynamic material basis and scientific connotation of Chinese medicine,

proposing the exploration of diagnosis and treatment scheme of integrated Chinese and Western medicine for the major and refractory diseases with clinical practice advantages, and conduct a comprehensive and systematic elucidation of their mechanisms.

The Division will not support the proposals that have no content related to research on Chinese medicine. For pure modern medical research proposals, please submit to the related medical discipline (H01~H30). Proposals which focus on natural medicine research only, should be submitted to Division IX (H34, H35). The research on Chinese herb resources should reflect the unique attributes of traditional Chinese medicinal materials, such as the yield and quality-related characteristics of the traditional Chinese herbs during production process; conduct the research on the protection, production and new resources of traditional Chinese herb. The Division does not support research on the resources of non-medicinal plant, animal and mineral. The research on the pharmacodynamic substances and pharmacology of Chinese herbs should elucidate the correlation between the efficacy of Chinese herbs and their substances, as well as the value to the development of Chinese herbology discipline. The new dosage forms in TCM pharmacy involving the loading of clinically effective substances should fully reflect the guidance of TCM theory and be guided by solving prominent problems in the clinical application of TCM; Ethnopharmacological research should indicate its relevance to the medical theories of the minority or traditional application principles. The Division will not fund the TCM research without natural science attributes. The proposals regarding Chinese medicine formulas or acupoint prescriptions should introduce the composition or the relevant acupoints. Regarding the prescription confidentiality in some proposals, applicants will be required to mail the prescriptions directly to the NSFC, and explain the reasons in the proposal. Applications that do not meet the above requirements will not be funded.

Department of Interdisciplinary Sciences

Interdisciplinary sciences refer to the group of disciplines that stem from deep interactions and inter-penetrations of multiple academic disciplines. It reconstructs trans-disciplinary structures of knowledge, logic of thoughts, frames of theories, and systems of methodologies. Distinguished from the original academic disciplines, interdisciplinary sciences are featured with comprehensiveness, extensiveness, uniqueness, and novelty. It is the outcome of evolutionary process of science, from the initial stage of general knowledge about nature to the intermediate stage of highly classified disciplines, and to the stage of recombination of knowledge. It also

represents an additional novel stereotype for human beings to explore the nature. Interdisciplinary science aims to generate and provide revolutionary viewpoints, tools, and paradigms to search for solutions to important and sophisticated issues that human beings are facing.

With a focus on major and complex fundamental scientific problems, and characterized by interdisciplinary research, the Department of Interdisciplinary Sciences (DIS) organizes and deploys research activities on interdisciplinary sciences to meet important national strategic needs and to push the frontier of science forwards. The responsibilityiees of DIS include: 1. to develop a complete and sound system to support interdisciplinary research in all disciplines; 2. to promote collaborations of multiple disciplines to solve complex issues of science and technology; 3. to facilitate the development of new academic disciplines and scientific breakthroughs; 4. to explore and develop revolutionary paradigms for scientific research; 5. to cultivate scholars of interdisciplinary scientific talent and to create a culture of interdisciplinary research.

Funding for Various Programs during the Concentrated Reception Period of DIS in 2025

Unit: 10,000 yuan

Project Type	No. of applications	No. of projects funded	Average funding amount (10,000 yuan/project)	Total funding amount	Success rate (%)
Science Fund for Excellent Research Group (A)	13	2	6 000	12 000	15.38
Science Fund for Excellent Research Group (B)	14	1	6 000	6 000	7.14
Science Fund for Creative Research Group (A)	53	4	1 000	4 000	7.55
Science Fund for Creative Research Group (B)	78	2	1 000	2 000	2.56
Young Scientists Fund (A)	662	37	400	14 800	5.59
Young Scientists Fund (B)	616	42	200	8 400	6.82
In total	**1 436**	**88**	—	**47 200**	—

Notes:

I. Types of projects accepted by DIS in 2026

Science Fund for Excellent Research Group, Science Fund for Creative Research Group, Young Scientists Fund (A, B, C), the Special Fund for Research on National Major Research Instruments (recommended by departments), the Special Fund for Research on National Major Research Instruments (free application), Major Program, special funds, Joint Fund for Cultural Heritage, and Major Research Plans, etc.

II. Application Requirements

Besides the application requirements specified in this Guide, DIS also requires:

(1) The characteristic of interdisciplinary science must be obvious and necessary in the proposal;

(2) The applicant has at least two different majors across various first-level-disciplines during one's undergraduate, master, and/or doctoral periods, or has done interdisciplinary scientific research.

III. Application Materials

In addition to meeting the requirements of the application materials in this Guide, the application materials submitted to DIS shall also meet the following requirements:

(1) DIS Special application forms shall be used for some programs in DIS. Please refer to the instructions of each type of program for specific requirements.

(2) When applying for DIS Programs, the applicant shall first select the acceptance code before selecting the application code.

i. There are five acceptance codes at DIS: T01 (Physical Sciences), T02 (Intelligence Sciences and Smart Manufacturing), T03 (Life and Health Sciences), T04 (Convergence Sciences), and T05 (Scientific Instruments). The applicant shall select one of the acceptance codes according to the applied research field.

ii. There is no separate set of application codes for DIS. The application codes can be found in the section "NSFC Application Codes" in this Guide. **Please refer to the instructions of each type of program for specific requirements with special attention to:**

- When selecting the application codes, try to select the secondary application code (4 digits).
- Fill in the "Research direction" and "Key words" accurately when completing the basic information section of application.

IV. Additional Notes

1. When filling in the application form, please read the instructions and outlines of the programs carefully.

2. Science Fund for Excellent Research Group and Major Program may be applied by one applicant alone or two applicants together:

(1) For joint application, the two applicants are named as the first applicant and the second applicant.

(2) If these two applicants are not in the same institutions, the institution of the second applicant shall be regarded as the cooperative research institution.

(3) In the case of joint application, the online filling and submission of the application form in the information system shall be done by the first applicant and his/her institution.

3. Requirements for research ethics and technological security (such as biosecurity, information security, etc.):

(1) For projects involving research ethics, the applicant shall provide

certification of ethical review from the ethics committee of their affiliated institution or superior authority (scanned copies should be uploaded as supporting documents with the application). Projects failing to provide the required certification will not be accepted or funded.

(2) For projects involving technological security (such as biosecurity, information security), the applicant shall adhere to relevant national laws and regulations and comply with related provisions strictly. They should provide a commitment to technological security from their affiliated institutions (scanned copies should be uploaded as supporting documents with the application). Projects failing to provide the required commitment will not be accepted or funded.

(3) Human life science and medical research shall comply with the relevant requirements of the "Ethical Review Measures for Human Life Science and Medical Research".

(4) After the approval of these projects, applicants shall resubmit certificate of ethical review or/and commitment to technological security in case of any change to the research plan during implementation, as per the above requirements.

Fields of physical sciences (T01)

The funding scope includes interdisciplinary researches based on fundamental natural sciences such as mathematics, physics, chemistry, etc. It aims to promote research at the global frontier of science and meet important national needs by solving fundamental scientific problems associated with information science, life science, material science, energy and environmental science, and also to achieve significant breakthrough or to develop new academic discipline and research fields.

Fields of intelligence sciences and smart manufacturing (T02)

The funding scope includes interdisciplinary researches based on advanced materials, contemporary engineering, information technologies, etc. It aims to meet important national and economical needs and promote research at the global frontier of science and technology by solving problems appeared during the development of Chinese society, such as the key scientific and technological problems of engineering, control, and advanced manufacturing, etc.

Fields of life and health sciences (T03)

The funding scope includes interdisciplinary researches associated with science, engineering, and medical sciences in the field of life and health. It aims to develop advanced technology and methodology to clarify the regulatory mechanism in

sophisticated life system from the aspect of multi-layer and trans-scale and to unveil the scientific law and principles governing biological phenomena. The Division works to explore novel mode of research in life science to face major challenges of human health and disease prevention and control.

Fields of convergence sciences (T04)

The funding scope includes interdisciplinary researches based on theory and methodologies of natural science, convergence of knowledge, and tools from multiple disciplines. Focusing on the complexity and evolutionary patterns of the human-nature-society coupled system, it addresses major scientific challenges in sustainable human development, including earth system processes and global change response, resource exploitation and ecological conservation, human behavior and civilization evolution, as well as risk, disasters, and social governance.

Fields of scientific instruments (T05)

The funding scope includes interdisciplinary researches addressing global scientific and technological frontiers and major national strategic demands, with a focus on common key technologies and general-purpose scientific research instruments, to support young scholars in developing original innovative scientific instruments (including instruments, key components, software, etc.) capable of solving major complex scientific problems. It aims to achieve multidimensional reconstruction, spanning from underlying principles and materials to processes and algorithms, to cultivate a cohort of professionals with advanced scientific instrument development capabilities, thereby enhancing China's core competitiveness in the global scientific instrument landscape.

General Program

General Program supports scientists engaged in basic research on self-selected topics within the funding scope of NSFC to conduct innovative research, in order to promote a balanced, coordinated and sustained development of all disciplines.

An applicant must meet the following qualifications:

(1) Have the experience of undertaking basic research projects or conducting other basic research;

(2) Hold a senior professional position or a doctoral degree, or be recommended by two professionals with senior academic positions in the same research field.

Full-time graduate students are not eligible to apply for the General Program, but on-the-job graduate students may apply through their host institutions with the consent of their supervisors.

Applicants should be familiar with the current situation of relevant research in China and the world, be capable of leading a research group to conduct innovative research. Applicants should prepare proposals in accordance with the specified proposal outline. The proposed research should have significant scientific merit and research value, with sufficient justification, novel academic ideas, and research contents that are specific, feasible, and well-planned. The number of collaborative institutions for General Program projects should not exceed two, and the project duration is 4 years.

In 2025, a total of 23,034 General Program projects were funded, with a direct cost of 11.37566 billion yuan. The average direct cost funding intensity was 493,900 yuan per project.

In 2026, the average funding intensity of direct costs for the General Program is expected to be roughly the same as that in 2025. Please refer to the "Funding Areas and Announcements by Scientific Departments" section for detailed funding scope, recent funding situation, and other relevant requirements. Applicants are advised to prepare their research proposals in line with the funding intensity and instructions by the respective scientific departments.

Young Scientists Fund (C)

The Young Scientists Fund (C) supports early-career researchers to freely select their research topics within the funding scope of NSFC to conduct basic research. It places special emphasis on cultivating the ability of early-career researchers to independently lead research projects and conduct innovative research, stimulating their innovative thinking, and nurturing next-generation researchers for basic research.

An applicant for the Young Scientists Fund (C) must meet the following qualifications:

(1) Have the experience of conducting basic research;

(2) Hold a senior professional position or a doctoral degree, or be recommended by two scientific and technical personnel with senior professional positions in the same research field;

(3) By January 1 of the application year, male applicants must be under the age of 35 [born on or after January 1, 1991], and female applicants must be under the age of 40 [born on or after January 1, 1986].

Full-time graduate students are not eligible to apply for the Young Scientists Fund (C). However, on-the-job graduate students who meet the above basic conditions may apply through their host institutions with the consent of their supervisors.

In 2026, the Young Scientists Fund (C) continues to be open to scientific and technical personnel from host institutions in Hong Kong and Macao, who will follow the same funding model and evaluation standards as applicants from Mainland host institutions. In addition to meeting the above basic conditions, applicants from Hong Kong and Macao must also meet the following qualifications:

(1) Abide by the Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China, the Basic Law of the Macao Special Administrative Region of the People's Republic of China, and the relevant management regulations of the National Natural Science Fund;

(2) Be formally employed by a host institution in Hong Kong or Macao.

On-site postdoctoral researchers or those currently studying for graduate degrees are not eligible to apply for the Young Scientists Fund (C) through host institutions in Hong Kong or Macao.

Special reminders to applicants:

(1) Those who are currently serving as the Principal Investigator of an ongoing

Young Scientists Fund (C) project, or who have previously undertaken one (including small exploratory projects with a 1-year duration, as well as terminated or withdrawn projects), are not eligible to apply again.

(2) The Young Scientists Fund (C) focuses on evaluating the applicant's own innovative potential. Applicants should prepare their proposals in accordance with the specific proposal writing guide for the Young Scientists Fund (C).

(3) The project duration for the Young Scientists Fund (C) is 3 years.

(4) In 2026, the Young Scientists Fund (C) will implement a lump-sum funding system. The funding amount for each project is 300,000 yuan.

In 2025, a total of 24,051 Young Scientists Fund (C) projects were funded, with a total funding amount of 7,215.30 million yuan.

Fund for Less Developed Regions

The Fund for Less Developed Regions supports scientific and technical personnel from selected host institutions in specific regions of China to conduct innovative scientific research within the funding scope of NSFC, aiming to cultivate and support scientific and technical personnel in these regions, stabilize and gather outstanding talents, and serve the construction of the regional innovation system as well as economic and social development.

An applicant for the Fund for Less Developed Regions must meet the following qualifications:

(1) Have the experience of undertaking basic research projects or conducting other basic research;

(2) Hold a senior professional position (title) or a doctoral degree, or be recommended by two scientific and technical personnel with senior professional positions (titles) in the same research field.

Full-time scientific and technical personnel who meet the above conditions and are affiliated with host institutions in the following regions are eligible to apply: Inner Mongolia Autonomous Region, Ningxia Hui Autonomous Region, Qinghai Province, Xinjiang Uygur Autonomous Region, Xinjiang Production and Construction Corps, Tibet Autonomous Region, Guangxi Zhuang Autonomous Region, Hainan Province, Guizhou Province, Jiangxi Province, Yunnan Province, Gansu Province, Yanbian Korean Autonomous Prefecture of Jilin Province, Enshi Tujia and Miao Autonomous Prefecture of Hubei Province, Xiangxi Tujia and Miao Autonomous Prefecture of Hunan Province, Liangshan Yi Autonomous Prefecture of Sichuan Province, Ganzi Tibetan Autonomous Prefecture of Sichuan Province, Aba Tibetan and Qiang Autonomous Prefecture of Sichuan Province, Yan'an City and Yulin City of Shaanxi Province, Longyan City, Sanming City, Nanping City, and Ningde City of Fujian Province. Additionally, scientific and technical personnel dispatched by the Organization Department of the Central Committee of the CPC for aid work in Xinjiang or Tibet for a duration of three (inclusive) years or more, in accordance with national policies, are also eligible to apply as applicants for the Fund for Less Developed Regions. If the host institution receiving the aid personnel in Xinjiang or Tibet is not a registered host institution with NSFC, they are permitted to apply through eligible host institutions within the aided autonomous region that can apply for the Fund for Less Developed Regions. Aid personnel to Xinjiang or Tibet should

provide supporting documents issued by the organization department or human resources department of their host institution certifying their status, and upload the scanned copy of these documents as an attachment to the application.

Researchers from central government-affiliated or People's Liberation Army-affiliated host institutions located within the above regions, as well as scientific and technical personnel from outside these regions, and non-full-time personnel of host institutions within the Fund's regional scope, are not eligible to apply as applicants for the Fund for Less Developed Regions, but may participate as key collaborators. Full-time graduate students are not eligible to apply as applicants for the Fund for Less Developed Regions. However, on-the-job graduate students may apply through their employing institution with the consent of their supervisor. Individuals without a work unit or whose employer is not a registered host institution with NSFC are not eligible to apply as applicants for the Fund for Less Developed Regions.

To provide balanced support for scientific and technical personnel within the funding regions of the Fund for Less Developed Regions, and to guide and encourage them to compete for General Program and other project types, thereby enhancing the level of basic research in these regions, effective from 2016, scientific and technical personnel who have received a cumulative total of 3 or more Fund for Less Developed Regions project grants as Project Leader are not eligible to apply as applicants for the Fund for Less Developed Regions. Fund for Less Developed Regions projects approved in 2015 and earlier (including 2015) are not counted towards this cumulative total.

Applicants for the Fund for Less Developed Regions should prepare their proposals in accordance with the specific proposal writing guide for the Fund for Less Developed Regions. The number of collaborating institutions for a Fund for Less Developed Regions project must not exceed 2, and the project duration is 4 years.

In 2025, a total of 3,541 Fund for Less Developed Regions projects were funded, with a total direct cost of 1,117.30 million yuan. The average direct cost funding intensity was 315,500 yuan per project.

The average funding intensity of direct costs for the Fund for Less Developed Regions in 2026 is expected to be roughly the same as that in 2025. Applicants are advised to refer to the direct cost funding intensity of the relevant scientific departments and prepare their budget requests realistically.

Key Program

The Key Program supports scientific and technical personnel engaged in basic research to carry out in-depth, systematic and innovative research on well-founded research directions or disciplinary growth points, to promote disciplinary development, and to facilitate breakthroughs in several important fields or scientific frontiers.

Key Program projects should reflect the principles of "limited objectives, limited scale, and prominent priorities," attach importance to interdisciplinary integration and permeation, make effective use of existing important scientific research bases at the national and departmental levels, and actively carry out substantive international cooperation and exchanges.

An applicant for the Key Program must meet the following qualifications:

(1) Have experience in undertaking basic research projects;

(2) Hold a senior professional position (title).

Postdoctoral researchers, individuals currently studying for a graduate degree, or those who do not have a work unit or whose employer is not a host institution registered with NSFC are not eligible to apply as applicants.

The total number of Key Program projects for which an individual serves as the applicant and as the Principal Investigator for an ongoing project is limited to one. Projects with their funding term expiring in the application year are not counted towards this limit.

Each year, NSFC determines the research fields or research directions for which Key Program applications will be accepted and issues guidelines to applications. Applicants should prepare their proposals in accordance with the requirements of this Guide and the scientific problem writing guide for the Key Program. Applicants should formulate the scientific question within the designated research field or research direction, determine the project title based on the research content, and ensure the project title does not cover the entire field or direction.

Key Program projects are generally undertaken by a single host institution. If collaborative research is necessary, the number of collaborating institutions must not exceed two. The project duration is 5 years.

In 2025, a total of 750 Key Program projects were funded, with a total direct cost of 1,683.50 million yuan. The average direct cost funding intensity was 2.2447 million yuan per project.

Funding Statistics for Key Program in 2025

Unit: 10,000 yuan

Departments	No. of applications	Projects Funded			
		No. of Awards	Funding for direct costs	Average funding amount	Share ofNSFC total funding for direct costs (%)
Mathematical and Physical Sciences	576	93	20,930	225.05	12.43
Chemical Sciences	357	68	15,640	230.00	9.29
Life Sciences	711	110	24,150	219.55	14.35
Earth Sciences	688	108	24,840	230.00	14.75
Engineering and Materials Sciences	784	105	24,150	230.00	14.35
Information Sciences	385	105	24,150	230.00	14.35
Management Sciences	159	34	5,290	155.59	3.14
Health Sciences	831	127	29,200	229.92	17.34
Total or average	**4,491**	**750**	**168,350**	**224.47**	**100**

For the research fields or research directions of the Key Program and related requirements, please refer to the introduction of each science department in this part.

Department of Mathematical and Physical Sciences

In 2025, the Department announced 139 areas for Key Programs, and received 576 applications, 93 of which were funded with direct cost funding of 209.30 million yuan. The average funding intensity of direct cost was 2.2505 million yuan per project, and the success rate was 16.15%.

In 2026, the Department plans to fund about 90 Key Program projects. The average direct cost funding will be about 2 to 3 million yuan per project. The funding will be 5 years. We shall further strengthen support for young scholars in mathematics and mechanics (under age 40).

Please indicate the proposed research directions in the “Annotations” column of the application form, otherwise the application will be not accepted. Please provide with the proper application code when applying.

In 2026, the main research directions are as follows:

1. Frontier problems in mathematical physical logic (A01, A02)
2. Key problems in number theory (A01, A02, A04)
3. Group and algebraic structure and representation (A01, A02)
4. Lee theory and quantum group (A01, A02)
5. Key problems in algebraic geometry (A01, A02)
6. Total differential geometry (A01, A02)
7. Geometry analysis and applications (A01-A03)
8. Modern method in mathematical physics (A01-A03)

9. Geometric topology and algebraic topology and their applications (A01, A02)

10. Complex analysis, complex dynamical system and algebraic dynamic system (A02, A03)

11. Multi complex variable and complex geometry (A01, A02)

12. Fractal geometry and geometric measure theory (A01-A03)

13.Theory and application of harmonic analysis (A02, A03)

14. Nonlinear functional analysis and non exchange analysis (A02, A03)

15. Operator theory and operator algebra and its applications (A01, A02)

16. Frontier problems in probability theory (A02, A03, A06)

17. Theory and applications of stochastic equations (A02, A03, A06)

18. Frontier problems in dynamical system (A02, A03)

19. Qualitative theory of differential equation (A02, A03)

20. Nonlinear partial differential equation (A02, A03)

21. Interdisciplinary theory of partial differential equation (A02, A03)

22. Integrable system and infinite dimensional dynamic system and (A01-A03)

23. Statistic analysis of complex data (A04)

24. Statistical basis and method of big data (A04)

25. Optimization theory and method driven by model or data (A04)

26. Optimized modeling and efficient algorithm for large scale and complex problems (A04)

27. Theory and application of combination mathematics (A04)

28. Key problem, algorithm and applications of graph theory (A04)

29. Basic computational methods and theoretical mathematical analysis (A05)

30. Computable modeling and simulation (A05)

31. Problem or data driven scientific and engineering computation (A05)

32. Mathematical method in modern control theory (A06)

33. Key mathematical problems in economy and finance (A04-A06)

34. Mathematical theory, method and application in biology and medicine (A04-A06)

35. Theory and method of computer mathematics (A04-A06)

36. Mathematical model, algorithm and applications for industrial software (A04 -A06)

37. Theory and method of uncertainty mathematics (A01-A06)

38. Mathematics in modern cryptography (A01-A06)

39. Mathematical theory and algorithm for image processing and analysis (A01-A06)

40.Mathematical theory and method for AI and data science (A01-A06)

41. Theory and method of AI assisted mathematical research(A01-A06)

42. Mathematical theory and algorithm in quantum computation and quantum information processing (A01-A06)

43.Mathematical theory, modeling and algorithm in information technology and

information security (A04-A06)

44.Dynamic modeling, analysis and control of nonlinear systems (A07)

45.Analysis and control of vibration characteristics for complex structures and system (A07)

46. Dynamic design and reverse problems (A07)

47. Mechanism and constitutive theory of macro and micro deformation of materials (A08)

48. Damage, failure and reliability assessment of materials and structure (A08)

49. Multi field coupled mechanics of smart materials and structure (A08)

50. Theory and method of complex system physics and mechanics (A08)

51. Temporal and spatial structure and laws of evolution of complex flows (A09)

52. Aerodynamic design and flow control (A09)

53. Hydrodynamics of major engineering projects and facilities (A09)

54. Complex fluid and multi interface flow (A09)

55. Multi level and across scale mechanics and biology for living organisms (A10)

56. Bio mechanics for major disease and special environment (A10)

57. Mechanical analysis, design and control in aerospace (A11)

58. Mechanism of damage and security of energy containing material explosion (A12)

59. Mechanical behavior of material and structure under large dynamic loading (A12) 60. Disaster dynamics of major engineering project and in extreme environment(A13)

61.Theoretical method, engineering test and instruments in experimental mechanics (A07-A13)

62. Theory, method and software for computational mechanics and structure optimization (A07-A13)

63. Nonlinear coupling paradigm and large model for multi scale mechanics (A07-A13)

64. Mechanical behavior of media in extreme conditions (A07- A13)

65. Digital mechanics and its applications (A07-A13)

66. Key mechanical problems in sustainable energy (A07-A13)

67. Key mechanical problems in integrated devices(A07-A13)

68. Nonlinear fluid and solid coupled dynamics and controls (A07-A13)

69. Early universe and the nature of dark matter and dark energy in (A1401)

70. Formation and evolution of large cosmos structure and galaxies (A1402, A1403)

71. Large mass black holes and active galaxy cores (A1404)

72. Formation, structure and evolution of the Galaxy and adjacent group of galaxies (A1405)

73. Formation and evolution of stars and interstellar matters (A1501, A1502)

74. Dense celestial bodies and disasters eruption of stars (A1503)

75. Characteristics and coupling process of multi layer structure of the sun Key mechanical problems in energy and environment areas (A1601)

76. Origin, evolution and forecast of solar eruption (A1602)

77. Formation, evolution and observation of planetary system (A1701, A1702, A1703)

78. Spatial and temporal reference system, orbital spinning dynamics and its applications (A1801-A1804)

79. Technology and method of optical/infrared/ultraviolet exploration (A1901)

80. Key technology and method of radio/millimeter-wave/sub-millimeter wave (A1902)

81. High energy radiation and multi messenger detection technology and method (A1903)

82.Big data, information system and AI technology and method (A1904, A1801)

83. Strong correlated system and superconductivity physics (A20)

84. Topological quantum matter state and properties (A20)

85. Physics of confined quantum systems (A20, A24)

86. Quantum transportation and low power consumption quantum devices (A20)

87. Surface and interface and membrane physics (A20)

88. Physics of semiconductor materials and devices (A20)

89.Physics and devices of magnetic and ferro electro materials (A20)

90. Physics of soft matter and bio matters (A20)

91. method and software of computational solid state physics (A20)

92. Physical problems in energy conversion and storage (A20)

93. New matter state and effect in extreme conditions (A20)

94. Optical detection and regulation of and condensed matters (A20)

95. AI driven condensed matter physics (A20)

96. Atomic, molecular and cluster structures and dynamics (A21)

97. Atomic and molecular physical studies in extreme conditions (A21)

98. Regulation and application of cold atoms and molecules (A21, A24)

99. Precision physical measurement based on atom and molecules (A21, A24)

100. Basis and applications of optical quantum information physics (A22, A24)

101. Nonlinear optics and spectral physics (A22)

102.Ultra fast, ultra strong and ultra high spatial resolution optical physics and applications (A22)

103. The interaction of light and matters in micro and nano scales (A22)

104. Physics and applications of optical field regulation (A22)

105. Acoustic propagation, inversion and control in complex media (A23)

106. Acoustic field and information processing in ocean (A23)

107. Acoustic sensing and acoustic devices for multi physical fields (A23)

108. Theory, experiment and new effect of quantum regulation

109. Frontier problems in mathematical physics and basic theory of quantum

physics (A25)

110. Basic problems in statistical physics and complex systems (A25)

111. Frontier problems in theory of gravitation and cosmology (A25)

112. Strong interaction and hadron physics (A26)

113. New method in quantum field, flavour physics and high precision measurement of standard models (A26)

114. Higgs physics and new physics (A26)

115. Dark matter, particle celestial physics and nuclear celestial physics (A26, A27)

116. Unique structure and reaction mechanism of nuclei (A27)

117. Heavy ion nuclear physics and laser nuclear physics (A27)

118.Quark gluon plasma and phase structure of nuclear matter (A27)

119. Accelerator physics and technology (A28)

120. Reactor physics and neutron technology (A28)

121. Particle and radiation detection (A28)

122. nuclear electronics, online and offline data processing (A28)

123. Magnetic confined fusion plasma physics and technology (A29)

124. Inertia confined fusion and laser plasma physics and technology(A29)

125. Low temperature plasma physics,technology and applications (A29)

126. Key problems related to radiation physics and radiation effect and radiation protection (A30)

127. advanced technology and experimental method of X-ray and neutron based ob larger science facilities.

128. Basis of nuclear technology application in new materials and energy areas (A30)

129. Basis of nuclear technology application in biology, medicine, and archaeology (A30)

130. Basis of nuclear technology application in energy and environment areas (A30)

Department of Chemical Sciences

In 2025, the Department of Chemical Sciences funded 68 Key Program projects, with a direct cost of 156.4 million yuan. The average funding intensity of direct cost is 2.3 million yuan per project for a period of 5 years. In 2026, the Department of Chemical Sciences issues guidelines for Key Program applications in 94 research fields. The average direct funding intensity for each project is approximately 2.3 million yuan. In principle, no more than 2 projects will be funded in each field. To further improve the level and quality of Key Program projects, research teams with a good research foundation and a certain scale are encouraged to participate in the

competition, and strong cooperation of joint research is encouraged to apply for key projects in interdisciplinary fields.

Applicants shall indicate the specific research area in the “Annotations” column of the application form. For "Application Code 1," either the primary application code corresponding to the field name or a secondary application code under this primary application code should be selected, in order to enable the review process.

Research areas for Key Program Projects funded by the Department of Chemical Sciences in 2026

1. New Methods/New Systems in Inorganic Synthesis (B01)
2. New Methods/New Reagents/New Reactions in Organic Synthesis (B01)
3. New Methods/New Monomers/New Reactions in Polymer Synthesis (B01)
4. Precise Synthesis and Structure-Activity Relationship of Solid Materials (B01)
5. Synthesis of Natural Products and Complex Drug Molecules (B01)
6. New Building Blocks/New Strategies/New Systems for Supramolecular Assembly (B01)
7. Polymer Synthesis with Controllable Chain Structure (B01)
8. Creation of Functional Molecules, Structures and Materials (B01)
9. Chemical Synthesis and Mechanisms under Unconventional Conditions or External Field Regulation (B01)
10. Artificial-Intelligence-Assisted Synthetic Chemistry (B01)
11. Synthesis, Structure and Properties of Elemental Organic and Coordination Compounds (B01)
12. Synthesis Catalyzed by Organometallics or Small Molecules (B01)
13. Synthetic Mechanisms: Characterization and Reactivity of Reactive Intermediates (B01)
14. Green and Sustainable Chemical Synthesis (B01)
15. Biosynthesis and Biomimetic Synthesis (B01)
16. In Situ Dynamic Studies of Surface/Interface Processes (B02)
17. Design and Construction of High-Performance Catalysts (B02)
18. Theoretical and Computational Studies of Catalysis and Surface/Interface Chemistry (B02)
19. Studies on Heterogeneous Catalytic Reactions Processes (B02)
20. Fundamentals and Applications of Colloid and Interface Chemistry (B02)
21. Electrocatalytic Substance Transformation or Energy Conversion (B02)
22. Precise Construction and Property Regulation of Low-Dimensional Surface/Interface Structures (B02)
23. Surface/Interface Chemistry for Efficient Hydrogen Production and Conversion (B02)
24. Surface/Interface Processes of Electrochemical Energy Storage (B02)

25. Design and Construction of Functional Soft Matter Systems (B02)
26. Physicochemical Fundamentals of Multi-Field Coupling Chemical Reactions (B02)
27. Electronic Structure Theory and Method (B03)
28. Chemical dynamics of Complex Molecular Systems (B03)
29. New Spectroscopic Method and Application (B03)
30. Theory and Simulation of Multiscale Systems (B03)
31. Molecular Mechanisms of Chemical Reactions (B03)
32. Aggregate Structure and Evolution Mechanism of Polymers (B03)
33. Artificial-Intelligence-Based Chemical Theory and Mechanisms (B03)
34. Chemical Computational Software for Structure and Dynamics (B03)
35. Fundamentals and Applications of Structural Chemistry (B03)
36. New Theories and Principles of Chemical Measurement Science (B04)
37. Chemical Measurements in Life and Living Organisms (B04)
38. Separation Analysis and Omics of Complex Systems (B04)
39. Chemical Measurement Methods for Energy Materials (B04)
40. Micro/Nano Devices and Intelligent Sensing (B04)
41. Single-Molecule, Single-Particle, Single-Cell Measurements (B04)
42. Analysis, Early Warning and Tracing of Public Safety (B04)
43. Chemical Measurement Methods Based on Large-Scale Scientific Facilities (B04)
44. Chemical Measurement Data Analysis and Artificial Intelligence (B04)
45. Biomedical Materials Chemistry (B05)
46. Energetic Materials Chemistry (B05)
47. Composite and Hybrid Functional Materials Chemistry (B05)
48. Organic Optoelectronic Materials Chemistry (B05)
49. Renewable and Biodegradable Polymeric Materials Chemistry (B05)
50. Inorganic Solid-State Functional Materials Chemistry (B05)
51. Biomimetic and Smart Materials Chemistry (B05)
52. Low-Dimensional Functional Materials Chemistry (B05)
53. Inorganic Molecular Crystalline Materials Chemistry (B05)
54. Drug Delivery Carrier Materials Chemistry (B05)
55. New Technologies and Methods for the Detection of Environmental Pollutants (B06)
56. Multi-medium Interface Behaviors and Migration and Transformation of Pollutants (B06)
57. Fundamental Research on Environmental Catalysis for Pollution and Carbon Reduction (B06)
58. Design and Application of Environmental Functional Materials (B06)
59. Pollution Processes and Principles of Green Remediation of Soil/ Groundwater (B06)

60. Treatment, Disposal and Resource Utilization Theory of Solid Wastes (B06)

61. Environmental Exposure and Toxicological Effects of New Pollutants (B06)

62. Formation Mechanisms and Health Effect of Air Pollution (B06)

63. Interaction and Regulation Mechanisms between Pollutants and Microorganisms (B06)

64. Artificial-Intelligence-Driven Mining and Application of Environmental Big Data (B06)

65. Dynamic Labeling with Chemical Probes and Analysis of Life Processes (B07)

66. Chemical Biology of Macromolecular Assemblies and Condensates (B07)

67. Discovery of Endogenous Molecules and Functional Regulation in Cell Communication (B07)

68. New Chemical Biology Technologies for Biomacromolecule Characterization (B07)

69. Spatiotemporal Analysis and Chemical Regulation of Biomacromolecules (B07)

70. Novel Chemical Biology Technologies for Drug Delivery (B07)

71. Dynamic Target Profiling and Precision Chemical Intervention (B07)

72. Biosynthesis and Structural Innovation of Bioactive Metabolites (B07)

73. Construction, Editing and Applications of Functional Nucleic Acids (B07)

74. Pharmaceutically Oriented Intelligent Design, Efficient Synthesis and Precise Modification of Biological Macromolecules (B07)

75. Chemical Engineering Basic Data and Intelligent Chemical Engineering (B08)

76. Interface Phenomena, Mechanisms and Regulation in Chemical Engineering Processes (B08)

77. Transformative Technologies and Principles of Heat and Mass Transfer in Chemical Engineering (B08)

78. Industrial Catalysts and New Catalytic Processes (B08)

79. Chemical Engineering Separation and Process Intensification (B08)

80. Chemical Safety and Novel Processes for Green Chemical Engineering (B08)

81. Key Basic Chemicals and High-End Special Chemicals (B08)

82. New Chemical Engineering Processes for High-Energy Compounds (B08)

83. Artificial-Intelligence-Driven Design of New Chemical Engineering Materials and Processes (B08)

84. Chemical Engineering Basis for the Low-Energy-Consumption Capture and Conversion of CO_2 (B08)

85. Photo-/Electrochemical Reactions and Energy Storage Engineering (B08)

86. Chemical Engineering Basis for the Efficient Conversion and Utilization of Biomass (B08)

87. Chemical Engineering Basis for Food and Pharmaceutical Manufacturing Processes (B08)

88. Synthetic Biotechnology and Green Biological Manufacturing (B08)

89. High-Efficiency Resource Recycling and Utilization & Environmental Chemical Engineering (B08)

90. Energy Conversion and Storage in Extreme Environments (B09)

91. All-Solid-State Secondary Batteries (B09)

92. CO_2 Capture and Chemical Conversion (B09)

93. High-Efficiency Photo-/Electrochemical Production and Storage of Green Hydrogen (B09)

94. High-Efficiency Photovoltaic Energy Chemistry (B09)

Department of Life Sciences

The research fields funded by the Department of Life Sciences cover biology, agricultural science, ecology and population health. According to the funding principle of "limited goals, limited scale and prominent priorities" for Key Program projects, Department of Life Sciences will focus on the development layout of—focusing on the forefront of scientific development, focusing on major national needs, striving to promote disruptive innovation, and solving the core scientific problems behind the demands and key technologies to carry out the project approval and funding works. In 2025, Department of Life Sciences received 711 applications of Key Program projects, 697 of which were eligible, and 110 applications were finally funded with an average funding amount of 2.2 million yuan per project.

In 2026, a dual-track model will be adopted for the application of Key Program projects in Department of Life Sciences, namely, application based on "Designated Areas" and application based on "Macroscopic Areas". These Key Program projects will provide a total funding budget of 240 million yuan for direct cost with an average funding amount of 2.2 million yuan per project. The applicants should provide a reasonable funding budget based on their actual research needs.

To meet major national needs, and combine the disciplinary development strategies and priority funding directions, the Department of Life Sciences have identified 47 designated areas for the Key Program projects in 2026 through extensive research and experts consultation. The applicants should decide on their project title, research contents and research plans based on these designated areas. The applicants should select a research area from the 47 designated areas for the application of Key Program in the column of "Annotations", and select the corresponding application code indicated in the list as application code 1.

To promptly support the major national needs and solve the key scientific

problems at the world‘s science frontiers, the Department of Life Sciences set up "Macroscopic Areas" for the application of Key Program in 2026. The applications for this track of Key Program should meet the following requirements: (1) the applicant has made significant progress in their previous researches, the further research works are in the urgent needs of Key Program funding but the research contents are not in the funding scope of designated areas for the Key Program this year; (2) the research content belongs to the new frontiers of science or new disciplinary developing points but is not in the funding scope of designated areas for the Key Program this year, the applicant has very good working foundations in this field and is in the urgent needs of high-impact funding support to carry out further in depth researches. Applicants can autonomously choose their own research direction to apply for Key Program, and select "Macroscopic Areas" for Key Program application in the column of "Annotations", with an application code that they freely choose. Except for the writing of application following the regular requirements, this kind of applications need to add a "Explanation about Previous Significant Innovative Progresses" part (approximately 800 Chinese characters) before the "Justification for Proposed Research" in the main body of the application form, this part should emphasize the reasons for applying Key Program, significant innovative progresses closely related to this application, relevant work foundations and published papers in important international academic journals.

Applicants should carefully read the application requirements, special notes and funding plans as listed in the "Guide" from Department of Life Sciences, and apply for the Key Program according to the requirements of this "Guide". Notice for applicants:

(1) The designated areas of Key Program projects are closely related to the funding scope of the discipline. The relevant requirements of Department of Life Sciences, as well as its scientific divisions and disciplines in the "Funding Areas and Precautions" also apply to Key Program projects.

(2) To apply for Key Program projects based on designated areas, please determine the research topic and write the application refer to the designated areas for Key Program. The applicants must select the title of designated areas they applied in the column of "Annotations", and accurately select a corresponding code indicated in the designated areas in the column of "application code 1".

(3) The principal investigators that have been supported by program of high intensity such as Key Program, Key International (Regional) Joint Research Program, Major Program, Key Support Project of Major Research Plan, Key Support Project of Programs of Joint Funds, Special Fund for Research on National Major Research Instruments, etc. in 2025, and for those who apply for projects that showing overlapping research contents with their other ongoing national science and technology plans, will not be funded in principle for Key Program projects in 2026.

Special notice for applicants: in view of the issues that have arisen in the

previous Key Program project applications, proposals with one of the following circumstances will be returned without review.

(1) The application that is inconsistent with the relevant requirements of

Department of Life Sciences, as well as its scientific divisions and disciplines in the "Funding Areas and Precautions";

(2) The application based on "Designated Areas" that fails to indicate the title of designated research areas in the column of "Annotations" on the basic information table in main body of the application text, or fails to be marked by the designated application code as required;

(3) The application based on "Designated Areas" that specifies the title of designated area in the column of "Annotations", but the actual research contents do not match the scope of funding;

(4) The application based on "Macroscopic Areas" that fails to be marked as "Macroscopic Areas" in the column of "Annotations", or without the "Explanation about Previous Significant Innovative Progresses" part with approximately 800 characters as required;

(5) The application without the electronic version of the PI‘s representative publications as required by the filling instructions and writing outlines of Key Program application;

(6) The applicant who is still working abroad and cannot guarantee to devote most of their time and energy to the research works in China.

In 2025, the main research directions are as follows:

1. Interactions among Microorganisms and Their Environment (C01)

2. Interactions between Pathogenic Microorganisms and their Host (C01)

3. Mechanisms of Plant Development, Adaptation and Evolution in Extreme Environments(C02)

4. Mechanisms of Plant Interactions with Environment and Other Organisms (C02)

5. Ecosystem Conservation, Restoration, and Management (C03)

6. Ecological Effects and Mechanisms of Microbial Communities (C03)

7. Mechanisms of Animal Adaptation and Evolution in Special Environments (C04)

8. Animal Diversity Conservation and Sustainable Utilization (C04)

9. Dynamic Process Characterization , Mechanistic Analysis of Biological Functional Molecules (C05)

10. Prediction, Simulation, and Design of Biomacromolecule Structure and Function (C05)

11. Intelligent Analysis of Biological Big Data and Algorithm Development (C06)

12. Material Basis, Information Transmission, and Functional Analysis of Genetics and Epigenetics (C06)

13. Mechanisms of Life Health and Trait Evolution (C06)

14. Mechanisms and Therapeutic Interventions of Cellular Homeostasis Dysregulation in Major Diseases (C07)

15. Cell Fate Plasticity and Organizational Order of Cell Collectives(C07)

16. Maintenance and Imbalance Mechanisms of Immune Microenvironment Homeostasis (C08)

17. Molecular and Cellular Mechanisms of Immune Responseand Immune Memory(C08)

18. Mechanisms of Nervous System Development and Plasticity(C09)

19. Brain Mechanisms and Computational Modeling of Social Behavior and Emotion (C09)

20. Brain Mechanisms of Higher Cognitive Functions(C09)

21. Intelligent Design of Functional Biomaterials and Engineering Reconstruction of Tissue/Organ (C10)

22. Precise Delivery of Bioactive Molecules and Biotherapy Technologies(C10)

23. Homeostasis Regulation and Its Relationship with Disease Occurrence and Development(C11)24. Physiological and Pathological Regulatory Mechanisms of the Body Perceptions and Responses to Internal and External Environment Changes (C11)

25. Tissue/Organ Development, Stem Cells, and Regeneration Repair (C12)

26. Gametogenesis, Embryonic Development, and Establishment and Maintenance of Pregnancy (C12)

27. Coupling Mechanisms of Key Agronomic Traits and Precision Breeding in Crops(C13)

28. Theoretical Basis of Crop Environmental Adaptation and Green-Efficient Production (C13)

29. Mechanism, Green Prevention and Control of Pests Caused Disasters in Crops (C14)

30. AI-Driven Development of New Plant Protection Products and Technologies (C14)

31. Mechanisms and Regulation of Important Trait Formation in Horticultural Crops (C15)

32. Theoretical Basis for High-Quality and Efficient Cultivation of Horticultural Crops (C15)

33. Efficient Utilization Mechanism and Regulation of Nutrient Resources (C15)

34. Targeted Cultivation or Efficient Utilization of Forest Resources(C16)

35. Fundamentals of Forest Tree Biological Breeding (C16)36. Formation and Regulatory Mechanisms of Important Traits in Livestock, Poultry, Silkworms, and Bees (C17)

37. Biological Basis of Efficient Utilization of Feed Nutrients and Exploration of Novel Feed Resources in Livestock and Poultry(C17)

38. Pathogenesis, Immunity, and Drug Resistance of Important Livestock and Poultry Diseases, and Zoonoses (C18)

39. Pathological and Physiological Basis of Important Livestock Diseases and Host Response(C18)

40. Occurrence, Prevention and Control Mechanism of Important Diseases in Aquaculture Organisms (C19)

41. Formation and Regulatory Mechanisms of Important Economic Traits in Aquatic Organisms (C19)42. Regulatory Mechanism of Green Food Processing, Biological Manufacturing and Preservation (C20)

43. Food Safety Detection, Control, and Mechanisms of Nutrition, Quality Formation (C20)

44. Detection, Analysis, and Manipulation of in Vivo Biomolecular Events(C21)

45. Precision Design, Engineering, and Construction of Living Systems (C21)

46. Targeted Breeding of Grass Resources (C22)

47. High-Value Utilization of Grass Resources(C22)

Department of Earth Sciences

Earth Science is a fundamental discipline dedicated to understanding the planetary Earth system. It primarily encompasses Geography, Geology, Geochemistry, Geophysics and Space Physics, Atmospheric Science, Marine Science, Environmental Geosciences, Lunar and Planetary Science, and other related interdisciplinary fields. The discipline primarily investigates various phenomena, processes, and interactions, as well as changes and causal relationships occurring within the planetary Earth system. It provides scientific and technological support for addressing key issues such as resource supply, environmental protection, and disaster prevention and mitigation. Innovative research in Earth sciences continually advances our understanding of the planetary Earth system, enriches the knowledge hierarchy concerning the origin and evolution of the Earth and other planets, and progressively strengthens the capacity to serve national needs. Each priority funding field within the Department of Earth Sciences emphasizes interdisciplinary integration; the selection of key project topics is not limited by traditional disciplinary boundaries.

In 2025, the Department of Earth Sciences received 688 Key Program proposals, of which 108 were funded. The total funding amount for direct cost reached 248.40 million yuan, with an average of 2.30 million yuan per project. The funding period is five years.

In 2026, the Department of Earth Sciences has identified ten priority fields for the Key Program:

(1) Earth System Carbon and Water Cycles;

(2) Global Change and Natural-Social Systems Coupling;

(3) Habitability of Earth and Planets and Origin of Life;
(4) Human and Civilization Evolution in Relation to the Environment;
(5) Cross-Sphere Material Cycle and Impacts on Resources and Environment;
(6) Ocean System Evolution and Cross-sphere Interactions;
(7) New Contaminants Cycle and Control;
(8) Multi-sphere Dynamic Processes and Prevention of Hazards;
(9) Earth System Models and Artificial Intelligence Technology;
(10) Novel Observation Methods and Technologies for Integrated Earth System.

Important Notes:

(1) Applicants must select one appropriate field from the above ten fields using the pull-down menu in the "Annotations" section of the proposal. Proposals with missing or incorrect annotations will be returned without review.

(2) Application Code 1 must be selected from the codes under the Department of Earth Sciences (D). Scientists from various disciplines within Earth Sciences, as well as scientists from fields such as Mathematical and Physical Sciences, Chemical Sciences, Life Sciences, Engineering and Materials Sciences, Information Sciences, Management Sciences, and Medical Sciences are encouraged to collaborate with Earth scientists on joint applications for the Key Program from the Department of Earth Sciences. The interdisciplinary application code should be indicated in Application Code 2.

(3) Applicants may determine the project title, research content, and research plan independently based on any of the research directions under the Key Program priority areas, by thoroughly reviewing previous work around the world, identifying potential breakthroughs, and clarifying approaches to achieve them. The main text of the proposal should clearly elaborate on the relationship between the proposed project and the selected research direction.

(4) The research content in the proposal should clarify its relationship to the selected Key Program priority area and its corresponding academic contribution. To avoid duplicate funding, a clear explanation of the connections and distinctions between this proposal and any related research projects already funded by other national science and technology programs is required.

1. Earth System Carbon and Water Cycles

Scientific objectives: This field aims to investigate the stage-wise evolution of carbon and water cycles in the Earth system from the early Earth to the future. It focuses on revealing the impacts of plate tectonics, biological evolution, and human activities on carbon and water cycles; understanding the feedback mechanisms among climate, environmental change, and carbon–water cycles; and developing a theoretical framework for the evolution of Earth's habitability. The research will provide scientific support for addressing climate change and achieving national carbon neutrality goals.

Preferred research themes in this field:

(1) Earth Evolution and Carbon–Water Cycles, including: early Earth carbon–water cycles; plate tectonics and carbon–water cycles; biological evolution and carbon–water cycles; extreme geological–environmental events and carbon–water cycles; comparisons of carbon–water cycles between Earth and terrestrial planets.

(2) Global Change and Carbon Cycle, including: multiscale climate sensitivity of greenhouse gases; extreme climate events and carbon cycle; natural systems and carbon sources and sinks; human activities and carbon cycle; feedback mechanisms between climate change and carbon cycle; nature-based carbon sequestration theories and technologies.

(3) Key Processes and Mechanisms of Water Cycle, including: coupled carbon–water cycle processes and mechanisms; water cycle and climate system coupling; human activities and water cycle; monsoon and arid-region hydrological processes; weather, climate, and eco-environmental effects of water cycle; coupled surface–groundwater cycle.

(4) Water Cycle and Water Resources, including: water resource assessment; anthropogenic regulation of water cycle; optimized management and utilization of water resources.

2. Global Change and Natural-Social Systems Coupling

Scientific objectives: This field aims to elucidate the interaction mechanisms and feedback loops between human society and natural environment under the context of global change; propose sustainability solutions and governance pathways. The research will provide scientific evidence and technical support for achieving harmony between humans and nature.

Preferred research themes in this field:

(1) Global and Regional Climate Linkages, including: natural variability and anthropogenic forcing in global and regional climate change; global change and regional extreme weather and climate events; mechanisms, resilience, and critical thresholds of abrupt shifts in climate-ecological environments; global and regional climate evolution patterns and predictions.

(2) Global Change and Earth Surface Systems, including: atmospheric environmental changes and their subsequent effects on ecology and human health under global change; ecological and environmental consequences of land-use changes under global change; structure, function, carrying capacity, and evolution of typical Earth's critical zones.

(3) Feedback Mechanisms within Natural-Social Systems, including: global change effects induced by socio-economic development; water-food-energy-ecology nexus and associated cascading processes; coupling mechanisms and resilience of natural-social systems; local and remote coupling relationships across regions; technology-driven systemic reconstruction of natural-social interactions.

(4) Sustainable Development Pathways and Human-Natural System Optimization, including: mitigation and adaptation strategies for global change;

quantitative characterization and assessment of sustainability metrics; sustainable development scenarios and predictions; optimization, regulation, and decision support for sustainable development pathways.

3. Habitability of Earth and Planets and Origin of Life

Scientific objectives: This field aims to reveal the environment, habitability evolution, and conditions for the origin of life on early Earth; evaluate the habitability and life-bearing potential of other planets and their satellites; develop a theoretical framework for the formation and evolution of habitable planets. This research will support national deep-space exploration strategies.

Preferred research themes in this field:

(1) Earth System and Habitability, including: Earth’s internal structure and formation processes; early solar, geospace, and interplanetary environment; primordial atmospheric and oceanic environment; internal dynamics and geological processes of early Earth; origin, evolution, and effects of the Earth's and planetary magnetic fields.

(2) Planetary Systems and Habitability, including: formation and evolution of the solar system and its planets; interaction between planets and their satellites; interior structure and geological processes of planets; environment of planetary surface, atmosphere, and space; multi-layered structure and coupled evolution of planets.

(3) Origin and Evolution of Life, including: basis and processes of the origin of life; co-evolution of life and environment; radiation and mass extinction of organisms; biological evolution and material circulation; maintenance of biodiversity.

(4) Space Environment and Habitability, including: cyclic evolution of solar activities and heliospheric environment; generation and propagation of solar transient events; triggering, evolution, and effects of magnetospheric storms and substorms; multi-scale physical processes and characteristics of the ionosphere; dynamic changes in the middle-upper atmosphere and near-space; space weather modeling and forecasting.

(5) Detection of Biosignatures and Assessment of Habitability, including: evolutionary models of planetary habitable environment; technologies and methods for detecting the signs of early Earth and extraterrestrial life; new principles, technologies, and methods for habitability detections.

4. Human and Civilizational Evolution in Relation to the Environment

Scientific objectives: This field aims to clarify the role of land-sea distribution and topographic change in shaping human migration patterns; examine the influential effects of environmental changes on primate and human evolution; explain the complex interactions among the origins of agriculture, civilizational developments, and environmental dynamics; offer scientific insights into the fundamental questions of human origins and future paths. The research will inform strategies and frameworks for achieving harmonious coexistence between humans and nature.

Preferred research themes in this field:

(1) Land-Sea and Topographic Evolution and Human Migration, including: effects of shifting land-sea boundaries on human dispersal; topographical developments and their implications for migratory routes; influences of glaciation events and sea-level changes on patterns of human movement.

(2) Environmental Change and Human Evolution, including: effects of environmental and ecological pattern changes on human evolution; co-evolution of humans and other lifeforms; influences of orbital-scale climate variability on human evolution; impacts of climate-ecological disruptions on human evolution.

(3) Origins of Agriculture and Environmental Interactions, including: relationships between dryland farming systems and environmental contexts; rice agriculture and its environmental ramifications; pastoralism and its environmental correlates; evolution of agro-pastoral transition zones in relation to environmental change.

(4) Environmental Change and Succession of Chinese Civilization, including: reciprocal influences between civilizational succession and ecosystem changes; effects of natural disasters on civilizational succession; the interplay between climate change and large-scale demographic movements; processes of social complexity and resultant landscape modifications.

(5) Innovations in Archaeological Methods and Technologies, including archaeological big data analytics, artificial intelligence applications, and archaeological numerical modeling; molecular biology techniques for archaeology; new technologies and methods in archaeological chronology; new technologies for subterranean and underwater archaeology; new methods for provenancing cultural artifacts.

5. Cross-Sphere Material Cycle and Impacts on Resource and Environment

Scientific objectives: This field aims to reveal structure, composition, and material cycle of Earth's core, mantle, and crust; study the multi-component, multi-scale, and multi-media interactions of the Earth’s surface; examine the controls of multi-scale structural systems on material cycle between internal and external spheres of the Earth; understand impacts of cross-sphere material cycle on mineral and energy resources and environment. The research will provide scientific support for safeguarding national resource security.

Preferred research themes in this field:

(1) Earth’s Structure and Material Cycle across Internal spheres, including: structure detection and dynamics of the Earth’s internal spheres; material cycle and mechanisms of the Earth's internal spheres; material differentiation and relocation of the Earth's internal spheres; geochemical processes in the deep Earth under extreme conditions; exchanges of critical elements and volatiles across the Earth's spheres.

(2) Material Cycle in the Earth's Surface System, including: multi-scale reaction processes at environmental interfaces; surface biogeochemical cycle; source tracing,

migration, and transformation of pollutants; material cycle during extreme geological events.

(3) Tectonic Movement and Material Cycle, including: tectonic evolution and material cycle of continents; material cycle of subduction zones; multi-scale tectonics and cross-scale effects; material exchange between the interior and surface of the Earth; tectonic impact on material exchange between the atmosphere, land surface, oceans, and ice-covered regions.

(4) Mineral and Energy Resources in relation to Material Cycle across Spheres, including: mineralization of critical metals; extraordinary high organic matter accumulation and hydrocarbon resource; cycle of critical earth materials and new geological energy; evolution of environment and life and related mineralization; new theories and technologies of exploration for mineral and energy resources.

6. Ocean System Evolution and Cross-Sphere Interactions

Scientific objectives: This field aims to elucidate the characteristics of material and energy cycles governing the evolution of the ocean system; clarify the complex interactive feedbacks between the ocean and the atmosphere, biosphere, lithosphere, and cryosphere; assess and predict their impacts on climate, resources, ecosystems and environment. This research will support the national strategy for building a strong maritime nation and provide a scientific foundation for China's deepened participation in global ocean governance.

Preferred research themes in this field:

(1) Oceanic Processes and Earth Coupling, including: ocean dynamic processes and energy transfer; ocean biogeochemical processes and material cycles; atmosphere–ocean interactions and climate change; fluid-solid coupling and its resource and environmental effects; evolution and dynamics of the oceanic lithosphere.

(2) Marine Life and Environmental Adaptation, including: characteristics and mechanisms of marine life processes; adaptive strategies and mechanisms of marine organisms to their environment; marine ecosystems and life processes in extreme environments.

(3) Marine Environment and Ecological Security, including: marine biodiversity and ecosystem stability; prediction and mitigation of marine hazards; functional restoration of coastal wetlands and marine ecological security; evolution and ecological restoration of islands and reefs.

(4) Rapid Changes in Polar Systems and Their Global Impacts, including: ocean circulation and multiscale polar processes; coupled interactions between the tropical ocean processes and the Arctic/Antarctic system; climate change in high-latitude and high-altitude regions and its ecological and environmental impacts; sub-ice science and polar ocean–ice–solid Earth coupling processes.

(5) Ocean Observation, Exploration, and Modeling, including: integrated high-precision, multi-parameter deep-sea observations and in situ experiments; experimental simulation of multi-scale processes in the deep seafloor; high-fidelity

modeling and prediction of coupled ocean systems.

(6) Ocean Sustainability and Global Governance, including: ocean system change and risk management; evolution and sustainable development of complex coastal systems; integrated land–sea management and healthy oceans; green and efficient development and utilization of marine resources; global ocean governance and international marine conventions.

7. New Contaminants Cycle and Control

Scientific objectives: This field aims to reveal the sources, sinks, cross-sphere transport and transformation processes of new contaminants, and their cycling patterns from regional to global scales within the Earth system; clarify their hazardous effects, toxic mechanisms, and exposure risks in complex environmental media; address fundamental scientific problems in coordinated governance, green substitution, and risk management. The research will provide scientific support for advancing the vision of a Beautiful China, Healthy China, and Safe China.

Preferred research themes in this field:

(1) Contaminant Identification, including: the screening of new contaminants; their characterization and identification, source apportionment, and occurrence characteristics.

(2) Transport, Transformation, and Cross-Sphere Cycle, including: the multi-media transport of new contaminants; their transformation processes and mechanisms, interface processes, biogeochemical cycle, and the long-range transport.

(3) Toxic Effects and Ecological Risk Assessment, including: toxicity testing and hazard identification; toxic effects and toxic mechanisms; biological responses to complex contamination; ecological effects and risk assessment.

(4) Environmental Exposure and Health Risk Assessment, including: exposure characteristics and biomarkers; exposomics and environmental attribution; internal and external exposure and health effects; characterization and assessment of health risks.

(5) Risk Prevention, Control, and Coordinated Governance, including: biosensing and intelligent prevention and control technologies; theories and methodologies for environmental criteria; principles and technologies for coordinated governance; implementation pathways for risk prevention and control.

8. Multi-Sphere Dynamic Processes and Prevention of Hazards

Scientific objectives: This field aims to advance fundamental understanding of the dynamic mechanisms and processes governing complex hazard systems; investigate multi-sphere hazard genesis, multi-dynamic hazard formation, precise and intelligent hazard prevention, and resilient and green hazard risk reduction. The research will provide scientific support for national strategies on hazard prevention and mitigation.

Preferred research themes in this field:

(1) Multi-Spheric Mechanisms of Hazard Genesis, including: extreme weather and climate events and associated meteorological hazards; climate change-induced

and water-related hazards; earthquake monitoring and seismogenic mechanisms; hazard generation mechanisms in the cryosphere; Earth's internal-external coupling dynamics underlying hazard initiation.

(2) Multi-Dynamic Mechanisms of Hazard Formation, including: catastrophic mechanical behavior in multiphase media of hazards; critical dynamics of complex systems; cross-scale processes of hazard evolution; coupled multi-dynamic mechanisms governing cascading hazards.

(3) Precise and Intelligent Hazard Prevention, including: multi-source sensing and intelligent identification; risk simulation and prediction; intelligent monitoring and early warning systems; integrated data-driven and mechanism-based large models for hazard forecasting and prediction.

(4) Resilient and Green Hazard Risk Reduction, including: hazard emergency response and management systems; green and sustainable hazard mitigation and prevention approaches; resilience-based hazard mitigation and post-hazard recovery; societal hazard risk reduction and risk governance.

9. Earth System Models and Artificial Intelligence Technology

Scientific objectives: This field aims to investigate the coupling mechanisms of multi-sphere, multi-process, and multi-element of the Earth system; develop autonomous Earth system models that integrate artificial intelligence technology; understand and predict changes and impacts of the Earth system. The research will provide scientific support for serving national security and sustainable development.

Preferred research themes in this field:

(1) Coupling Processes of the Earth System Spheres, including: coupling processes of the solid Earth system spheres; coupling processes of the Earth surface system spheres; coupling processes between the deep Earth and surface systems; coupling processes between the Earth system and human activities.

(2) Earth System Modeling, including: solid Earth models and sphere coupling technologies; components of atmosphere-ocean-land-ice coupled Earth system models and coupling technologies; coupling models between the Earth system and human activities; Earth system spatial data modeling and data assimilation technologies; model support technologies.

(3) Integration of Artificial Intelligence and Earth System Models, including: large artificial intelligence forecasting and prediction models; data assimilation technologies integrating artificial intelligence; parameterization of complex processes through artificial intelligence-physics fusion; earth system models empowered by artificial intelligence.

(4) Earth System Model Evaluation and Data, including: error analysis and correction technologies; uncertainty analysis and detection-attribution technologies; predictability analysis and ensemble forecasting technologies; Earth system analysis and reanalysis datasets; digital twin Earth technologies.

10. Novel Observation Methods and Technologies for Integrated Earth System

Scientific objectives: This field aims to develop original theories and methods for Earth system observation; innovate technologies and equipment for observing the Earth system and human activities; enhance cross-scale observational capabilities for key Earth system processes and multi-sphere interactions.

Preferred research themes in this field:

(1) Earth System Remote Sensing Theory and Technology, including: remote sensing of key variables and processes of Earth system; cross-interface radiation/ scattering transmission mechanisms and modeling; intelligent processing and fusion of remote sensing information; remote sensing inversion of Earth system energy and biogeochemical cycles.

(2) In-situ Sensing and Experimental Analysis Technology for Earth System, including: novel principles for in-situ measurement of key Earth system variables; in-situ sensing of Earth system variables and processes; multimodal sensing of human and socio-economic activities; experimental analysis for key Earth system elements.

(3) Terrestrial Reference Frame, Time System and Intelligent Mapping, including: theory and models of terrestrial reference frame and time system; vertical datum unification and time-variable gravity field; comprehensive positioning, navigation; timing systems, and intelligent survey and mapping.

(4) Observation Experiment and Big Data Analysis for Earth System, including: targeted observation technologies and simulation experiments for Earth system; multimodal observation networks for sensing multi-sphere coupling of Earth system; intelligent big data analysis for human and socio-economic activities; intelligent big data analysis for multi-sphere coupling of Earth system; spatial analysis and visualization of Earth system.

Department of Engineering and Material Sciences

In 2026, the Department of Engineering and Material Sciences (DEMS) plans to prioritize 13 Key Program funding areas in engineering, materials, and the interdisciplinary areas of engineering and materials.

In 2025, DEMS received 784 proposals for Key Program, among which 105 were granted. The total direct cost funding was 241.50 million yuan, with an average funding amount of 2.3 million *yuan* per project. In 2026, DEMS plans to support approximately 105 projects, with an average funding amount of 2 to 3 million *yuan* per project in direct costs and a period of 5 years.

The funding areas for Key Program in DEMS in 2026 are as follows:

(1) Design, preparation, and application fundamentals of metallic materials

(E01);

(2) Design, preparation and application fundamentals of inorganic nonmetallic materials (E02);

(3) Design, preparation, and application fundamentals of organic polymer materials (E03);

(4) Safe and high-efficiency resource extraction and green processing and utilization (E04);

(5) Scientific issues in mechanical design, manufacturing and service performance (E05);

(6) Energy and Power Engineering & Engineering Thermophysics (E06);

(7) Scientific fundamentals and key technologies of electrical engineering (E07);

(8) Sustainable Architecture and High-Performance Civil Engineering (E08);

(9) Key Scientific Issues in Hydraulic Science and Engineering (E09);

(10) science fundamentals and key technologies in environmental engineering (E10);

(11) Advanced Equipment and Technologies for Ocean Engineering (E11);

(12) Integrated Transportation and Vehicle Engineering (E12);

(13) New conceptual materials, material commonalities, and engineering intersection (E13).

Notes:

Applicants are required to select a specific research area of the Key Program in the dropdown menu of the "Annotations" section. Applications that do not select a specific research area or that specify an incorrect one will not be accepted.

Applicants may independently determine the project title, research content, and research plan based on the specific research area. Applicants should accurately select the corresponding application code to which the specific research area belongs, in the "Application Code 1" column. For example, if applicants selct the "2.1 Original Research and Transformative Applications in the Frontier and Interdisciplinary Fields of Inorganic Nonmetallic Materials" , then E02 or a second-tier application code of E02 should be selected. Another application code may be selected for the "application code 2" column as a supplement if needed.

The Key Program funding areas of DEMS in 2026 are as follows:

1. Design, Preparation, and Application Fundamentals of Metallic Materials (E01)

1.1 Critical issues in the design, preparation, processing, service performance, and applications of ferrous and nonferrous metallic materials;

1.2 Superalloys, intermetallics, and metal-matrix composites;

1.3 Key issues in property enhancement of metallic structural materials;

1.4 Low-dimensional, metastable and multi-principal element metallic materials;

1.5 Novel strategies for performance regulation and multifunctional coupling in metallic functional materials;

1.6 Metallic biomaterials, smart materials, and bioinspired metallic materials;

1.7 Structural characterization, surfaces, and interfaces of metallic materials;

1.8 Fundamental research on metallic materials addressing national strategic priorities;

1.9 Exploration of new theories, technologies, and effects in metallic materials.

2. Design, preparation and application fundamentals of inorganic non-metallic materials (E02)

2.1 Original research and transformative application in the frontier intersection of inorganic non-metallic materials;

2.2 Thermodynamics, kinetics and in-situ characterization studies on the structure and property regulation of inorganic non-metallic materials;

2.3 Research on inorganic non-metallic materials driven by artificial intelligence;

2.4 Preparation or service of inorganic non-metallic materials in extreme environments;

2.5 Multifunction integration and intelligentization of inorganic non-metallic materials and devices;

2.6 Research on inorganic non-metallic materials towards the strategies of carbon peaking and carbon neutrality;

2.7 Research on inorganic non-metallic materials for life and health;

2.8 Applied fundamental research on inorganic non-metallic materials for integrated circuits, quantum technology, aerospace, etc;

2.9 Applied basic research on the green preparation and recycling of inorganic non-metallic materials.

3. Design, preparation, and application of organic polymer materials (E03)

3.1 New methods and principles for the preparation of polymer materials;

3.2 Aggregation structures and properties of polymer materials;

3.3 New theories, methods, and technologies for the processing (including micro -nano processing and additive manufacturing) of polymer materials;

3.4 High performance modification and functionalization of general polymer materials;

3.5 Organic polymer composite materials;

3.6 Eco- and environmentally friendly polymer materials;

3.7 Recycling of polymer materials;

3.8 Intelligent organic polymer materials;

3.9 Biomedical organic polymer materials;

3.10 Organic optoelectronic polymer materials and devices;

3.11 Artificial intelligence-based organic polymer materials;

3.12 Organic polymer materials addressing major national needs.

4. Secure and high-efficiency resource extraction and green processing and utilization (E04)

4.1 Fundamental scientific issues in high-efficiency and green drilling and

extraction in deep strata, deep sea, and unconventional oil and natural gas resources;

4.2 Fundamental scientific issues in carbon dioxide sequestration and enhanced recovery;

4.3 Key scientific issues in the safety and reliability of oil and gas storage and transportation;

4.4 Safe, efficient, and intelligent collaborative exploitation theory and key technology of deep strategic mineral resources;

4.5 Theories and key technologies for the mine rehabilitation, ecological treatment and utilization of solid wastes;

4.6 Theories and methods for the accurate pre-control of industrial production process safety and public safety;

4.7 Green separation and process intensification, and high-value utilization of strategic mineral resources;

4.8 Fundamental scientific issues for new low-carbon ferrous metallurgy processes and technologies;

4.9 New theories and technologies for the efficient extraction and cyclic utilization of complex metallic resources;

4.10 Scientific foundations for the in-situ development and utilization of deep space resources;

4.11 New technological principles for the extraordinary metallurgy and forming of metals (alloys);

4.12 Fundamentals for material short-process preparation, composite forming, and intelligent processing;

4.13 Scientific foundations and key technologies for the high-quality utilization of recycled metallic materials;

4.14 Big data, large models, and artificial intelligence in the mineral processing and metallurgy processes.

5. Scientific issues in mechanical design, manufacturing and service performance (E05)

5.1 New theories and methods in robotics and mechanism design;

5.2 Design and manufacturing of high-performance drive transmission systems and novel key components;

5.3 Dynamics modeling, design, simulation, and control of mechanical systems and equipment;

5.4 Reliability design of mechanical structures and mechatronic equipment for extreme serving environments;

5.5 Mechanical and tribological behavior and regulation of complex mechanical surfaces/interfaces;

5.6 Intelligent design theories and methods;

5.7 Mechanical bionic design and biomanufacturing theories and methods;

5.8 Theories and methods for high-precision and high-performance forming

manufacturing;

5.9 Theories and methods for ultra-precision, ultrahigh-speed, and ultra-intense energy field machining manufacturing;

5.10 Processes, equipment, and systems for green and intelligent manufacturing;

5.11 New principles and methods for multidimensional and multi-parameter sensing and measurement;

5.12 Principles, methods and systems for micro/nano manufacturing;

5.13 Theories and technologies of atomic-level manufacturing;

5.14 Scientific principles and methods of humanoid robots.

6. Energy and Power Engineering & Engineering Thermophysics (E06)

6.1 Analysis, control and optimization of energy systems;

6.2 Energy conversion, flow mechanisms and control in power equipment and fluid machinery;

6.3 Heat and mass transfer in energy conversion and utilization processes;

6.4 Combustion theory, pollution control, and novel combustion techniques;

6.5 Fundamentals of multiphase flow in energy and power systems;

6.6 Measurement principles and methods for complex thermophysical fields;

6.7 Conversion and utilization of new and renewable energy sources;

6.8 Efficient and clean conversion and utilization of carbon-based energy;

6.9 Energy storage and hydrogen energy technologies.

7. Scientific fundamentals and key technologies of electrical engineering (E07)

7.1 Common fundamental technologies in electromagnetics and superconductivity；

7.2 Electrical materials, devices and equipment;

7.3 Electromechanical energy conversion and electric drive;

7.4 New type power systems and integrated energy;

7.5 High voltage and plasma technologies;

7.6 Electric energy conversion and control;

7.7 Electric energy storage technologies and systems；

7.8 Bio-electromagnetic technology.

8. Sustainable Architecture and High-Performance Civil Engineering (E08)

8.1 Theories and Methods for Sustainable Architecture and Digital-Intelligent Design

8.2 Theories and Methods for Urban-Rural Space and Landscape Planning

8.3 Fundamental Theories and Methods for Resilient Design and Planning of Urban Renewal

8.4 Fundamental Theories and Key Technologies for Low-Carbon Energy Systems in Buildings and Healthy Environment Creation

8.5 Fundamental Theories and Methods for Intelligent Design of Complex

Engineering Structures

8.6 Low-Carbon, Durable and High-Performance Civil Engineering Materials

8.7 Fundamental Theories and Key Technologies for Intelligent Engineering Construction and Maintenance

8.8 Life-Cycle Intelligent Diagnosis and Performance Enhancement of Engineering Structures

8.9 Fundamental Theories and Methods of Geotechnical Engineering under Complex Conditions or in Ecologically Fragile Areas

8.10 Catastrophe Theories and Prevention/Control Technologies of Underground and Tunnel Engineering

8.11 Theories and Enhancement Technologies for the Safety and Longevity of Road and Rail Engineering

8.12 Theories and Methods for Multi-Hazard Disaster-Resistant Resilience and Protection Enhancement in Civil Engineering

8.13 Fundamental Theories and Key Technologies for New Energy Infrastructure

8.14 Fundamental Theories and Key Innovative Technologies for Extraterrestrial Engineering Construction.

9. Key Scientific Issues in Hydraulic Science and Engineering (E09)

9.1 Regulation and storage of stormwater resources and flood disaster prevention and control in urban and rural water networks;

9.2 Spatiotemporal optimization and intelligent management of multi-source water allocation in large-scale irrigation districts;

9.3 Intelligent irrigation technology systems for modern agriculture;

9.4 Systemic response mechanisms of river–lake systems under changing water–sediment conditions;

9.5 Risk analysis and intelligent early warning of reservoir algal blooms;

9.6 Hydraulic safety and regulation of navigation in modern canals;

9.7 Mechanisms of stable operation of ultra-high-head impulse turbines;

9.8 Dynamic failure mechanisms and risk prevention of deep overburden layers in dam foundations;

9.9 Intelligent monitoring and safety assessment of hydraulic structures.

10. Science fundamentals and key technologies in environmental engineering (E10)

10.1 Drinking water risk control and safety assurance;

10.2 Low-carbon treatment of municipal/industrial wastewater and resource & energy recovery;

10.3 Sustainable urban and rural water systems construction;

10.4 Synergistic reduction of air pollutants and greenhouse gas emissions;

10.5 Low-carbon treatment and high-value utilization of solid waste;

10.6 Cross-media Synergistic control of combined pollution in contaminated

sites and groundwater;

10.7 Watershed/regional ecological risk prevention and integrity restoration;

10.8 Environmental health risk prevention and control;

10.9 Eco-environmental monitoring and intelligent sensing;

10.10 Environmental system modeling and intelligent governance.

11. Advanced Equipment and Technologies for Ocean Engineering (E11)

11.1 Synergistic disaster reduction and long-term protection of coastal engineering and natural systems;

11.2 Performance assessment and intelligent design of ocean equipment systems;

11.3 Operation, maintenance and assurance technologies for marine resource development equipment;

11.4 Safety and applicability of ship power systems with new energy;

11.5 Intelligent coordination technologies for submersible swarms;

11.6 Marine observation and detection technologies and engineering systems;

11.7 Green and intelligent shipping systems and maritime emergency-response technologies.

12. Integrated Transportation and Vehicle Engineering (E12)

12.1 Key technologies for the design and control of new high-performance vehicles;

12.2 Key technologies for collaborative operation and task execution among multiple vehicles;

12.3 Key technologies and equipment for testing of end-to-end automated driving vehicles;

12.4 Integrated aircraft design and key technologies for flight control;

12.5 Key technologies for reusable space transportation systems and on-orbit refueling;

12.6 Planning and coordinated operation of integrated transportation networks incorporating low-altitude traffic.

13. New conceptual materials, material commonalities, and engineering intersection (E13)

13.1 Common scientific issues in material design, preparation, processing, or characterization;

13.2 Original and innovative materials with new concepts, structures, and properties;

13.3 New principles and methods for material compositing and hybridization;

13.4 Integration of multifunctional materials and devices;

13.5 Key materials for high-end manufacturing and national major projects;

13.6 New materials addressing major national needs in energy, environment, life and health, etc.;

13.7 Artificial intelligence-driven cognition or creation of new materials.

Department of Information Sciences

In 2025, the Department of Information Sciences announced 1 Key Program Cluster , covering 4 key research directions, and 109 funding areas for the Key Programs. 385 applications were received, and 105 projects were funded with a total funding (direct costs) of 241.50 million yuan and an average funding (direct costs) of 2.30 million *yuan* per project.

In 2026, the Department will announce 2 Key Program Clusters covering 10 priority directions, and 104 Key Program funding areas. It is planed to fund about 105 Key Program projects with an average funding of about 2.5 million yuan in direct costs per project for 5 years. Applicants should grasp the research directions in relevant areas, integrate the development trends in the relevant areas and their research basis, and and address the critical national needs or the frontiers of information sciences. Applicants should consider the practical application objects or processes, fomulate key scientific problems and conduct systematic and in-depth theoretical studies or experimental verification. In addition to publishing high-level academic papers, some research results should be demonstrated or validated in experimental systems or in practical applications.

The deadline for submitting proposals of Key Program funding areas for 2027 is April 30, 2026. For relevant requirements, please refer to the website of the Department of Information Sciences（https://www.nsfc.gov.cn/Portals/0/fj/fj20240124_01.docx）。

Priority areas (Key Program Clusters) for 2026

1. Advanced theories and key technologies for smart radar detection and imaging

Radar has the ability of acquiring remote information around the clock and in all weather conditions, which is vitally important in target and environmental monitoring for national security and economic development. To overcome the limitations of traditional radar system and technology, this Key Program Cluster focuses on embodied radar, concealed detention, cluster coordination, moving target imaging, and integration of communication and sensing. It aims to develop new systems, new theories and new methods of smart radar detection and imaging, promote interdisciplinary studies of radar with newly emerged AI technology, so as to provide basic and theoretical support to the development of radar technology.

The Key Program Cluster comprises 6 research directions, and plans to fund about 6 projects:

1) Electromagnetic world model and embodied synthetic aperture for radar information processing

2) Aperture confined space-based radar for wide-area concealed detection

3) Theory and method of radar detection by external radiation source on smart

swarming unmanned platforms

4) Embodied smart radar detection and imaging for swarming unmanned aerial vehicles

5) Theory and method of smart imaging and sensing of 3D SAR moving targets

6) Temporal and spatial regulated detention and anti-interception technologies for 6G satellite systems

2. Generation, amplification and synthesis technology for high power, ultrashort pulse optical fibre laser

The generation, amplification and synthesis technology for high power, ultrashort pulse optical fibre laser represent an important direction in the development of laser technology. Addressing the need of fiber laser in areas such as precision processing and measurement, optical electronic confrontation, strong field physics, etc., this Key Program Cluster focuses on key scientific problems and technologies related to the generation and and amplification of high power ultra short pulse fiber laser, including nonlinear effects, noise control and coherence synthesis.

This Key Program Cluster comprises 4 research directions and plans to fund about 4 projects.

1) New optical fibers and devices for ultra short pulse laser transmission

2) Generation and amplification of high repetition rate, low noise femto second optical fiber laser

3) Generation and amplification of ultraviolet laser based on nonlinear effects of optical fiber

4) Mechanisms and methods of temporal spatial coherence synthesis of ultra short pulse optical fiber laser

The funding areas for Key Program in DIS in 2026 are as follows:

1. Theories and key technologies for super high reliability, super low time lag, and large-scale connection of 6G (F0103)

2. Basic theories and key technologies for the integration of communication, sensing, and computation of embodied agent network (F0103)

3. Theories and methods of channel coding for ultra-reliable transmission for 6G time sensitive services (F0105)

4. Theories and methods for the coordination of communication and sensing in low altitude network (F0105)

5. Theories and methods for the management of smart reconfiguration resources for satellite and land collaboration (F0106)

6. Extraction and transmission of syntax information for underwater distributed acoustic signal detection (F0107)

7. Generation and coding technologies for generative model driven video (F0108)

8. High spectra efficiency and low power consumption simplified coherent transmission for short distance optical communications (F0109)

9. Multi mode coordinated sensing of dynamic acoustic scenarios based on

microphone array (F0111)

10. Active and passive high spectra multi dimensional sensing and information characterization for islands and reefs (F0113)

11. Theories and methods of integrated long distance and high flux hydro acoustic communication and detection (F0113)

12. Interpretation of characteristic syntax of across module behavior of child autism in optical field environment (F0117)

13. Characterization and generation of multi target in large dynamic scenario (F0117)

14. Research on GHz time frequency bench chips of sub 10 fs oscillation (F0118)

15. Sub-7GHz super wideband high performance digital radio frequency TX/RX chips (F0118)

16. Electro-magnetic modeling and multi frequency stealth technology based on super structural fiber and super surface (F0119)

17. Key technologies of multi frequency and multi format airborne antenna micro systems for wide angle range stealth (F0119)

18. Super wide band GHz high apace ratio pules power sources (F0119)

19. Key technologies of wide frequency tetra hertz on-chip detector based on media wave-guide (F0120)

20. AI driven multi-omics coordinated analysis and mechanism elucidation of major diseases (F0124)

21. Key technologies of acquisition of image information and control of cerebral tissue liquid (F0125)

22. Key technologies of three-chamber decoupled magnetic resonance imaging of brain functions (F0125)

23. Algorithm design, optimization and analysis for error tolerant quantum computation (F0201)

24. Highly robust combination optimal algorithm for high dimensional large scale graph data (F0201)

25. Key technologies of softwaare-hardware collaborative acceleration for privacy computation (F0204)

26. High performance code generation and optimization driven by AI (F0204)

27. Model reasoning architectures and technologies based on unified storage tank (F0204)

28. Design and verification of security for chips of the internet of things enhanced by domain knowledge (F0205)

29. Physical attack and defence technologies for memory systems in AI computation (F0205)

30. Key encryption technologies for coordinated safe computation of trusted

data spaces (F0206)

31. Optimal design of lossless exchange network in model training systems (F0207)

32. Theories and methods of integrated optimization of product modeling and simulation (F0209)

33. Theories and methods of olfactory perception for embodied robots (F0209)

34. Simulation and test methods for embodied smart systems in complex environments (F0209)

35. smart generation technologies for 3D content based on physical constraints (F0209)

36. Autonomous interaction and evolution of vertical domain multi mode agents (F0210)

37. Theories and methods of coordination of video generation and compression (F0210)

38. Brain inspired zero sample learning methods and its applications (F0210)

39. Theories and key technologies of 3D genome structure modeling (F0213)

40. Multi mode large modeling technologies for the integration of bio sequences, structures and functions (F0213)

41. Computation for the evolution of simulated expensive optimation scenarios (F0601)

42. Quantum and classical hybrid quantum machine learning (F0601)

43. Theories and methods of multi-mode cognitive computation with large and small model collaboration (F0601)

44. Technologies and methods for smart scheduling of low altitude traffic in complex meteorological conditions (F0602)

45. Structured graph and text generation and learning for multi agent coordination (F0603)

46.Embodied vision-language-behavior self-adaptive coordination in complex dynamic scenarios (F0604)

47. Autonomous learning theories and evolution methods for cross morphology embodied intelligence (F0605)

48. Mechanisms and methods for enhanced decentralized distributive reasoning (F0606)

49. Active embodied smart technologies based on human-machine-environment systems (F0608)

50. Trusted brain-computer coordinated smart identification verification mechanisms and methods (F0609)

51. Theories and methods of neural mechanisms-inspired light-weight memory brain network modeling (F0609)

52. Educational agents construction methods and evolution mechanisms (F0701)

53. Self adaptive learning control and gaming decision-making of stoichastic distributive systems (F0301)

54. Theories and methods of optimal control of new energy systems with power and computing coordination (F0302)

55. Smart defence methods for cross domain unmanned swarm systems for marine security (F0302)

56. Theories and methods of high precision security control for smart electro mechanical systems (F0302)

57. Smart operation control of large capacity wind turbines in extreme environments (F0302)

58. Autonomous coordinated control of heterogeneous swarm equipment in complex environments (F0302)

59. Theories and applications of optimal control of safe operation for large energy storage systems (F0303)

60. Safety control and energy management integration of hydrogen lithium hybrid aircraft (F0304)

61. Theories and methods of integrating sensing, transmission and control of new energy systems for ships (F0304)

62. Construction and application of large models of multi mode 3D genome regulation (F0305)

63. Bio-system modeling and analytical methods based on spatiotemporal omics (F0305)

64. Highly integrated artificial olfactory systems for enhanced embodied intelligence perception (F0306)

65. Real time mission planning and autonomous operation control of low orbit large scale satellite constellations (F0307)

66. Smart operation, maintenance and regulation of cyber-physical systems for oil and gas production in extreme environments (F0308)

67. Smart coordination and optimal control of multi source heterogeneous industrial manufacture systems (F0308)

68. Multi mode in situ intravascular sensing and navigational interventional diagnosis and therapeutic robots (F0309)

69. Flexible detection robots for multi media irregular pipelines (F0309)

70. Trusted sensing and decision-making of industrial assembly robots based on lightweight large models (F0309)

71. Visual sensing and autonomous navigation of across scenario hetero multi robots (F0309)

72. Autonomous extreme flight control for unmanned aerial vehicles driven by end to end data (F0309)

73. Large scale data set construction and dynamic learning mission evaluation for complex dynamic systems (F0310)

74. Multiple driven smart control of ship borne radar for precise detection of sea targets (F0310)

75. Smart methods for membrane removal, sedimentation and generation equipment (F0310)

76. Smart inversion and control of high speed flow fields (F0311)

77. Doping Mechanisms and devices for AIN semiconductors (F0401)

78. Multi channel pito second re-configurable time-to-digital converters (F0402)

79. EDA and architectures of highly effective 3D embodied large model inference chips (F0402)

80. Self powered non contact coupled communication and sensing chips for underground cable monitor (F0402)

81. PbSe based medium wave infrared focal plane detector working at room temperature (F0403)

82. Gallium nitride super wide band dynamic reconfiguration high efficiency amplifier chips (F0404)

83. Ultra fast high voltage silicon carbide pulse power semiconductor devices (F0404)

84. Polarized regulation nitride semiconductor devices with integration of sensing, storage and computation (F0405)

85. Through glass via millimetre modeling and passive device integration (F0406)

86. Compute-in-memory chips for multi mode large models (F0409)

87. 2D/3D display technologies for high resolution dense optical field (F0501)

88. UAV coordinated light-field imaging and sensing for bird migration (F0501)

89. Time-parity symmetric new semiconductor light sources (F0502)

90. High efficiency silicon based heterogeneous integrated nonlinear photonic chips (F0502)

91. Extremely low power Kerr optical switch array chips (F0502)

92. Coherent optical transceiver integrated chips based on non Hermite effects (F0502)

93. Theories and key technologies of medium infrared space optical communication in atmospheric environments (F0503)

94. Distributive optical fiber sensing enhancement for multi parameter percepiton (F0503)

95. Mechanisms and key technologies of large scale micro nano structured black bodies for infrared remote sensing measurements (F0504)

96. Key technologies of high energy 2 μ m laser driven EUV light sources (F0506)

97. Laser radar 3D detection for upper sea water (F0507)

98. Synchronous fast detection technologies for large complex optical surfaces and subsurface defects (F0508)

99. Multi dimensional regulation of pixel thermo radiation of fixed direction emission devices (F0508)

100. 3D photacoustic-ultrasound multi mode imaging of the total mammary gland (F0511)

101. Nonlinear optical pathological imaging based on micro cavity enhancement (F0511)

102. Quantum light source research based on low dimensional materials and topological micro cavity (F0513)

103. Multi channel heterogeneously integrated light transceiver chips for optical interconnected computation power (F0514)

104. Key technologies of quantum sensing chips based on compressed light III-V/lithium niobate (F0515)

Department of Management Sciences

In 2025, the Department of Management Sciences received a total of 159 Key Program applications, and funded 34 projects, with a total funding in direct costs of 52.90 million *yuan*. The average funding amount (direct cost) was 1.56 million *yuan* per project.

During the 15th Five-Year Plan period, the DMS will release Key Program funding areas annually. The Key Program projects should focus on the following three aspects: (1) frontier scientific issues that promote discipline development, have the potential to produce innovative achievements, and generate international impacts; (2) important theoretical and application issues that are urgently needed and feasible to promote economy development, society development, reform and opening-up, and the improvement of China's comprehensive competitiveness; (3) systematic and in-depth innovative research, which explores management theories and practices with Chinese characteristics and has a sound research background or good potential for discipline development.

The funding areas described in this *Guide* outline the main contents and scopes. The titles of applications do not necessarily need to be exactly the same as the funding areas of Key Program listed below. Applicants are required to have solid research experiences and abilities in the relevant areas that they are applying for. Applicants are encouraged to fully leverage their academic strengths, define clear research objectives, highlight research priorities , accurately identify and effectively

address one or several key scientific questions, and achieve theoretical innovation. In addition, applications are required to combine theories with practice, discover key scientific issues from important practical management issues from perspectives of China's situations and the nation's key demands, and conduct in-depth research, and try to provide new approaches to address practical management issues. Emphasis should be given to the scientific methodologies, and the application of scientific approaches, and take real data and actual cases as the fundamental information of their research.

Applicants who apply for Key Program of the DMS should choose the applications codes indicated after the Key Program areas in the Application Code 1 field, and select the name of the corresponding areas in the Appendix of the application. Applications that fail to do so will be not be accepted.

In 2026, the DMS plans to fund about 35 projects in the following Key Program areas. The funding amount (direct cost) will be about 2.00 million *yuan* per project with a duration of 5 years.

Funding areas for Key Program in Management Sciences in 2026 are as follows:

1. AI-Based System Modeling and Decision-Making

(1) Theories and Applications of Large Language Model-Empowered Complex System Optimization Modeling (G0101)

(2) Reinforcement Learning-Based Decision Theories and Methods for Complex Supply Chains (G0102, G0109)

(3) Generative Intelligent Modeling and Simulation Optimization for Stochastic Service Systems (G0102, G0110)

(4) AI and Optimization Theory Co-Driven Urban Renewal Research (G0102, G0115)

(5) Behavioral Modeling and Decision-Making in Human-AI Collaboration (G0103, G0106)

2. Digital Intelligence Technology-Based Risk and Resilience Management in Complex Networks (G0101, G0113)

3. Management Decision Theories and Algorithms Based on Large-Scale Small-Sample Data (G0102, G0103)

4. Optimization Theories and Algorithms for Non-Convex Problems in Supply Chain Management (G0102, G0109)

5. Incentive Mechanisms and Cooperative Scheduling for Prosumers in Large-Scale Vehicle-Grid Interaction (G0102, G0110)

6. Data-Centric Trustworthy Large Language Models: Theoretical Foundations and Key Algorithms (G0105, G0111)

7. AI-Driven Emotional Design Theories for Service Systems (G0106, G0110)

8. Efficacy Research for Visual Display Terminal (VDT)-Based Tasks (G0108)

9. Decentralized Finance Risk Prevention and Control Empowered by Large Models and Smart Contracts (G0114)

10. Planning and Operations Management of Demand-Responsive Passenger Transportation (G0116)

11. AI-Enhanced Traffic Control Theories and Methods for Megacities (G0116)

12. Multi-Modal Travel and Emergency Management for Air-Ground Coordination (G0116)

13. Key Management Issues in Chinese Firms' Globalization

(1) International Human Resource Management and Organizational Integration of Internationally of Globalizing Firms (G0204)

(2) International Marketing and Localized Product Design Innovation (G0207)

(3) Cross-Border Financial Risk Management and Financing Model Innovation (G0210)

(4) Digital and Intelligence Technology-Driven Identification and Management of New Risks in Firm Globalization (G0214)

14. Marketing Innovation Driven by Marketing Intelligence

(1) Pathways and Approaches for Enterprise Marketing Transformation Driven by Marketing Intelligence Technologies (G0207)

(2) Mechanisms of Consumer Behavior Transformation Driven by Marketing Intelligence Technologies (G0207)

(3) Mechanisms and Methods of Intelligent Technology-driven Dynamic Supply -Demand Matching(G0207)

15. Restructuring of Innovation Governance Systems of Private Enterprises Empowered by Artificial Intelligence Technologies (G0203)

16. Mechanisms of Information Disclosure Behavior under the Intervention of Artificial Intelligence Technologies (G0206)

17. AI-Driven Organizational Change in Enterprises (G0208)

18. Optimization of Platform Supply Chain Operational Decision-Making with the Introduction of Intelligent Agents (G0211)

19. Synergistic Optimization of State-Owned Enterprise Governance Enabled by Digital Technologies (G0212)

20. Development Pathways of Corporate Venture Capital Ecosystems Oriented toward Strategic Frontier Areas (G0213)

21. Economic Systems and Intelligent Regulatory Risk Prevention

(1) Computational Economics of Global Value Chain Restructuring: Theory Construction, Empirical Testing, and Estimation Simulation (G0303)

(2) China's periphery Economic Cooperation Mechanisms and Risk Prevention Under Great Power Competition and Cooperation (G0306)

(3) Stablecoin Shocks and Global Financial Stability: Dynamic Modeling and Risk Assessment (G0307)

(4) Intelligent Regulation Theories and Mechanisms for Science and Technology

Finance (G0307)

22. Economic Forecasting Theories and Policy Evaluation Based on Multimodal Data Fusion (G0301)

23. Modeling and Governance of Multi-Sided Interaction Mechanisms in Digital Platforms from a Network Game Perspective (G0304)

24. Incentive-Compatible Design, Dynamic Optimization, and Quantitative Evaluation of Macroeconomic Policy Coordination (G0305)

25. Measurement Systems and Dynamic Evolution Mechanisms of the Digital Industry Intelligence (G0309)

26. Synergistic Development Mechanisms and Pathway Innovation of Technology-Driven Smart Agriculture Across the Whole Industry Chain (G0311)

27. Driving Mechanism Design and Policy Coordination for Urban/County Economic Transformation (G0312)

28. Digital Intelligence Healthcare and Emergency Management

(1) Trustworthy AI-Enabled Healthcare System Construction and Management Mechanism Innovation (G0405)

(2) Big Data-Driven Synergy Mechanisms and Policy Optimization for Healthcare, Insurance, and Pharmaceuticals (G0405, G0406)

(3) Demand Assessment and Resource Allocation Optimization for Long-Term Care of the Elderly in the context of Population Aging (G0410)

(4) AI-Driven Paradigm Shift and Coordination Mechanisms in Emergency Management (G0409, G0410)

29. Emerging Technologies of Risk Assessment and Regulation (G0404)

30. Mechanisms and Governance of Public Service Complexity Driven by Digital Intelligence (G0401)

31. Multi-Dimensional Resilience Measurement and Collaborative Governance Mechanisms for Urban Renewal (G0409, G0413)

32. Non-CO_2 Greenhouse Gas Emission Reduction and Local Adaptation Strategies (G0411)

33. Performance Evaluation, Spatial Modeling, and Policy Research on Regional Environmental Collaborative Governance (G0412)

34. Dynamic Monitoring and Collaborative Governance Policies for Urban-Rural Employment Development (G0415)

Department of Health Sciences

In 2025, the Department of Health Sciences (DHS) received a total of 831 applications for the Key Program in 42 thematic areas and macro-areas-guided Key Programs and funded 127 projects with a total funding of 292.00 million *yuan* in direct costs and an average funding amount of 2.2992 million *yuan* in direct costs per

project. **In 2026, the funding plan for the Key Program will continue to consist of two categories: Key Programs applied under thematic areas and Key Programs guided by macroscopic areas. The average funding amount (direct cost) is about 2.30 million *yuan* per project, with a duration of 5 years.**

Based on national needs, discipline development strategies and the priority funding directions in the field of health sciences, the DHS proposes 42 thematic areas for 2026. Applicants are encouraged to independently determine the project title, research content and research approach based on the scope of the key program areas. **In the "Annotations" section, applicants should select one of the following 42 areas of Key Program; in the column of Application Code 1, the corresponding application code should be selected according to the application code indicated after the funding area.**

To ensure timely support of the key scientific issues addressing significant national demands and science frontiers in the world, the DHS continues to fund the **Key Program in macroscopic areas**. Applicants who have achieved significant progress or innovative findings in the initiation, development, prognosis, diagnosis, treatment and prevention of major diseases, may independently choose research directions to apply for the Key Program if the planned research content falls out of the scope of the Key Program. In this case, **applicants should indicate "macroscopic areas" in the "Annotations" section,** and **may choose a relevant application code on their own. In addtional to preparing the applicaiton in accordance with standard requirements, applicants should provide a description of significant innovative progress achieved within 1000 words. Application without this description will not be accepted.**

Applications that fail to correctly select "Annotations" and the application code as specified above will not be accepted.

For the requirements and important notes on application preparation, please refer to the general introduction of Key Program in this *Guide*.

Special instructions for applicants:

(1) The Department's requirements in the "Funding Areas and Instructions" section also apply to the Key Program. Applicants should carefully read and follow the instructions.

(2) In 2026, the Department will generally not fund applicants who received high-intensity funding from NSFC in 2025 [such as Key International (Regional) Joint Research Program, Major Program, Key Program of Major Research Plan or Key Programs of Joint Funds, Special Fund for Research on National Major Research Instruments], or are applying with a proposal of similar research contents to their ongoing national scientific projects funded by other governmental agencies.

Applications fail to follow the requirments will not be accepted.

The funding areas for Key Program in DHS in 2026 are as follows:

1. Progression mechanisms and precision intervention strategies for chronic

obstructive pulmonary disease (COPD) (H01)

2. New mechanisms and novel interventions for arrhythmias (H02)

3. Cellular senescence and vascular diseases (H02)

4. Interaction mechanism and intervention between malignant clones of hematologic malignancies and bone marrow microenvironment (H08)

5. Drug resistance mechanism and intervention of relapsed/refractory hematological malignancies (H08)

6. Pathogenesis and intervention strategies of visceral fibrosis in the digestive system (H03)

7. Inflammation regulatory mechanism and intervention of urinary system diseases (H05)

8. The mechanisms and interventions of endocrine-neuro-immune interactions in metabolic diseases (H07)

9. Aging and functional remodeling of oral maxillofacial tissues and organs (H15)

10. Research on the pathogenesis, diagnosis, and treatment of otorhinolaryngology diseases (H14)

11. Genetic mechanisms and translation in neurodevelopmental and neurodegenerative diseases (H09)

12. Neurobiological mechanisms and interventions of chronic pain comorbidities (H09)

13. Mechanisms of stress-related mental disorders and neuromodulation (H10)

14. Dynamic patterns and critical nodes in the transition from aging to disease (H19)

15. The mechanisms and interventions of intrauterine environment disorder on adverse pregnancy outcomes (H04)

16. Common pulmonary immune characteristics and differential regulatory mechanisms in respiratory diseases (H11)

17. Immunotherapy and immune remodeling for autoimmune diseases (H11)

18. Artificial intelligence empowered research and translational application of birth defects/rare diseases (H04/H23)

19. Mechanisms and precise interventions for stress-induced injury in special or extreme environments (H24)

20. AI powered rapid and accurate identification of biological evidence (H25)

21. Application research of organoids in new drug screening, regenerative medicine, and disease modeling (H28)

22. Mechanisms and intelligent diagnosis of vascular related diseases based on innovative imaging technologies (H27)

23. Mechanisms of infection and pathogenesis of major pathogens and intervention strategies (H21/H22)

24. AI-enabled discovery of novel biomarkers, precision diagnostic technologies, and clinical applications for major diseases (H26)

25. Metabolic regulation mechanisms and intervention strategies for locomotor system diseases (H06)

26. Effects and mechanisms of rehabilitation intervention on neurological and motor dysfunction (H20)

27. Mechanisms of cancer immunotherapy resistance and identification of therapeutic targets (H18)

28. Interactions between internal environment and tumor microenvironment (H18)

29. Key technologies and translational research for early diagnosis and recurrence monitoring of cancer (H18)

30. Aberrant DNA damage repair and tumor evolution (H18)

31. Homeostatic imbalance, reconstruction and intervention of important skin diseases (H12)

32. Mechanism, assessment and intervention of radiation injury (H29)

33. Population health effects of environmental exposure (H30)

34. the Role and prevention strategies of nutritional metabolism in chronic diseases (H30)

35. Delivery of biomacromolecular drugs to the central nervous system (H34)

36. Research on synthetic biology-enabled immunomodulatory biomacromolecular drugs (H34)

37. Mechanism and target discovery for comorbid emotional disorders in autoimmune diseases (H35)

38. Regulation and drug development of tertiary lymphoid structures in tumors (H35)

39. Research on the biological basis of Zang–Fu correlation theories and the therapeutic mechanisms of related prescriptions (H31)

40. Research on the neural circuit mechanisms of acupuncture in the prevention and treatment of neurodegenerative diseases (H31)

41. Research on the biosynthetic pathways and efficient biomanufacturing of trace highly bioactive components from traditional Chinese medicines (H32)

42. Research on strategies and mechanisms of integrative Chinese and western medicine in the prevention and treatment of autoimmune diseases (H33)

Major Program

Major Porgrams are designed to address major scientific questions at the science frontiers and in response to the major needs of national economic, social and S&T development and national security. Major Programs are deployed in advance, conduct multidisciplinary research, and leverage their supporting and guiding roles in improving the capability of original innovation in basic research in China.

The duration of a Major Program project is 5 years.

Applicants should meet the following qualifications:

(1) Have experience in undertaking basic research projects;

(2) Hold a senior academic position (or an equivalent title).

On-site postdoctoral researchers, students currently studying for a graduate degree and those without an employer or whose employer is not registered at NSFC are not eligible to apply for Major Programs.

Specific calls for Major Programs will be announced separately.

Major Research Plan

Major Research Plans are designed to address major national strategic demands and key scientific frontiers. Through strengthened top-level design, Major Research Plans refine scientific objectives, gather advantageous research resources and form project clusters wwith relatively unified objectives and orientations. Major Research Plans facilitate crossing and convergence of multiple-disciplines, foster innovative talents and teams, promote the original innovation ability of basic research in China and provide scientific support for the national economic, social development and national security.

Major Research Plans follows the principles of "limited objectives, stable support, integrated sublimation, and leapfrog development." The term of a Major Research Plan is generally 8 years.

Applicants for Major Research Plan projects must meet the following eligibility requirements:

(1) Have experience in undertaking basic research projects.

(2) Hold a senior professional position (or an equivalent title).

On-site postdoctoral researchers, students currently studying for a graduate degree, or scientific and technical personnels who do not have an employer or whose employer is not a host institution registered at NSFC are not eligible to apply as applicants.

Major Research Plan projects consist of three subcategories, namely, the Cultivation Projects, Key Support Projects and Integration Projects. Applicants should prepare proposals in accordance with the requirements of the relevant Major Research Plan projects in this Guide and the specific proposal writing guide for Major Research Plan projects. Applications should emphasize definite objectives and key breakthroughs, featuring interdisciplinary research, and clearly articulate the contributions to solving critical scientific issues and fulfilling the overall goals of the Major Research Plan. Applicants should select "Major Research Plan" for the “funding category” field in the application form, and select "Cultivation Projects", "Key Support Projects" or "Integration Projects" as the sub-category, and fill the title of the specific Major Research Plan in the "Annotation" field.

The duration of Cultivation Projects is generally 3 years, and 4 years for Key Support Projects. The duration of Integration Projects is determined by the Steering Committee of each Major Research Plan based on actual needs. For Cultivation Projects and Key Support Projects, the number of collaborating institutions shall not

exceed two. For Integration Projects, the number of collaborating institutions shall not exceed four. The key participants of an Integration Project must be actual contributors to the project, and the total number of key participants shall not exceed 9.

To achieve the overall scientific objectives and multi-disciplinary integration of the Major Research Plan, principal investigators who receive funding are expected to comply with the relevant regulations on data and information management and sharing. During project implementation, attention should be paid to the inter-supportive relationships with other projects under the same Major Research Plan.

To strengthen academic exchange and promote research aligned with the Major Research Plan's objectives, as well as multi-disciplinary collaboration and integration, each Major Research Plan will organize an annual academic conference for funded projects and periodically hold academic symposia in relevant fields. Principal Investigators of funded projects are obliged to participate in these academic activities.

During the centralized application period, the Department of Interdisciplinary Sciences will accept applications for the following 17 Major Research Plans. Specific guidelines will be announced separately.

1. Scientific Basis of Critical Metal Metallurgy

Critical metals refer to rare, scattered, rare earth, and precious metals that are essential for the development of strategic emerging industries such as new energy and electronic information, and those face high supply risks and require prioritized support. Major Research Plan "Scientific Basis of Critical Metal Metallurgy" aims to address the needs of upgrading the metallurgical industry and ensuring the supply chain security of strategic emerging industries.

2. Explainable and Generalizable Next-Generation Artificial Intelligence Methods

Addressing the major national strategic needs for AI development, this Major Research Plan focuses on fundamental scientific issues in AI. It aims to develop new methodological systems for AI, promote basic research and talent cultivation in AI in China, and support the country's leading position in science and technology in the world.

3. Battery Systems Beyond Conventional Paradigms

This Major Research Plan aims to address major national needs of achieving the goals of carbon peak and carbon neutrality and national security, and focusing on key scientific issues and technical bottlenecks in energy storage batteries and power batteries in terms of energy density, power density, safety, environmental adaptability, resources, and costs, develop unconventional battery systems and related theories, providing scientific support for the innovative development of next-generation batteries in China.

4. High-Precision Quantum Manipulation and Detection

Addressing the major national strategic needs for developing quantum science and technology, this Major Research Plan focuses on key scientific issues and

technical challenges in quantum information science and its interdisciplinary applications, and aims to develop new principles and methods, explore sustainable technological pathways, strengthen basic research and talent cultivation in quantum science and technology in China, and promote the country's position in quantum science and technology.

5. Scientific Foundation of Surfaces and Interfaces for Future Technologies

Surface and interface science underpins many fundamental disciplines such as matter, energy, and information, and serves as a common scientific foundation for major national strategic needs including catalysis, superconductivity, and chips. This Major Research Plan addresses core scientific issues in surfaces and interfaces, conducting research on precise detection, accurate calculation, and precise control of surface/interface structure, electronic states, and properties. It aims to develop new methods, tools, and theories for surface/interface research, laying a solid scientific foundation for breakthroughs in several future key technologies and contributing to the high-tech development in China.

6. Scientific Foundation and Control Mechanisms for High-Efficiency Flight in Multi-Physical Fields

Addressing the major national needs for global reach high-speed civil aviation within about one hour and scheduled space transportation between Earth and orbit, this Major Research Plan focuses on fundamental issues of efficient flight in multi-physical fields. With an emphasis on the overall two-stage-to-orbit concept, it aims to establish theories and methods for designing reusable, efficient, and intelligent vehicles across large airspaces and wide speed ranges, achieving breakthroughs in core foundational theories and technologies such as continuous configuration morphing, active flow control, and intelligent control, thereby providing theoretical foundations and technical support for the innovative development of space transportation systems.

7. Scientific Foundations of Cutting-Edge Technologies for Integrated Circuits

Addressing the major national strategic needs for high-performance integrated circuits, this Major Research Plan focuses on fundamental issues arising from the significant increase in chiplet integration density, tackles key challenges in the mathematical foundations, key information science technologies, and physical theories of process integration for integrated chips. It aims to advance chip research in China and provide foundational theories and technical support for developing new pathways to improve chip performance.

8. Fundamental Research on Atomic-Scale Manufacturing

Atomic-scale manufacturing involves controlling the structure and composition of materials at the atomic scale. Its core is to achieve specific functions through precise atomic manipulation, surpassing the precision limits of traditional manufacturing techniques and realizing atomic-level transformation and efficient

utilization of materials. By optimizing matter transformation and energy utilization at the atomic scale, it enables on-demand customization of material structures and properties, laying the scientific and technological foundation for realizing disruptive technologies, upgrading strategic industries, and enhancing national security competitiveness.

9. Digital Decoding of Immunity

Immunity is the body's comprehensive ability to resist pathogen invasion, eliminate antigenic foreign substances, and monitor and maintain a healthy homeostatic state. The immense diversity and complexity of the immune system are key foundations of immunity, yet traditional research models have failed to systematically reveal the rules governing the generation and evolution of immunity. This Major Research Plan encourages a paradigm shift towards research combining scientific inquiry with data-driven approaches. It supports projects that generate high-quality, scalable, and integrable immunity data, establish unified data repository management mechanisms and platforms, and standardize the acquisition of large-scale human immunity data. Through digital presentation and deep decoding of large-scale immunity data, it aims to achieve a panoramic understanding of the human immune system's operating mechanisms under healthy and diseased conditions, elucidate the scientific connotation of immunity from multiple perspectives, promote precision diagnosis and treatment, and serve the "Healthy China" strategy.

10. Deciphering the Glycocode of Life

Glycans are the generic term for carbohydrate molecules in biological systems, and are also fundamental biomolecules that constitute life. They can exist independently or form structurally rich glycoconjugates with proteins and lipids, playing crucial roles in life processes and being closely related to human health and diseases. The high complexity of glycan structure and function endows them with immense information capacity, which cannot be simply deduced from the genetic code. Therefore, glycomics research has become a significant scientific frontier in the post-genomic era. Oriented towards improving human life and health, this Major Research Plan adopts a new "Glycocode" perspective to decipher the complex mapping relationship between glycan sequence/structure and biological function, expand understanidng of the mechanisms of life information regulation, and establish an innovation system ranging from technology development, functional interpretation, precise regulation to clinical application, laying the foundation for glycan-related biomedicine development in China.

11. Fundamental RNA Research Empowering Drug Innovation

Ribonucleic acid (RNA) is considered as the original molecular form of life, participating in and regulating important life processes across multiple dimensions. RNA research continuously revolutionizes our understanding of the basic principles of life activities, becoming the most rapidly developing research frontier in the life and health sciences. Breakthroughs in RNA science hold immense application

potential. Particularly, the emerging RNA drug industry is becoming a key component of new quality productive forces. RNA drugs offer advantages such as strong target specificity, a large number of druggable targets, high therapeutic efficacy, and short development cycles, positioning them as leading candidates for the next generation of drug development. Insufficient research on the complex dynamic characteristics of RNA and its regulatory mechanisms, coupled with a lack of fundamental enabling technologies for RNA drug creation, currently hinders innovation. This Major Research Plan addresses the bottleneck issues in RNA drug development, based on fundamental RNA research and technological innovation, to empower the creation of RNA drugs. The forward-looking deployment and implementation of this plan will provide new opportunities for the development of RNA biomedicine in China.

12. Deep Planetary Driving Mechanisms of the Earth's Habitability

Focusing on the crucial role of Earth's internal spheres (core, mantle, and crust) in controlling planetary habitability, this Major Research Plan addresses major scientific questions concerning cross-sphere dynamic processes and energy-material cycles, with deep volatiles as the key link. Through comprehensive, cross-disciplinary and cross-scale research integrating earth sciences, mathematics, physics, chemistry, information science, and materials science, it aims to provide fundamental theories and technical support for unraveling the mystery of the deep engine driving Earth's habitability.

13. Fundamental Research on Intelligent Software for Human-Cyber-Physical Fusion

Addressing the major national strategic needs for independent innovation in critical software, and focusing on significant scientific issues related to the mathematical/physical foundations, engineering construction, operation and maintenance evolution, and quality assurance of new paradigms for intelligent software, this Major Research Plan integrates interdisciplinary research from information science, mathematics, physics, engineering, and management. It aims to provide fundamental theories, key technologies, and talent support for scientific breakthroughs in the field of critical software in China.

14. Fundamental Scientific Issues of Extreme Flow and Heat Transfer of planetary atmosphere entry vehicles

During deep space exploration missions, spacecrafts enter extraterrestrial planetary atmospheres or return to Earth's atmosphere at speeds exceeding the first cosmic velocity. The surrounding gas undergoes intense compression and severe friction. The spacecraft's enormous kinetic energy converts into internal energy within the gas, which is transported and transferred by the flow, inducing extreme flow and heat transfer phenomena accompanied by ultra-high temperature physicochemical reactions, severely impacting flight safety. This Major Research Plan addresses the major needs of deep space exploration missions, aiming to scientifically understand and precisely control the key physical mechanisms and

effects of planetary entry flight, innovate and develop theories for extreme flow and heat transfer, lead scientific frontiers and technological development in related fields.

15. Mechanisms of Cell Cluster Formation and Regulation

Cell clusters, as the material basis for organ development and individual growth in higher organisms, exhibit complex characteristics such as high heterogeneity, spatiotemporal dynamics, autonomous adaptability, and multi-dimensional interactions. Their dynamic formation and precise regulation are current research frontiers in life and health sciences. Addressing the key scientific question of understanding the cross-scale regulatory rules from molecular self-assembly mediating cell interactions to the emergence of cell cluster functions, this Major Research Plan is driven by interdisciplinary research. It aims to develop high-resolution in-situ characterization and manipulation tools for dynamically analyzing and precisely intervening in cell clusters, decode the complete picture of cell clusters from multiple perspectives including biomolecular condensates, cell fate evolution, and dynamic microenvironment; elucidate their formation mechanisms, plasticity evolution, and rules of functional emergence; and develop new data-intelligence-driven research paradigms. It will empower an innovation system spanning technology development, data standards, mechanism analysis, plasticity regulation, and clinical translation, providing theoretical and technical support for the development of regenerative medicine and biomedicine.

16. Evolution and Critical Transitions of the Coastal Zone Complex System

Focusing on the evolution, critical transitions, and dynamics of the coastal zone complex system, this Major Research Plan addresses major scientific questions concerning the co-evolution and driving mechanisms, critical transitions, and future development trends and sustainability of this system. Through integrated research across earth sciences, mathematics, physics, information science, and management science, it aims to lead the frontier of scientific theory for coastal zone complex systems, provide technical support for coastal zone management and decision-making, and serve the implementation of China's maritime power strategy and the response to global challenges.

17. Scientific Foundation for Efficient Material Conversion in Natural-Artificial Fusion

Focusing on the scientific foundation for efficient material conversion through the fusion of natural and artificial processes, this Major Research Plan addresses major scientific questions concerning the analysis of biological material conversion processes, efficient energy capture, electron transfer, and material conversion, and the construction of efficient natural-artificial fusion material conversion systems. Through integrated research across chemistry, physics, life sciences, and medicine, it aims to lead the frontier of theories for efficient material conversion and enhance China's innovation capability, talent pool, and overall level in the field of natural-artificial fusion material conversion.

Young Scientists Fund (B)

The Young Scientists Fund (B) supports young scholars who have made notable achievements in basic research. It encourages them to focus on international scientific frontiers and major national needs, strengthen the formulation of scientific questions, and independently select research directions to conduct innovative research. This fund aims to promote the rapid growth of young scientific and technological talents and cultivate a group of outstanding researchers expected to reach the forefront of world science and technology.

Scientific and technical personnel from host institutions applying for the Young Scientists Fund (B) must meet the following qualifications:

(1) Consciously study and implement the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, uphold high scientific ethics, and exemplarily practice the spirit of scientists in the new era;

(2) Abide by the laws and regulations of the People's Republic of China and the relevant management regulations of the National Natural Science Fund;

(3) By January 1 of the application year, male applicants must be under the age of 38 [born on or after January 1, 1988], and female applicants must be under the age of 40 [born on or after January 1, 1986];

(4) Hold a senior professional position (title) or a doctoral degree;

(5) Have experience in undertaking basic research projects or conducting other basic research;

(6) Have no formal employment in institutions outside Chinese Mainland;

(7) Ensure that the time devoted to research work at the host institution during the funding period is no less than 9 months per year.

In 2026, the Young Scientists Fund (B) continues to be open to scientific and technical personnel from host institutions in Hong Kong and Macao, who will follow the same funding model and evaluation standards as applicants from Mainland host institutions. In addition to meeting the conditions specified in items (1), (2), (3), (4), (5), and (7) above, applicants must also meet the following qualifications:

(1) Abide by the Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China, the Basic Law of the Macao Special Administrative Region of the People's Republic of China, and the relevant management regulations of the National Natural Science Fund;

(2) Be formally employed by a host institution in Hong Kong or Macao.

The following personnel are not eligible to apply for the Young Scientists Fund

(B):

(1) Those who have previously received funding from the Young Scientists Fund (A) (including the former National Science Fund for Distinguished Young Scholars) or the Young Scientists Fund (B) [including the former Excellent Young Scientists Fund and the former Excellent Young Scientists Fund (Hong Kong/Macao)];

(2) Those applying for the Young Scientists Fund (A) in the same year;

(3) Postdoctoral researchers or individuals currently studying for a graduate degree.

Special reminders to applicants:

In 2026, the Young Scientists Fund (B) will implement a lump-sum funding policy. The funding amount for each project is 2 million yuan. The project duration is 3 years.

In 2026, according to the relevant requirements of central authorities for the overall coordination and linkage of national science and technology talent programs, an individual may undertake only one program at the same level of national science and technology talent programs. An individual may apply for only one program within the same application year. Applications for programs at a lower level after having been supported at a higher level are not permitted.

In 2025, the Young Scientists Fund (B) received 9,495 applications and funded 800 projects, with a total funding amount of 1,600 million yuan.

Funding Statistics for the Young Scientists Fund (B) in 2025

Departments	No. of applications	No. of awards	Success rate (%)
Mathematical and Physical Sciences	1,036	94	9.07
Chemical Sciences	1,192	106	8.89
Life Sciences	1,254	110	8.77
Earth Sciences	1,036	76	7.34
Engineering and Materials Sciences	1,572	137	8.72
Information Sciences	1,340	112	8.36
Management Sciences	285	27	9.47
Health Sciences	1,164	96	8.25
Interdisciplinary Sciences	616	42	6.82
Total or average	**9,495**	**800**	**8.43**

The Young Scientists Fund (A)

The Young Scientists Fund (A) supports young scholars who have made outstanding achievements in basic research. It encourages them to focus on international scientific frontiers and major national needs, strengthen the formulation of scientific questions, and independently select research directions to conduct innovative research. This fund aims to promote the growth of young scientific and technological talents, attract overseas talents, and cultivate and foster a group of outstanding academic leaders who will reach the forefront of world science and technology.

I. Application Requirements for the Young Scientists Fund (A)

Scientific and technical personnel from host institutions applying for the Young Scientists Fund (A) must meet the following qualifications:

(1) Consciously study and implement the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, uphold high scientific ethics, and exemplarily practice the spirit of scientists in the new era;

(2) Abide by the laws and regulations of the People's Republic of China and the relevant management regulations of the National Natural Science Fund;

(3) By January 1 of the application year, male applicants must be under the age of 45 [born on or after January 1, 1981], and female applicants must be under the age of 48 [born on or after January 1, 1978];

(4) Hold a senior professional position (title) or a doctoral degree;

(5) Have experience in undertaking basic research projects or conducting other basic research;

(6) Ensure that the time devoted to research work at the host institution during the funding period is no less than 9 months per year.

In 2026, the Young Scientists Fund (A) continues to be open to scientific and technical personnel from host institutions in Hong Kong and Macao, who will follow the same funding model and evaluation standards as applicants from Mainland host institutions. In addition to meeting the conditions specified above, applicants must also abide by the Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China and the Basic Law of the Macao Special Administrative Region of the People's Republic of China.

The following personnel are not eligible to apply for the Young Scientists Fund (A):

(1) Those who have previously received funding from the Young Scientists Fund

(A) (including the former National Science Fund for Distinguished Young Scholars);

(2) Those currently undertaking a Young Scientists Fund (B) project [including the former Excellent Young Scientists Fund and the former Excellent Young Scientists Fund (Hong Kong/Macao)], unless applying in the year their current project's funding term expires;

(3) Those applying for the Young Scientists Fund (B) in the same year;

(4) Postdoctoral researchers or individuals currently studying for a graduate degree.

Special reminders to applicants:

To increase support for outstanding young talents and to identify and cultivate potential leading researchers in basic research at an early stage, in 2026, the Young Scientists Fund (A) will organize separate reviews and implement long-term stable support for male applicants under the age of 35 [born on or after January 1, 1991] and female applicants under the age of 38 [born on or after January 1, 1988]. Applicants have not formally commenced employment in China at the time of application are permitted to apply, provided that they have signed an employment contract or a letter of intent for employment with the host institution. If the grant is approved, the applicant must formally start employment at the host institution by the end of November 2026. Failure to do so will result in project termination.

In 2026, the Young Scientists Fund (A) will implement a lump-sum funding policy. The funding amount for each project is 4 million yuan (2.8 million yuan for projects in mathematics and management science). The project duration is 5 years.

In 2026, according to the relevant requirements of central authorities for the overall coordination and linkage of national science and technology talent programs, an individual may undertake only one program at the same level of national science and technology talent programs. An individual may apply for only one program within the same application year. During the support period of the Young Scientists Fund (B) or any other talent program at the same level, applicants who are understaking such projects are not eligible to apply for the Young Scientists Fund (A), except in the year when the funding term expires.

In 2025, the Young Scientists Fund (A) received 6,442 applications and funded

Funding Statistics for the Young Scientists Fund (A) in 2025

Departments	No. of application	No. of Awards	Success rate (%)
Mathematical and Physical Sciences	840	53	6.31
Chemical Sciences	816	55	6.74
Life Sciences	696	50	7.18
Earth Sciences	633	43	6.79
Engineering and Materials Sciences	1,027	77	7.50
Information Sciences	825	53	6.42
Management Sciences	160	13	8.13
Health Sciences	783	69	8.81
Interdisciplinary Sciences	662	37	5.59
Total or average	**6,442**	**450**	**6.99**

450 projects, with a total funding amount of 1,767.60 million yuan.

II. Application Requirements for the Young Scientists Fund (A, Continuation Funding)

To strengthen the continuous cultivation of outstanding talents and establish a long-term stable funding mechanism, NSFC will continue the Young Scientists Fund (A, Continuation Funding) program in 2026. Applications may be submitted by individuals meeting the following conditions:

1. Consciously study and implement the Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, uphold high scientific ethics, and exemplarily practice the spirit of scientists in the new era;

2. Abide by the laws and regulations of the People's Republic of China and the relevant management regulations of the National Natural Science Fund;

3. Have no formal employment in institutions outside Chinese Mainland;

4. Ensure that the time devoted to research work at the host institution during the funding period is no less than 9 months per year;

5. Be the Project Leader whose Young Scientists Fund (A) project funding term expires at the end of 2025.

In 2026, the Young Scientists Fund (A, Continuation Funding) will implement a lump-sum funding policy. The funding amount for each project is 8 million yuan (5.6 million yuan for projects in mathematics and management science). The project duration is 5 years.

The number of projects funded is expected not to exceed 20% of the total number of projects with funding terms expiring at the end of 2025. Please select the "Young Scientists Fund (A, Continuation Funding)" subcategory during the application process. When applying for the Young Scientists Fund (A, Continuation Funding), applicants should select the application code belonging to the same science department as that of their first funding period; applications across different science departments are not permitted.

The application for the Young Scientists Fund (A, Continuation Funding) is not counted within the total limit of applications and funded projects at the time of application, but it will be counted after formal acceptance.

Individuals with senior professional positions (titles) are limited to one application or participation in the same year for the following project types: Science Fund for Outstanding Research Groups, Science Fund for Creative Research Groups, Young Scientists Fund (A, Continuation Funding), and Science Fund for Collaborative Research Groups.

Principal Investigators currently undertaking or whose funding term has expired for a Young Scientists Fund (A, Continuation Funding) project (including the former continuation funding of the National Science Fund for Distinguished Young Scholars) are not eligible to apply for or participate in the Science Fund for Creative Research Groups.

In 2025, the Young Scientists Fund (A, Continuation Funding) funded 62 projects, with a total funding amount of 488.80 million yuan.

III. Supplementary Guideline Explanation for Adding the "Clinical Science"category to Young Scientists Fund (A) Applications

Following the characteristics of medical science and the growth patterns of clinical medical talents, the Young Scientists Fund (A) continues to pilot reforms in the scientific research evaluation system for clinicians and further advance the review mechanisms of clinical medical talent projects. This initiative encourages young clinicians to base their research on clinical practice, aiming to elucidaing disease mechanisms and improve clinical outcomes. This initiative encourages applicants to conduct innovative scientific research and technological exploration, cultivating and fostering a group of leading talents in clinical research with international influence.

An "Annotation" option for "Clinical Science" has been added to the Young Scientists Fund (A) application. Applicants who possess a medical practitioner's license and a senior professional position (title) in the health series, and who meet other application requirements for the Young Scientists Fund (A), may select this option. The Department of Medical Sciences will organize dedicated reviews for these applications. For applications selecting the "Clinical Science" annotation option, specific requirements are detailed in the application preparation instructions and proposal writing guide for the Young Scientists Fund (A) (Special for the Department of Medical Sciences) available in the Grants system.

Science Fund for Creative Research Groups

The Science Fund for Creative Research Groups supports outstanding academic leaders, both domestic and international, to independently choose research directions, establish and lead research teams to carry out innovative basic research, target international scientific frontiers and major national needs, tackle key challenges, and cultivate and foster research teams capable of establishing a presence at the international forefront of science.

The Science Fund for Creative Research Groups has two subcategories, Category A and Category B. Category B is specifically intended to fund teams composed of outstanding young researchers, providing them with more opportunities to take on major responsibilities and leadership roles, thereby accelerating their emergence as exceptional talents.

I. Application Requirements

Applicants and participants of the Science Fund for Creative Research Groups must meet the following conditions:

(1) Have experience in undertaking basic research projects or conducting other basic research.

(2) Ensure that the time devoted to research work at the host institution during the funding period is no less than 6 months per year.

(3) The academic leader and research team members should belong to the same host institution and have a sound foundation for collaboration.

(4) The academic leader, acting as the project applicant, must hold a senior professional position (title). Research team members, acting as participants, must hold a senior professional position (title) or a doctoral degree.

(5) For Category A projects, the applicant must be under the age of 55 on January 1 of the application year [born on or after January 1, 1971]. Key team members should be primarily early-career and mid-career researchers, and the number of key members should not exceed 5. For Category B projects, both the applicant and all key members must be under the age of 40 on January 1 of the application year [born on or after January 1, 1986], and the number of key members should not exceed 3.

Starting from 2026, the Science Fund for Creative Research Groups (Category B) is open to scientific and technical personnel from host institutions in Hong Kong and Macao, who will follow the same funding model and evaluation standards as

applicants from Mainland host institutions. In addition to meeting the conditions specified above, applicants must also meet the following qualifications:

(1) Abide by the Basic Law of the Hong Kong Special Administrative Region of the People's Republic of China, the Basic Law of the Macao Special Administrative Region of the People's Republic of China, and the relevant management regulations of the National Natural Science Fund;

(2) Be formally employed by a host institution in Hong Kong or Macao.

II. Application Limit Requirements

Applications for the Science Fund for Creative Research Groups are not counted within the total limit of applications and ongoing projects at the time of submission; however, they are counted within the total limit from the point of formal acceptance by NSFC until a funding decision is made, and after funding is awarded. Projects funded by the Science Fund for Creative Research Groups approved in 2024 and earlier (including 2024) are not counted within the total limit of applications and ongoing projects.

Individuals who have previously served as project leader for a funded Science Fund for Creative Research Group project are not eligible to apply as an applicant. The project leader and participants with senior professional positions (titles) of an ongoing Science Fund for Creative Research Group project are not eligible to apply for or participate in another application. Participants who have withdrawn from a Science Fund for Creative Research Group project or a Science Fund for Outstanding Research Groups project (including the former Basic Science Center project) are not eligible to apply for or participate in an application for 2 years.

Individuals with senior professional positions (titles) may apply for or participate in no more than one Science Fund for Creative Research Group project in the same year. In the same year, the total number of applications and participation for the Science Fund for Creative Research Groups, the Science Fund for Outstanding Research Groups, the Young Scientists Fund (A, Continuation Funding), and the Science Fund for Collaborative Research Groups must not exceed one.

Principal Investigators who are currently undertaking or have completed the funding period of a Young Scientists Fund (A, Continuation Funding) project are not eligible to apply for or participate in the Science Fund for Creative Research Groups.

In 2025, the Science Fund for Creative Research Groups (Category A) received a total of 385 applications and funded 34 projects, with a total direct cost of 334 million yuan; the Science Fund for Creative Research Groups (Category B) received a total of 650 applications and funded 31 projects, with a total direct cost of 308 million yuan.

The project duration for the Science Fund for Creative Research Groups is 5 years. The direct cost is 10 million yuan per project, and the indirect cost is 2 million yuan per project (for mathematics and management science, the direct cost is 8 million yuan per project, and the indirect cost is 2 million yuan per project).

Funding Statistics for the Science Fund for Creative Research Groups in 2025

Unit: 10,000 yuan

Departments	A			B		
	Applications Received	Projects Funded	Direct Costs	Applications Received	Projects Funded	Direct Costs
Mathematical and Physical Sciences	41	4	3 800	80	3	3 000
Chemical Sciences	40	4	4 000	79	4	4 000
Life Sciences	44	3	3 000	99	6	6 000
Earth Sciences	40	4	4 000	56	3	3 000
Engineering and Materials Sciences	56	5	5 000	106	5	5 000
Information Sciences	50	4	4 000	61	3	3 000
Management Sciences	10	2	1 600	16	1	800
Health Sciences	51	4	4 000	75	4	4 000
Interdisciplinary Sciences	53	4	4 000	78	2	2 000
Total or average	**385**	**34**	**33 400**	**650**	**31**	**30 800**

The Science Fund for Outstanding Research Groups

The Science Fund for Outstanding Research Groups aims to gather and integrate outstanding domestic research resources, targets at international science frontiers and major national needs through forward-looking deployment. It fullly leverages the strengths and distinctive characteristics of the science funding system, relies on high-level academic leaders, attracts and bring together outstanding S&T talents from different disciplines, and promotes in-depth cross-disciplinary integration, supports scientific personnel to conduct research and exploration in a relatively long-term and stable way, so as to produce a number of original achievements at international leading level, secure the dominant position in global sceintific landscape and establish a number of academic highlands with important international influence.

The Science Fund for Outstanding Research Groups has two subcategories, A and B. B is specifically designed to fund teams composed of outstanding young researchers, providing them with more opportunities to take on major responsibilities and leadership roles, thereby promoting their emergence.

I. Application requirements

Applicants and key participants for the Science Fund for Outstanding Research Groups should meet the following qualifications:

(1) Have the experience of undertaking basic research project or doing other basic research;

(2) The applicant should be an excellent research team with multi-disciplinary crossings at the scientific frontiers, including 1 academic leader and at most 4 key participants.

(3) As the applicant, the academic leader should be an internationally well known scientist in the field, with senior academic position (title), outstanding academic ability and a proven track record of coordinating and managing large-scale projects, strong coordination and cohesion, and able to assemble excellent researchers from various scientific backgrounds. Key participants should have senior academic position (title) and outstanding research achievements in related scientific fields and potential for continuous growth.

(4) For Category A projects, the applicant must be under the age of 60 as of January 1 of the application year [born on or after January 1, 1966], Key team

members should be primarily early-career and mid-career researchers. For Category B projects, both the applicant and key members must be under the age of 55 as of January 1 of the application year [born on or after January 1, 1971], and the average age of the applicant and key members must be under the age of 50.

The total number of the host institution and collaborative research institutions must not exceed three.

II. Application Limit Requirements

The Science Fund for Outstanding Research Groups (including the former Basic Science Center Program, limited to the Principal Investigator and key participants) is subject to a joint restriction on the total number of projects for researchers applying for and undertaking with NSFC's Major Program (limited to PI and major participants with a senior professional rank or title), Special Fund for Research on National Major Research Instruments (limited to PI and major participants with a senior professional rank or title of the department-recommended projects), National Key Research and Development Program (excluding Young Scientist Program, Technological Innovation Fund for Technology-based Small and Medium-sized Enterprises and International Cooperation Programs; limited to the PI and sub-project PIs), the National S&T Major Program (excluding Young Scientist Program; and limited to PI and sub-project PIs). The number of projects applied for and undertaken by a applicant at the same time shall not exceed two in principle. Unless specified otherwise, projects for which the funding period expires in the year of application are not counted within the limit. Before submitting an application, the academic leader should confirm that key members of the application team meet the above requirements.

An application of the Science Fund for Outstanding Research Groups (including the former Basic Science Center Program) is not counted in the total number of application and on-going projects at the time of submission; however, it is counted within the total limit from the point of formal acceptance by NSFC until a funding decision is made, and after funding is awarded. An application formally accepted but fails to reach the on-site investigation is not counted. The principal investigator and key members of a funded project of the Science Fund for Outstanding Research Groups, from a funding decision is made by NSFC until the project expires, shall not apply for or participate in other types of program except for the Young Scientists Fund (A), Young Scientists Fund (B), strategic research projects under the Major Program, and S&T activity projects under the Special Program.

The total number of applications for Special Fund for Research on National Major Research Instruments (department-recommended projects) and the

Science Fund for Outstanding Research Groups for one applicant within the same year cannot exceed one.

The total number of applications either as the PI or as a participant by individuals holding senior positions (titles) for the Science Fund for Creative Research Groups, the Science Fund for Outstanding Research Groups, the Continued Fund of Young Scientists Fund (A) and the International Collaboration Fund for Creative Research Teams shall not exceed one.

Principal investigators of an expired project of the Science Fund for Outstanding Research Groups (including the former Basic Science Center Program) are not eligible to apply for a new one. Principal investigators and the participants with senior academic positions (titles) of on-going projects of the Science Fund for Creative Research Groups program are not eligible to apply for the Science Fund for Outstanding Research Groups either as an applicant or participant, unless the project of the Science Fund for Creative Reseach is in the last year of the funding. Participants who have withdrawn from a Science Fund for Creative Research Group project or a Science Fund for Outstanding Research Groups project (including the former Basic Science Center project) are not eligible to apply for or participate in an new application for 2 years.

The funding duration of the Science Fund for Outstanding Research Groups program is 5 years. The direct cost shall not exceed 60 million yuan per project (for mathematics and management sciences, the direct cost shall not exceed 50 million yuan per project).

Tianyuan Fund for Mathematics

Tianyuan Fund for Mathematics is a special fund to integrate the collective wisdom of mathematicians, explore funding mechanism that suits the unique features of mathematics, and make China a leading country in mathematics. This fund supports researchers to conduct research while considering the features and demands of mathematics, fostering young talents, promoting academic exchanges, optimizing the research environment, and cultivating mathematical culture, so as to strengthen the innovation capability of China in mathematics. The fund mainly supports the following 7 types of programs in 2026.

1. Tianyuan Mathematics Center Program Program

The Tianyuan Mathematics Center Program Program aims to set up a platform to promote research cooperation and exchanges in various mathematical topics and interdisciplinary areas of study. Through a variety of academic exchanges and seminars, this program aims to bring together research teams to solve core scientific problems, deepen collaboration between experts from various fields at home and abroad, foster research talents, and promote interdisciplinary research between mathematics and other related disciplines or sub-fields, thus enhancing overall research of mathematics in China, forming leading research directions and advancing the development of the mathematical discipline.

The center should be based on a large region, strengthen its radiating effect within the region, and be oriented towards the whole country. Focusing on several frontier fields and important development directions of mathematics and its applications, the center should organize and undertake various academic activities under the Tianyuan Fund for Mathematics, including the Tianyuan Mathematics Summer School Program, the Tianyuan Mathematics Young Teacher Training Program, and the Tianyuan Mathematics Visiting Scholar Program.. The project title should be in the form of "Tianyuan xx Center of Mathematics". Applications should include the significance, scope, working plan, foudations and conditions of the proposed activities, and potential collaborating institutions and personnel.

In 2026, the Tianyuan Mathematics Center Program will selectively and continuously support re-applications from previously funded projects.. 5 such projects are planned to be funded. Among them, one will have a funding

duration of 5 years, with a funding intensity of 17 million yuan; four will have a funding duration of 1 year, with a funding intensity of 2 million yuan per project.

2. Tianyuan Mathematics International Exchange Center Program

The Tianyuan Mathematics International Exchange Center Program aims to build an international academic exchange platform. Oriented towards the international community and centering around the frontier research fields and important development directions of mathematics and its applications, it promotes in-depth exchanges and cooperation among domestic and international mathematicians on hot issues in the frontier fields.

The center is responsible for organizing and undertaking high-level mathematical exchange and seminar activities, and organizes 30 to 50 exchange and seminar projects every year. Each exchange and seminar project should invite several internationally renowned mathematicians and leading domestic scholars at the forefront of mathematical research to participate, and it will be carried out in the form of a combination of academic reports and open discussions.

In 2026, the Tianyuan Mathematics International Exchange Center Program will selectively and continuously support re-applications from previously funded projects. 1 project is to be funded for one year, with a funding intensity of approximately 10 million yuan.

3. Tianyuan Mathematics Young Researcher Program

The Tianyuan Mathematics Young Researcher Program aims to encourage young researchers to engage in research in mathematics and its applications, support the growth and development of young mathematical talents, and cultivate more future talents of mathematics. The funding duration for the Tianyuan Mathematics Young Researcher Program if from January 1, 2027 to December 31, 2028. And the funding intensity is approximately 100,000 yuan per project.

Application Requirements:

As of January 1 of the application year, male applicants should be under the age of 33 (born on or after January 1, 1993), and female applicants should be under the age of 35 (born on or after January 1, 1991).

Applicants should not have served as the principal investigator of a NSFC project.

Applicants should apply for the Tianyuan Mathematics Young Researcher Program independently, and the application should not include information of participants.

Postdoctoral researchers currently in a station are not eligible to apply for the Tianyuan Mathematics Young Researcher Project.

The Tianyuan Mathematics Young Researcher Program is open for application from August 20, 2026, to 16:00 on August 31, 2026. Applications for the Tianyuan Mathematics Young Researcher Project will not be accepted out of this period.

4. Tianyuan Mathematics Workshop / Advanced Seminar Program

Tianyuan Mathematics Workshop supports the organization of a series of courses on a specific topic for graduate students, guiding them into the frontiers of the discipline..The program requires a combination of foundational and specialized courses, with a certain scale and a duration of approximately three weeks. The application should include a teaching outline, course contents, and a list of the lecturers.

Tianyuan Mathematics Advanced Seminar mainly support research groups consisting of outstanding mid-career and young mathematicians who collaborate to host regular workshops and seminars key scientific problems at the international forefront of mathematics. A review paper in the relevant research direction is required after the workshop.

The funding duration for the Tianyuan Mathematics Workshop / Advanced Seminar Program is from January 1, 2027 to December 31, 2027, with a funding intensity of approximately 150,000 yuan per project.

5. Mathematical Culture and Communication Program

This program supports the publication of mathematics communication series or books, including books authored or translated by domestic scholars from outstanding foreign works. This program also supports the publication of influential national journals related to mathematical culture, mathematical communication, mathematics education, and mathematical modeling, with the goal of improving the quality and expanding the reach of these journals among the public. This program supports important national mathematical communication activities organized by universities, research institutions, science associations at or above the provincial level, and mathematical societies.

The funding duration of the Mathematical culture and communication program is from January 1,2027 to December 31,2027, with a funding intensity of approximately 100,000 yuan per project.

6. Tianyuan Mathematics Frontier Key Special Program

Aiming at the international academic frontiers, the Tianyuan Mathematics Frontier Key Special Program supports basic mathematical research targeting

major international forefront issues in mathematical science, and cultivates research teams that are willing to explore the most challenging scientific problems. The Academic Leading Group of the Tianyuan Fund for Mathematics conducts research and analysis based on the development trends of international mathematics and is responsible for approving the research topics to be supported each year. The annual guidelines for this program will be released separately.

7. Tianyuan Interdisciplinary Mathematics Key Program

Tianyuan Interdisciplinary Mathematics Key Program aims to promote the deep integration of mathematics with other disciplines and specialized fields. The program aims to facilitate the application of mathematics in other disciplines/fields, solve key mathematical problems in related fields and major engineering projects, and cultivate interdisciplinary research teams. The Academic Leading Group of the Tianyuan Fund for Mathematics is responsible for approving the key research topics to be supported each year. The annual application guide for this program will be released separately.

The submission period for the online application of the mathematics Tianyuan Program is divided into two periods: from March 1, 2026, to 16:00 on March 20, 2026; and from August 20, 2026, to 16:00 on August 31, 2026. After completing the application, the applicant shall submit the electronic application and its attachments online. All the attachment materials required in the application (the original version of relevant supporting materials, approval documents, and other paper materials required by special instructions) should all be uploaded as electronic scanned copies. The supporting institutions must confirm and submit their electronic applications and attached materials item by item through NSFC's Grants system before the application deadline. Hard copy application materials are not needed. After the project is approved, the host institution shall bind the signed and sealed harcopy page of the application into the final pages of the project funding plan and submit it together. The signature and seal information must be strictly consistent with the electronic application.

The applicants should select "Tianyuan Fund for Mathematics Program", and the sub-category description of "Tianyuan Fund for Mathematics", and in the "Annotations" section, one of the above types of programs should be selected according to the content of the application. For all applications, applicants should select the application code for the Mathematics as the "application code 1". Applications with incorrect or unselected application code 1 will not be accepted.

The Tianyuan Fund for Mathematics provides no indirect costs, and the applied funds are direct costs. During the implementation of the Tianyuan Fund for Mathematics projects, it is necessary to acknowledge that "the project is supported by the Tianyuan Fund for Mathematics of the National Natural Science Foundation of China".

Research Program of National Major Research Instruments and Facilities

The Research Program of National Major Research Instruments and Facilities is oriented towards scientific frontiers and national needs, with a strong focus on scientific objectives. It supports the development of original scientific research instruments and core components that play an important role in promoting scientific development, exploring natural laws, and broadening research fields, in order to enhance China's original innovation.

The Research Program of National Major Research Instruments and Facilities comprises two categories: department-recommended projects and freely-applied projects.

Funding for Research Program of National Major Research Instruments and Facilities in 2025

Unit: 10,000 yuan

Category	No. of applications	No. of awards	Direct cost	Average funding amount for direct costs (Unit: 10,000 yuan/project)
department-recommended projects	53	4	31410.25	7852.56
freely-applied projects	731	70	53229.78	760.43

The funding duration for projects of the Research Program of National Major Research Instruments and Facilities is 5 years, and the number of collaborative institutions in one project should not exceed 5.

1. Eligibility Requirements:

Applicants for the Research Program of National Major Research Instruments and Facilities should meet the following qualifications:

(1) Have experience in undertaking basic research projects;

(2) Hold a senior professional position (title). Postdoctoral research fellows, full-time graduate students, researchers without host institutions, and researchers whose host institutions have not been registered at NSFC are not eligible for application.

2. Requirements for application and budget for direct cost

(1) For freely-applied projects, applicants may submit research applications via their host institutions. The budget for direct costs is less than 10 million yuan

per project.

(2) Applications for department-recommended projects must be recommended by on of the following 13 departments: Ministry of Education, Chinese Academy of Sciences, Ministry of Natural Resources, Ministry of Industry and Information Technology, Ministry of Ecology and Environment, Ministry of Agriculture and Rural Affairs, National Health Commission, China Earthquake Administration, State Administration for Market Regulation, China Meteorological Administration, China Academy of Engineering Physics, Equipment Development Department and Logistic Support Department of Central Military Commission. The budget for direct costs of the department-recommended projects of the Research Program of National Major Research Instruments and Facilities should be no less than 10 million yuan per project.

3. Notes on the application

(1) Applicants should read this *Guide* carefully and prepare research proposals in accordance with the guidelines of the Research Program of National Major Research Instruments and Facilities. Please select the "Research Program of National Major Research Instruments and Facilities" from the funding categories, and choose either "freely-applied" or "department-recommended" as the funding subcategory. The application code shall be selected based on the research content from the application codes of relevant scientific departments, excluding the Department of Management Sciences..

(2) Research Program of National Major Research Instruments and Facilities (limited to the principal investigator of department-recommended projects and key senior technical personnel) is subject to a joint limit together with the Science Fund for Outstanding Research Groups (including the former Basic Science Center Program, limited to the principal investigator and core members), the Major Program (limited to the principal investigator and sub-project leaders), the National Key Research and Development Program (excluding projects for young scientists, small and medium-sized technology-based enterprises, and international cooperation; limited to the principal investigator and sub-project leaders), and the National Science and Technology Major Project (excluding projects for young scientists; limited to the principal investigator and sub-project leaders). In principle, the total number of projects (or sub-projects) concurrently applied for and undertaken by a researcher shall not exceed two. Projects (or sub-projects) for which the funding period expires in the year of application are not counted toward this limit. Before submitting a project application, the applicant shall confirm that both the applicant and the key participants meet the requirements of the aforementioned joint limit.

For researchers with senior academic rank (title), the total number of projects concurrently applied for and undertaken under the Research Program

of National Major Research Instruments and Facilities and the National Key R&D Program-"Basic Scientific Research Infrastructure and Major Research Instrument R&D" (Scientific equipment direction) shall no exceed one (including as applicant and main participant).

(3) Applicants should compile the project budget seriously and carefully based on the actual needs of instrument development, adhering to the principles of relevance to objectives, policy compliance, and economic rationality. NSFC will organize experts to review the budget, and projects whose requested funds significantly exceed the actual needs will not be funded.

International (Regional) Cooperation and Exchange Program

The International (Regional) Cooperation and Exchange Program supports scientists and researchers in conducting substantive international (regional) collaborative research and academic exchanges. Participants are encouraged to leverage international scientific resources to address global scientific frontier problems, national priorities, and shared human challenges. Guided by principles of equality, mutual benefit, and sharing of achievements, the program aims to foster collaborative opportunities, strengthen cooperative ties, and improve the quality of China's scientific research and its global competitiveness.

The International (Regional) Cooperation and Exchange Program consists of two categories: Key International (Regional) Joint Research Program, and International (Regional) Joint Research and Exchange Program funded under the Agreements/ MoUs.

Key International (Regional) Joint Research Program

The Key International (Regional) Joint Research Program (hereafter referred to as the Key Joint Research Program) provides funding for scientists and researchers with established collaborative foundations to conduct international (regional) cooperative research with overseas partners to address global scientific frontier problems, major national needs and common challenges facing humanity.

The Key Joint Research Program should fully leverage the academic strengths of both Chinese and foreign research teams, demonstrating the necessity and complementarity of the collaboration. This program is designed to encourage Chinese researchers to lead or participate in large-scale international scientific research initiatives, as well as to utilize major domestic and international research facilities for joint studies. Both parties should have a good foundation for cooperation, and pay attention to the sharing of results and the protection of intellectual property rights in the process of cooperative research.

The Key Joint Research Program comprises two categories: Guide-directed

projects and Freely-applied projects. For the Guide-directed projects, applicants must select the exact name of the prioritized research areas as listed in this Guide in the Annotation Section. The proposal should address key scientific issues in that area with innovative approaches. For Freely-applied projects, applicants should select “Freely-applied” in the Annotation Section and propose a research topic of their choice and must include a "Statement on the Basis and Necessity of Cooperation" (maximum 800 words) in the application preceding the "Background and Rationale" section .

1. Eligibility requirements

Applicants must meet the following eligibility criteria:

(1) Having the position/title of professor or associate professor;

(2) Must be the Principal Investigator (PI) of an ongoing or completed NSFC research grant with a minimum duration of 3 years.

(3) Having solid foundation of cooperation with overseas partners.

Their overseas collaborative partners should meet the following eligibility criteria:

(1) conducting scientific research abroad and independently leading a research laboratory or key research project;

(2) Holds a professional technical position (or an equivalent title) abroad equivalent to or higher than that of an associate professor.

Number requirements of Chinese cooperative research institutions:

The number of Chinese cooperative research institutions of Key Joint Research Program shall not exceed 2.

2. Attachment Documents and requirements

Apart from the Chinese application form, the applicants shall also submit the following documents:

(1) English Application Form: It can be downloaded from the NSFC's Grants System and must be submitted as an attachment along with the online application form. If the overseas collaborator is unable to sign the English application form, they shall send a signed confirmation letter via fax, scan, or other means, explicitly stating that they have read and accepted the content of the English application, and agree to participate in the project application and undertake the assigned research work. The confirmation letter shall be printed on the official letterhead of the foreign collaborator's university or research institution. The letterhead should include the collaborator's institutional information, including the university or research institution's logo, full name of the organization, and specific contact details. Foreign collaborators must provide their complete and accurate mailing address and contact information, while clearly specifying the collaborative project title, scope of cooperation, duration of collaboration, and arrangements for sharing outcomes.

2. Cooperation agreement: The applicant and the overseas collaborator must jointly sign a cooperation agreement. A scanned copy of the agreement must be

submitted as an attachment to the online application form. Agreements signed by only one party will not be accepted. The Agreement should include: (i) Research contents and objectives; (ii) List of collaborating PIs and participants; (iii) Duration, methods and plan of joint research; (iv) Ownership, use and transfer of IPR; (v) budget and funding arrangements. For specific requirements, please refer to the template of the "Cooperation Agreement" downloaded from the NSFC Grants system.

3. Representative works published by overseas partners in the past five years that are relevant to the project application.

Funding of the Key Joint Research Program in 2025

Unit: 10,000 yuan

Research areas	No. of applications	Funded Projects			
		Number	Funding rate (%)	Direct cost	Average funding intensity
Mathematical and Physical Sciences	50	9	18.00	2 025	225.00
Chemical Sciences	32	6	18.75	1 355	225.83
Life Sciences	104	17	16.35	3 851	226.53
Earth Sciences	90	14	15.56	3 160	225.71
Engineering and Materials Sciences	113	17	15.04	3 839	225.82
Information Sciences	78	12	15.38	2 710	225.83
Management Science	30	5	16.67	880	176.00
Health Sciences	151	23	15.23	5 180	225.22
In total / Average	**648**	**103**	**15.90**	**23 000**	**223.30**

In 2025, the Key Joint Research Program received 648 applications and funded 103 projects, with a total funding of 230 million yuan. In 2026, the Key Joint Research Program plans to fund 105 projects, with an average funding in direct costs similar to that of 2025. The funding period is five years.

Priority Areas for the Key Joint Research Program in 2026

1. Mathematical and Physical Sciences

(1) Frontier theories, methods and applications of mathematics;

(2) Mechanical mechanism and regulation of complex flow and nonlinear systems;

(3) Mechanics of new materials and new structures

(4) The origin of the universe, the formation and evolution of galaxies and stars;

(5) Quantum materials and devices;

(6) Quantum information and quantum precision measurement physics;

(7) Mechanisms and control of optical or acoustic field;

(8) Physical research of condensed matter system;

(9) Particle physics and nuclear physics;

(10) Research based on large-scale scientific facilities in China and abroad;

(11) Freely-selected topics.

2. Chemical Sciences

(1) Construction of functional molecular system;

(2) Green synthesis method and process;

(3) New mechanisms of chemical reactions under extreme conditions or external field control;

(4) Principles and methods of accurate chemical measurement in complex systems;

(5) Chemical creation principles and methods of advanced functional materials;

(6) Traceability and assessment of global environmental pollutants;

(7) Chemistry and chemical engineering under unconventional conditions;

(8) Efficient storage, conversion, and utilization of chemical energy;

(9) Application of artificial intelligence in chemistry and chemical engineering;

(10) Sustainable chemistry;

(11) Freely-selected topics.

3. Life Sciences

(1) Artificial intelligence and the precise design, modification, and simulation of life processes;

(2) Biodiversity evolution and adaptive mechanisms of key traits;

(3) Molecular basis of cell fate plasticity in development and aging;

(4) Neural mechanisms of cognition and perception, and brain-inspired research;

(5) Molecular mechanisms of homeostatic regulation of body functions;

(6) Responses and adaptations of biodiversity and ecosystems to global change;

(7) Food quality formation and regulation mechanism and food safety;

(8) Biological basis of agricultural animal and plant germplasm innovation;

(9) Cross-border invasion of pests and diseases of crops and its evolution and prevention and control mechanism;

(10) Pathogenicity and transmission mechanism of cross-border diseases;

(11) Freely-selected topics.

4. Earth Sciences

(1) Land surface critical processes and their multiple effects;

(2) Formation theory and exploration and development technology of deep energy resources;

(3) Deep-shallow coupling process and Earth system evolution;

(4) Migration, transformation and prevention and control of pollutants;

(5) Atmospheric dynamics, physical and chemical processes and extreme weather and climate;

(6) Ocean system evolution and polar environment;

(7) Global change and sustainable development;

(8) Earth system process and modeling;

(9) Mechanism, monitoring, early-warning and risk prevention of geological disasters;

(10) New theories, technologies and methods of planetary and earth system

observation;

(11) Freely-selected topics.

5. Engineering and Materials Sciences

(1) High-performance structural metallic materials;

(2) Novel inorganic non-metallic functional materials;

(3) High-performance fibers and composite materials;

(4) Safe and efficient resource extraction and its green processing and utilization

(5) Precision machining, intelligent design and manufacturing;

(6) Renewable energy, new energy sources and energy storage technologies

(7) Efficient systems of electrical energy conversion and transformation;

(8) Basic theories and advanced technologies for engineering disaster prevention and resilience improvement;

(9) Watershed hydrology, water resources, and hydroelectric engineering;

(10) Marine and environmental engineering;

(11) Intelligent transportation and vehicle engineering

(12) Freely-selected topics.

6. Information Sciences

(1) Theoretical basis and key technologies of mobile network and communication;

(2) Detection imaging, remote sensing theory and key technologies;

(3) Novel computing paradigms and software methodologies;

(4) Multi-agent control theory and optimization system;

(5) New theories and application of embodied intelligence and unmanned systems;

(6) Biological and medical information system and technology and human-machine interface;

(7) Design and manufacturing of new semiconductor devices and integrated circuits;

(8) New photoelectric integration technologies, devices and applications;

(9) New computing theories and applications of large models and big data;

(10) Research on new artificial intelligence theories and algorithm;

(11) Freely-selected topics.

7. Management Sciences

(1) Complex system management based on artificial intelligence and human intelligence collaboration;

(2) Theories and methods of digital-intelligent management;

(3) System reliability management of digital-analog fusion task scenarios;

(4) Resilience of large-scale infrastructure and smart city management;

(5) Theories and method of business administration under new technologies;

(6) Frontier theories and methods of big data-based economics;

(7) Financial security and risk management in the digital economy;

(8) Public health and health management driven by digital intelligence;

(9) Research on management theories and practice to promote sustainable development;

(10) Freely-selected topics.

8. Health Sciences

(1) Epidemiology, pathogenesis, and precision diagnosis and treatment strategies for major chronic diseases;

(2) The key role of immune system imbalance in the pathogenesis of major diseases and new strategies for immunotherapy;

(3) Research on the frontier of reproduction, development, aging related diseases;

(4) Identification, prevention and control, diagnosis and treatment of infectious diseases and emerging infectious diseases;

(5) Artificial intelligence-driven imaging medicine and biomedical engineering;

(6) Artificial Intelligence and novel drug targets;

(7) Modernization and standardization of Traditional Chinese Medicine;

(8) Pathogenesis and new intervention strategies of rare diseases;

(9) Basic theories and key technologies of intelligent medical care for major diseases;

(10) Freely-selected topics.

International (Regional) Cooperation and Exchange Program under Agreements/MoUs

The International (Regional) Cooperation and Exchange Programs under Agreements/MoUs are organized and funded by NSFC and other international science funding agencies (or research institutions and international organizations) to support bilateral and multilateral joint research and academic exchanges for scientists and researchers. In recent years, the NSFC has expanded its funding channels for international (regional) cooperative research and exchange programs. So far, NSFC has signed cooperation agreements or memorandums of understanding with 111 funding institutions (or research institutions and international scientific organizations) in 57 overseas countries (regions) worldwide. After NSFC negotiates with overseas funding agencies and reaches agreements regarding cooperation and exchange modalities, types of projects to be funded, funding areas, funding intensity, and review procedures, both sides will release call guides on their websites to call for proposals and organize the review process.

The International (Regional) Cooperation and Exchange Program under Agreements/MoUs consists of 2 types of program: Joint Research Program and Exchange Program.

The Joint Research Program refers to bilateral or multilateral joint research projects funded by NSFC and other funding organizations (or research institutions and international scientific organizations) to support scientists and researchers to conduct basic research projects under the framework of cooperation agreements/ MoUs.

The Exchange Program is designed to support Chinese researchers with ongoing NSFC projects to conduct international collaboration and exchange activities, promoting innovation, cultivating talent, and enhancing the development of research disciplines to improve the overall quality of ongoing NSFC projects. The Exchange Program includes Personnel Exchange Program and Academic Conference Program.

Further details on the International (Regional) Collaborative Research and Exchange Program are provided below. For detailed requirements about the application in 2026, please refer to the call for proposals launched on NSFC's website.

Asia and Africa

Japan

Japan Society for the Promotion of Science (JSPS)

NSFC and JSPS jointly fund exchange projects and bilateral workshops.

(1) Exchange Program

NSFC will cover international travel expenses for Chinese researchers visiting Japan, as well as accommodation, meals, and inter-city transportation costs for Japanese researchers visiting China. JSPS will cover the international travel expenses for Japanese researchers visiting China, as well as local expenses and inter-city transportation costs for Chinese researchers visiting Japan.

(2) Bilateral Workshop

Participants of a bilateral workshop from each side must come from at least 3 institutions. For bilateral workshops to be held in China, the local cost of the attendees and the expense of the workshop will be covered by NSFC, while the cost of the international traveling of Japanese attendees will be covered by JSPS. For bilateral workshops to be held in Japan, the local cost of the attendees and the expense of the workshop will be covered by JSPS, while the cost of the international traveling of Chinese attendees will be covered by NSFC.

In addition, NSFC supports approximately 10 young researchers each year to attend the international HOPE Meeting hosted by JSPS. The conference invites Nobel laureates to deliver reports to young researchers from Asia and Africa through poster exchanges, group discussions, cultural experiences, and other ways that facilitate in-

depth communication. JSPS covers the costs of the conference organization and local activities, while the NSFC funds the international travel expenses and related costs for Chinese participants.

South Korea

National Research Foundation (NRF)

NSFC and NRF jointly support joint research projects, exchange projects, and bilateral workshops.

(1) Joint Research Program

NSFC and NRF jointly fund research projects in areas of common interest between Chinese and Korean researchers. NSFC provides research funding and international collaboration support for Chinese researchers. Korean collaborators receive funding from the NRF.

(2) Exchange Program

NSFC and NRF jointly fund the exchange projects between Chinese and Korean researchers. The funding period is 2 years. The maximum funding amount for each project is 150,000 yuan. NSFC will cover international travel expenses for Chinese researchers visiting South Korea, as well as accommodation, meals, and inter-city transportation costs for Korean researchers visiting China. NRF will cover the international travel expenses for Korean researchers visiting China, as well as local expenses and inter-city transportation costs for Chinese researchers visiting South Korea. The number of projects to be funded will be decided by both sides through negotiation.

(3) Bilateral Workshop

Participants of a bilateral workshop from each side must come from at least 3 institutions. NSFC provides a maximum funding amount of 150,000 yuan for each project. For bilateral workshops to be held in China, the local costs of the attendees and the expenses of the workshop will be covered by NSFC, while the costs of the international traveling of Korean attendees will be covered by NRF. For bilateral workshops to be held in Korea, the local costs of the attendees and the expenses of the workshop will be covered by NRF, while the costs of the international traveling of Chinese attendees will be covered by NSFC. The number of workshops to be funded will be decided by both sides through negotiation.

China, Japan and South Korea

Joint Research Program

The A3 Foresight Program is a joint research program supported by NSFC, Japan Society for the Promotion of Science (JSPS), and the National Research Foundation of Korea (NRF). NSFC, JSPS and NRF support researchers from China, Japan and South Korea to conduct world-class collaborative research in selected strategic areas with the aim to foster outstanding young researchers and address common regional challenges.

The priority areas of the A3 Foresight Program for each year are consistent with the themes of the Northeastern Asian Symposium jointly organized by NSFC, JSPS and NRF.

Israel

Israel Science Foundation (ISF)

NSFC and ISF jointly support bilateral workshops.

Both parties fund bilateral academic workshops annually, with the themes determined through consultations between two organizations.

Thailand

National Research Council of Thailand (NRCT)

NSFC and NRCT jointly fund research projects in areas of common interests between Chinese research and Thai researchers. The maximum funding amount for each project is 2 million yuan from NSFC with a funding period of 3 years.

Pakistan

Pakistan Science Foundation (PSF)

NSFC and PSF jointly support joint research projects, exchange projects, and bilateral workshops.

(1) Joint Research Program

NSFC and PSF jointly fund research projects in areas of common interests between Chinese research and Pakistani researchers. NSFC provides research funding and international collaboration support for Chinese researchers. Pakistani collaborators receive funding from the PSF.

(2) Exchange Program

NSFC will cover international travel expenses for Chinese researchers visiting Pakistan, as well as accommodation, meals, and inter-city transportation costs for Pakistani researchers visiting China. The traveling cost of Pakistani researchers to China and the local expense of the Chinese researchers in Pakistan will be covered by PSF.

(3) Bilateral Workshop

Participants of a bilateral workshop from each side must come from at least 3 institutions. For bilateral workshops held in China, the local cost of the attendees and the expense of the workshop will be covered by NSFC, while the cost of the international traveling of Pakistani attendees will be covered by PSF. For bilateral workshops held in Pakistan, the local cost of the attendees and the expense of the workshop will be covered by PSF, while the cost of the international traveling of Chinese attendees will be covered by NSFC.

Iran

Iran National Science Foundation (INSF)

NSFC and INSF jointly support joint research projects and bilateral workshops.

(1) Joint Research Program

NSFC and INSF jointly fund the research projects in areas of common interest between Chinese and Iranian researchers. NSFC provides research funding and international collaboration support for Chinese researchers. Iranian collaborators receive funding from the INSF.

(2) Bilateral Workshop

Participants of a bilateral workshop from each side must come from at least 3 institutions. For bilateral workshops to be held in China, the local costs of the attendees and the expenses of the workshop will be covered by NSFC, while the costs of the international traveling of Iranian attendees will be covered by INSF. For bilateral workshops to be held in Iran, the local costs of the attendees and the expenses of the workshop will be covered by INSF, while the costs of the international traveling of Chinese attendees will be covered by NSFC.

Egypt

Academy of Scientific Research and Technology (ASRT)

Joint Research Program

NSFC and ASRT jointly fund the research projects in areas of common interest between Chinese and Egyptian researchers. NSFC provides research funding and international collaboration support for Chinese researchers. Egyptian collaborators receive funding from the ASRT.

Other Cooperation Channels

NSFC has signed bilateral cooperation agreements with the National Research Foundation of Singapore (NRF), the Department of Science and Technology of India (DST), the Council of Scientific and Industrial Research of India (CSIR), Thailand Science Research and Innovation (TSRI), and International Bamboo and Rattan Organization (INBAR) to jointly support collaborative research projects, exchange projects, and academic conferences for researchers.

America and Oceania

USA

The National Science Foundation (NSF)

According to the cooperative agreement between NSFC and NSF, both sides jointly support research and exchange projects in areas of common interest.

(1) Joint Research Program

NSFC and NSF jointly solicit collaborative research proposals in the areas of Biodiversity on a Changing Planet (BoCP) and Ecology and Evolution of Infectious Diseases (EEID).

NSFC and NSF will release the call for proposals together. The Chinese and U.S. researchers should submit the proposals to NSFC and NSF respectively. NSFC and NSF will jointly make final funding decisions based on the review conducted in the agreed approach and procedures.

(2) Exchange Program

NSFC and NSF will fund exchange projects in the areas of Biodiversity on a Changing Planet (BoCP) and Ecology and Evolution of Infectious Diseases (EEID) to support network building and preliminary research.

NSFC and NSF will release the call for proposals together. The Chinese and U.S. researchers should submit the proposals to NSFC and NSF respectively. The proposals will be reviewed by NSFC and NSF according to the agreed approach and procedures. And the final funding decisions will be mutually made.

Gates Foundation (GF)

According to the cooperative agreement between NSFC and GF, both sides jointly support research projects and bilateral workshops in areas of common interest.

(1) Joint Research Program

NSFC and GF will jointly solicit collaborative research proposals in the areas of global health, and support Chinese scientists to conduct collaborative research with international collaborators.

NSFC and GF will release the call for proposals together. NSFC and GF will jointly make final funding decisions based on the review conducted in the agreed approach and procedures.

(2) Bilateral Workshop

NSFC and GF will fund bilateral workshops in areas of global health and agriculture. The topics of the workshops will be mutually identified and agreed by both parties.

New Zealand

Ministry of Business, Innovation and Employment (MBIE)

According to the cooperative agreement between NSFC and MBIE, both sides jointly support research and workshop projects in areas of common interest.

(1) Joint Research Program

NSFC and MBIE jointly solicit collaborative research proposals in the areas of common interest. NSFC and MBIE will release the call for proposals together. The Chinese and New Zealand researchers should submit the proposals to NSFC and MBIE respectively. NSFC and MBIE will jointly make final funding decisions based

on the review conducted in the agreed approach and procedures. NSFC provides research funding and international cooperation support for Chinese researchers and MBIE provide corresponding funding for New Zealand collaborators.

(2) Bilateral Workshop

NSFC and MBIE will fund bilateral workshops in areas of common interest. The topics of the workshops will be mutually identified and agreed by both parties. For domestic workshops, NSFC will fund the conference expenses required for the Chinese side to host the conference, as well as the accommodation, food, and inter-city transportation expenses of both Chinese and New Zealand participants. MBIE will fund the international travel expenses of New Zealand participants. For overseas workshops, NSFC will fund the international travel expenses of Chinese participants, while MBIE will fund the conference expenses required for the New Zealand side to host the conference, as well as the accommodation, food, and inter-city transportation expenses of both Chinese and New Zealand participants.

Latin America

NSFC will support research projects, exchange projects and workshops with São Paulo Research Foundation (FAPESP), Brazilian National Council of State Funding Agencies (CONFAP), National Scientific and Technical Research Council of Argentina (CONICET), National Research and Development Agency of Chile (ANID) and Technology and Environment of the Republic of Cuba (CITMA) respectively based on the bilateral cooperative agreements.

(1) Joint Research Program

NSFC will solicit collaborative research proposals with partner agencies respectively in the areas of common interest, and make final funding decisions jointly based on the review conducted in the mutually agreed approach and procedures.

(2) Exchange Program

NSFC will solicit exchange proposals with partner agencies respectively in the areas of common interes, and make final funding decisions jointly based on the review conducted in the mutually agreed approach and procedures.

(3) Bilateral Workshop

NSFC will fund bilateral workshops with partner agencies respectively in areas and numbers mutually identified and agreed.

Europe

European Union

European Research Council (ERC)
Joint Exchange Program

NSFC and ERC will jointly fund the Chinese researchers to visit European countries for a single long-term or multiple short-term research stay (3 to 12 months in total). The Chinese researchers should join the ERC-funded project teams to conduct collaborative research based on the common interest. The international traveling cost of Chinese team will be covered by NSFC, with a maximum funding amount of 30,000 yuan per project. The local and research costs in Europe will be covered by ERC-funded projects.

Russia

Russian Science Foundation (RSF)

Joint Research Program

NSFC and RSF will jointly fund the collaborative research in areas of common interest between the Chinese and Russian researchers. NSFC provides funding for the research costs and international collaboration costs of the Chinese researchers. RSF provides corresponding funding for Russian researchers.

Germany

German Research Foundation (DFG)

Joint Research Program

NSFC and DFG will jointly fund the collaborative research in areas of common interest between Chinese and German researchers. NSFC provides funding for the research costs and international collaboration costs of the Chinese researchers. DFG provides corresponding funding for German researchers.

UK

UK Research and Innovation (UKRI)

Joint Research Program

NSFC and UKRI will jointly fund the collaborative research between the Chinese and UK researchers based on the research fields of common interest. The maximum funding amount for each project will be 2 million or 3 million yuan from NSFC. The funding duration will be 3 to 4 years.

The Royal Society (RS)

Joint Exchange Program

NSFC and RS will jointly fund the costs for the international traveling, accommodation, meals and intercity transportation for mutual exchange and visits between Chinese and UK researchers.

Belgium

The Research Foundation-Flanders (FWO) and the Fund for Scientific Research (FNRS)

Joint Exchange Program

NSFC covers the international travel expenses for Chinese researchers visiting Belgium and their living expenses during their stay in Belgium. FWO and FNRS respectively cover the international travel expenses for researchers from the Dutch-speaking and French-speaking communities of Belgium when visiting China, as well as their living expenses during their stay in China.

Italy

Ministry of Foreign Affairs and International Cooperation (MAECI)

Joint Research Program

NSFC and the MAECI will support collaborative research between Chinese and Italian researchers in areas of common interest. The funding amount and duration will be decided jointly by the two parties.

The National Research Council (CNR)

Joint Exchange Program

NSFC will support the international traveling costs of Chinese researchers to Italy and their local expenses in Italy. The international traveling costs of the Italian researchers to China and local expenses of the Italian researchers in China will be covered by CNR.

France

National Scientific Research Center (CNRS)

Joint Exchange Program

NSFC will support the international traveling costs of Chinese researchers to France and their local expenses in France. The international traveling costs of the French researchers to China and their local expenses in China will be covered by CNRS.

Belarus

Belarusian Republican Foundation for Fundamental Research (BRFFR)

Joint Exchange Program

NSFC and BRFFR will jointly fund the costs for the international traveling, accommodation, meals and intercity transportation of Chinese and Belarusian researchers, as well as the expenses for the bilateral workshops.

Finland

Research Council of Finland（RCF）

Joint Exchange Program

NSFC will provide the international traveling costs, accommodation, meals and intercity transportation for the Chinese researchers in Finland, and the expenses for the bilateral workshops to be held in China. The international traveling costs and the related expenses for the Finnish researchers in China and the bilateral workshops to

be held in Finland will be covered by RCF.

Turkey

The Scientific and Technological Research Council of Turkey (TÜBİTAK)

Joint Research Program

NSFC and TÜBİTAK will jointly fund the collaborative research in areas of common interest between Chinese and Turkish researchers. NSFC provides funding for the research costs and international collaboration costs of the Chinese researchers. TÜBİTAK provides corresponding funding for Turkish researchers..

Serbia

Science Fund of the Republic of Serbia (SFRS)

Joint Research Program

NSFC and SFRS will jointly fund the collaborative research in areas of common interest between Chinese and Serbian researchers. NSFC provides funding for the research costs and international collaboration costs of the Chinese researchers. SFRS provides corresponding funding for Serbian researchers.

Spain

State Research Agency (AEI)

Joint Research Program

NSFC and AEI will jointly fund the collaborative research between the Chinese and Spanish researchers based on the research fields of common interest. The funding amount and duration will be jointly decided by the two parties.

Sweden

Research Council of Sweden (VR)

Joint Exchange Program

NSFC and VR will jointly support the exchange and network building between Chinese and Swedish researchers. The funding amount and duration will be jointly decided by the two parties.

The Netherlands

Dutch Research Council (NWO)

Joint Exchange Program

NSFC and NWO will jointly support the exchange between Chinese and Dutch researchers. The funding amount and duration will be jointly decided by the two parties.

Bilateral Workshop

NSFC and NWO will jointly support bilateral workshops in areas of common interest. The funding amount and duration will be jointly decided by the two parties.

International Scientific Organizations and Multilateral Cooperation

International Center for Theoretical Physics (ICTP)

About 50 Chinese young researchers are funded by NSFC every year in the areas of mathematics, physics, and earth sciences to participate in various research activities at ICTP, such as summer seminars and short-term joint research. NSFC provides funding for international travel expenses and related costs for Chinese participants, while ICTP covers accommodation and meal expenses for Chinese participants.

International Institute of Applied Systems Analysis (IIASA)

NSFC encourages Chinese scientists to conduct multilateral cooperation with researchers from IIASA Programs in the areas of energy, environment, land use, water, population, etc., and to jointly apply for research funding from governmental organizations, private and national science foundations, World Bank and EU Framework Program.

(1) Exchange Program

NSFC funds PhD students to participate in the IIASA Young Scientists Summer Program (YSSP) in Vienna each year. Relevant information and application forms can be downloaded from the IIASA website (http://www.iiasa.ac.at).

(2) Bilateral Workshop

NSFC and IIASA will fund academic workshops in areas of mutual interest. The topics and the number of workshops will be determined in consultation between two sides.

Consultative Group on International Agricultural Research (CGIAR)

NSFC has reached agreements with 11 CGIAR affiliated institutes/centers, including the Center for Bioversity International, International Center for Tropical Agriculture (CIAT), Center for International Forestry Research (CIFOR), International Maize and Wheat Improvement Center (CIMMYT), International Potato Center (CIP), International Center for Agricultural Research in the Dry Areas (ICARDA), World Agroforestry (ICRAF), International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), International Food Policy Research Institute (IFPRI), International Livestock Research Institute (ILRI), and International Rice Research Institute (IRRI), to fund joint research projects conducted by researchers from both sides. The maximum funding amount for each project is 2 million yuan from NSFC with a funding period of 5 years.

United Nations Environment Program (UNEP)

NSFC and UNEP jointly support scientists to conduct collaborative research in the fields of eco-system, climate change, resource efficiency and environmental governance and other sustainable development related areas. Cooperation with

developing countries in Africa and Asian-Pacific regions will be given special focus. The maximum funding amount for each project is 2 million yuan from NSFC with a funding period of 5 years.

Belmont Forum (BF/IGFA)

NSFC supports Chinese researchers to participate in multilateral cooperation under the framework of the Belmont Forum. The maximum funding amount for each project is 2 million yuan from NSFC with a funding period of 3 years.

International Centre for Integrated Mountain Development (ICIMOD)

NSFC and ICIMOD jointly fund research projects to support researchers from China and ICIMOD member countries to advance research in the fields of sustainable development related areas in the region of Hindu Kush-Himalayas in China and the neighboring countries.

BRICS STI Framework Program

The Ministry of Science and Technology of China (MOST), NSFC, Brazil National Council for Scientific and Technological Development (CNPq), Foundation for Assistance to Small Innovative Enterprises of Russia (FASIE), Ministry of science and higher education of the Russian Federation (MSHE), Foundation for Assistance to Small Innovative Enterprises (FASIE), Department of Science and Technology of India (DST), Department of Science and Technology of South Africa (DST), and National Research Foundation of South Africa (NRF), jointly fund multilateral research projects under the framework of BRICS STI Framework Program. The maximum funding amount for each project is 2 million yuan from NSFC with a funding period of 3 years.

The East Asia Science and Innovation Area Joint Research Program (e-ASIA)

NSFC collaborates with research funding agencies of 10 ASEAN member countries and 7 additional countries (Australia, Japan, New Zealand, India, South Korea, Russia, the U.S.) to jointly fund multilateral research under the e-ASIA framework. Field of Cooperation include Materials (Nanotechnology), Alternative Energy, Agriculture (Food), Health Research, Disaster Risk Reduction and Management, Environment (Climate Change, Marine Science) and Advanced Interdisciplinary Research towards Innovation. The maximum funding amount for each project is 2 million yuan from NSFC with a funding period of 3 years.

Sustainable Development International Cooperation Program (SDIC)

Aiming at realizing the United Nations Sustainable Development Goals (SDGs), NSFC works with other funding agencies and international organizations to fund multilateral scientific research projects to address global challenges and major scientific problems faced by all countries around the world, especially developing countries, through three types of programs: Capacity Building Project, Key Project and Integration Project. The Capacity Building Project aims to enable further research and collaboration among Chinese and foreign researchers through exchange activities

including collaborative research, researcher mobility, networking, workshops, training, and fieldwork. The Key Project supports Chinese and foreign researchers to conduct collaborative research in selected fields, fostering outstanding scientific talents to solve regional scientific issues, developing strategies for the coordinated implementation of ecological, resource, and socio-economic aspects of the SDGs and propose sustainable development strategies to provide scientific decision-making support for sustainable development in relevant countries and regions.

Hong Kong and Macao SARs and Taiwan Region of China

NSFC has established cooperation with the Research Grant Council of Hong Kong (RGC), Beijing-Hong Kong Academic Exchange Centre (BHKAEC), Macao Foundation for the Development of Science and Technology (FDCT), and K.T. Li Foundation for the Development of Science and Technology in Taiwan, China. NSFC actively supports collaborative research and exchanges between the mainland and Hong Kong, Macau, as well as across the Taiwan Strait, in areas of common interest. Types of activities that can be funded are joint research projects and exchange projects (including visits and academic workshops).

Hong Kong

The Research Grant Council of Hong Kong (RGC)

NSFC and RGC will jointly fund join research in areas of natural sciences in 2026. The priority funding areas include information sciences, biological sciences, new materials, marine and environmental sciences, medical sciences, and management sciences. Meanwhile, to further encourage academic exchanges between young researchers from both sides, academic workshops are organized and funded in areas of common interest.

Beijing-Hong Kong Academic Exchange Centre (BHKAEC)

NSFC and BHKAEC will jointly organize and fund academic workshops in areas of common interest.

Macao

Foundation for the Development of Science and Technology (FDCT)

NSFC and FDCT will, under the framework of the signed cooperative agreement, jointly fund basic research projects between scientists from both sides. The priority areas include information sciences, TCM research, marine sciences, environmental sciences, biological sciences, new material sciences, as well as space sciences. Meanwhile, NSFC and FDCT will organize and fund academic workshops

in areas of mutual interest.

Taiwan

K.T. Li Foundation for the Development of Science and Technology

NSFC is dedicated to encouraging and promoting scientific cooperation and exchange between scientists across the Taiwan Strait. In 2026, NSFC will continue to support cross-Straits academic workshops and fund substantial joint research projects according to the consensus reached with K.T. Li Foundation for the Development of Science and Technology.

Sino-German Center for Research Promotion

The Sino-German Center for Research Promotion (SGC) is a research funding agency, jointly set up by NSFC and German Research Foundation (DFG). SGC‘s legal status is NSFC‘s affiliated institution. It aims at promoting scientific cooperation and exchange between Chinese and German researchers so as to push forward in-depth cooperation and development in fundamental science between China and Germany. Starting from 2024, the application, funding and management of all SGC Programs (except the Lindau Program) has been transferred to its parent agencies (i.e. NSFC and DFG) and incorporated into the NSFC’s MOU-based International (Regional) Cooperation and Exchange Program. Applicants shall submit applications to NSFC and DFG respectively and are subject to the eligibility and requirements of NSFC and DFG. For the year 2026, the SGC plans to launch the "German Young Scholars Exchange Program to China," the "Sino-German Short-Term Lecture Series Program," and the "Sino-German Research Policy Symposium Program." Please refer to the subsequent notices on the SGC website for details.

1. Subjects Covered

The SGC supports the cooperation activities between Chinese and German scientists in fundamental research in all fields of natural sciences.

2. Eligibility Requirements

Chinese Applicants must be the Principal Investigator (PI) or key members of ongoing or completed NSFC research grants with a minimum duration of 3 years. German Applicants must be eligible to apply for funding from DFG. Eligible Chinese and German scientists shall submit proposals respectively to NSFC and DFG. Unilateral applications are not accepted.

3. Application Limit

The SGC Programs (except for the Lindau Program) are subject to NSFC‘s regulation on the limit of the number of projects that an individual researcher can undertake or apply for.

4. Programs

(1) Bilateral Workshop (SGC Forum)

The Program supports small bilateral workshops between Chinese and German researchers. For workshops to be held in China, NSFC will cover the expenses for the workshop and the accommodation, meals, and inter-city transportation costs for participants from both sides. DFG will cover the international travel expenses for German participants. For workshops to be held in Germany, NSFC will cover the international travel expenses for Chinese participants, while DFG will cover the expenses for the workshop and the accommodation, meals, and inter-city transportation costs for participants from both sides. For detailed requirements about the application in 2026, please refer to the call for proposals to be launched on NSFC and SGC websites.

(2) International Exchange Program (SGC Mobility)

The Program aims at supporting in-depth cooperation and exchanges between Chinese and German scientists in a specific field over a period of 3 years. It mainly supports short-term visits and small-scale workshops. For detailed requirements about the application in 2026, please refer to the call for proposals to be launched on NSFC and SGC websites.

(3) Lindau Program

Lindau Nobel Laureate Meeting is held in late June each year in Lindau, Germany. Excellent young scientists from around the globe are also invited to attend the event. The SGC, together with Lindau Nobel Laureates Foundation, invites and funds 30 excellent Chinese PhD students and 10 excellent undergraduate students to participate in the Nobel Laureate meeting in Lindau, Germany. Before the event, SGC organizes a week-long academic visit for the invitees to the German research institutions well-known in relevant disciplines. Candidates are selected throughout China and must be recommended by their host institutions. The final approval list is decided by correspondence review and interviews by a panel of Chinese and German experts. The SGC provides funding for formally selected students for international travel expenses, inter-city travel expenses and accommodation costs according to its current funding rates. The SGC will handle the visa affairs for the selected students and pay for the related fees. The SGC is responsible for the acceptance, funding and management of this program.

Research Fund for International Scientists

The Research Fund for International Scientists (RFIS) aims to support outstanding international scientists of foreign citizenship who are ready to come to Chinese mainland to conduct basic research and applied basic research on independently select research topics within the funding scope of NSFC, promoting long-term and stable academic cooperation and exchanges between foreign and international scientists.

The RFIS consists of three sub-types:

1. The Research Fund for International Young Scientists (RFIS-I)
2. The Research Fund for International Excellent Young Scientists (RFIS-II)
3. The Research Fund for International Senior Scientists (RFIS-III)

I. Eligibility Requirements

Scientific and technical personnel applying for the RFIS shall meet the following requirements:

1. The Research Fund for International Young Scientists (RFIS-I)

(1) Obtained a doctoral degree within the past 6 years (obtained after January 1, 2020);

(2) Have prior experience in conducting basic research or postdoctoral research;

(3) Ensure that during the funding period, the time devoted to conducting research work at the host institution is no less than 9 months per calendar year;

(4) Ensure compliance with the laws and regulations of the People's Republic of China and the relevant administrative rules of NSFC during the stay in China;

(5) Sign a research agreement with the host institution (if the applicant holds a full-time position outside China at the time of application, the foreign employer shall be informed).

2. The Research Fund for International Excellent Young Scientists (RFIS-II)

(1) Obtained a doctoral degree within the past 15 years (obtained after January 1, 2011);

(2) Hold a senior professional position (or an equivalent title);

(3) Have prior experience in undertaking basic research projects as the Principal Investigator (PI);

(4) Ensure that during the funding period, the time devoted to conducting

research work at the host institution is no less than 9 months per calendar year;

(5) Ensure compliance with the laws and regulations of the People's Republic of China and the relevant administrative rules of NSFC during the stay in China;

(6) Sign a research agreement with the host institution (if the applicant holds a full-time position outside China at the time of application, the foreign employer shall be informed).

3. The Research Fund for International Senior Scientists (RFIS-III)

(1) Hold a senior professional position (or an equivalent title);

(2) possess outstanding academic achievements and international influence;

(3) Ensure that during the funding period, the time devoted to conducting research work at the host institution is no less than 9 months per calendar year;

(4) Ensure compliance with the laws and regulations of the People's Republic of China and the relevant administrative rules of NSFC during the stay in China;

(5) Sign a research agreement with the host institution (if the applicant holds a full-time position outside China at the time of application, the foreign employer shall be informed).

II. Additional Requirements for Eligibility

1. For programs at the same level, an applicant may receive funding as principal investigator only once.

2. An individual may apply for or undertake no more than one project in the same year. In the year of application for any of the sub-types of the RFIS, the applicant shall not apply for the Young Scientsts Fund (Categories A, B, or C), Science Fund for Creative Research Groups, or Cooperative Innovation Research Team Program as principal investigator.

3. An applicant is not eligible to apply for the RFIS-I if the applicant has been the PI of an on-going or completed project of the RFIS-II, the RFIS-III, the International Collaboration Fund for Creative Research Teams, the Young Scientists Fund-C, the Young Scientists Fund- B (including the former Excellent Young Scientists Fund for scholars in Hong Kong and Macao), the Young Scientists Fund-A and the Science Fund for Creative Research Groups.

4. An applicant is not eligible to apply for the RFIS-II if the applicant has been the PI of an on-going or completed project of the RFIS-III, the International Collaboration Fund for Creative Research Teams, the Young Scientists Fund-B, the Young Scientists Fund-A, and the Science Fund for Creative Research Groups.

5. An applicant shall not apply for the RFIS-III if the applicant has been the PI of an on-going or completed project of the International Collaboration Fund for Creative Research Teams, the Young Scientists Fund-A, and the Science Fund for Creative Research Groups.

6. RFIS are not counted within the total limit on applications and funded projects.

III. Funding Areas and Intensity

In 2026, the funding areas for the RFIS include: Mathematical and Physical Sciences, Chemistry Sciences, Life Sciences, Earth Sciences, Engineering and Material Sciences, Information Sciences, Management Sciences, Health Sciences, and Interdisciplinary Sciences. Please note that the RFIS-I is not open to applications in Interdisciplinary Sciences.

Applicants can apply for a one-year or two-year RFIS project. The funding in direct cost is up to 200,000 RMB per year (per project) for the RFIS-I, 400,000 RMB per year (per project) for the RFIS-II, and 800,000 RMB per year (per project) for the RFIS-III.

IV. Application Submission

For detailed information, please refer to *Call Guidelines for Research Fund for International Scientists in 2026* published on the official website of NSFC.

Science Fund for Global Challenges and Sustainability

To implement the strategic decision on establishing a globally oriented science fund, guided by the Four Orientations in advancing S&T development, NSFC takes reforms to expand its opening-up to the world, build platforms for international collaboration in basic research, expand international collaboration and contribute to an open innovation ecosystem with global competitiveness. In 2024, based on the existing International (Regional) Cooperation and Exchange Programs and the Research Fund for International Scientists, NSFC officially launched the Science Fund for Global Challenges and Sustainability which is implemented by the Department of International Programs, through the following steps. First, the International Collaboration Fund for Creative Research Teams (ICFCRT) was initiated to enhance international scientific collaborations, and attract and support pioneering scientists of foreign citizenship to form and lead research teams in China, carry out creative basic and applied basic research, and cultivate leading research teams capable of establishing a presence at the international forefront of science. Second, efforts have been made to establish a long-term and stable funding mechanism and an international review and management model. Particularly, to support Chinese researchers to expand international cooperation and exchanges by leveraging major international science programs, projects, facilities, instruments, and organizations, and to initiate and lead international major science cooperation programs and deeply engage in global science and technology governance. Two programs have been established, including the NSFC-CERN Large Scientific Infrastructure International Cooperation Research Programs and the China Jinping Underground Laboratory Large Scientific Infrastructure International Cooperation Research Programs. Through these reform measures, a "Research–Talent–Platform" funding landscape for international cooperation has preliminarily taken shape.

International Collaboration Fund for Creative Research Teams

The International Collaboration Fund for Creative Research Teams (ICFCRT) aims to attract and support pioneering scientists of foreign citizenship to form and

lead research teams in China, carry out creative basic and applied basic research, promote international collaboration, and cultivate leading research teams capable of establishing a presence at the international forefront of science.

I. Eligibility Requirements

(1) Applicants of the Collaborative Creative Research Team shall meet the following requirements:

a. Has a foreign citizenship and a senior academic title;

b. Has Outstanding academic achievements and significant international influence, and ability to build and lead a research team to carry out creative research in China;

c. Ensure that during the funding period, the time devoted to conducting research work at the host institution is no less than 6 months per calendar year;

d. Sign a research agreement with the host institution (if the applicant holds a full-time position outside China at the time of application, the foreign employer shall be informed).

(2) Key participants of the Collaborative Creative Research Team, regardless of nationalities, shall hold senior academic titles or doctoral degrees.

(3) Each application shall have no more than four key research participants, and the number of collaborating institutions shall not exceed two.

(4) Applicants and key participants shall ensure compliance with the laws and regulations of the People's Republic of China and the relevant administrative rules of NSFC during the stay in China.

II. Additional Requirements for Eligibility

(1) Applicants holding senior academic titles, no matter as the PI or as a participant, may apply for or participate in applications/projects for a total number of no more than one project per year across the following categories:,ICFCRT, the Continuing Grant of the Young Scientist Fund-A, the Science Fund for Creative Research Groups，and the Science Fund for Outstanding Research Groups.

(2) The PIs of on-going or completed projects of the Continuing Grant of Young Scientists Fund-A (including the former Continuing Grant of National Science Fund for Distinguished Young Scholars), the Science Fund for Creative Research Groups or the Science Fund for Outstanding Research Groups (including the former Basic Science Center Program) shall not apply for or participate in ICFCRT.

(3) Researchers with senior academic titles who are participating in on-going projects of ICFCRT, the the Science Fund for Creative Research Groups or the Science Fund for Outstanding Research Groups (including the former Basic Science Center Program) , shall not apply for or participate in a new ICFCRT project .

(4) The total number of Research Fund for International Scientists projects and ICFCRT projects for which an individual applies as principal investigator or is undertaking as principal investigator shall not exceed one..

(5) ICFCRT projects are not counted within the limit on the total number of projects applied and undertaken by one applicant.

III. Funding Areas, Duration and Intensity

In 2026, the funding areas for the ICFCRT include: Mathematical and Physical Sciences, Chemical Sciences, Life Sciences, Earth Sciences, Engineering and Material Sciences, Information Sciences, Management Sciences, Health Sciences, and Interdisciplinary Sciences.

The project duration will be three years with a funding in direct costs of 6 million RMB per project and indirect funding of 1.2 million RMB per project. For projects funded in Mathematical Sciences and Management Sciences, the funding in direct costs is 4.8 million RMB per project and the funding in direct costs is 1.2 million RMB per project.

IV. Proposal submission

For detailed information of proposal submission, please refer to *Call Guidelines for International Collaboration Fund for Creative Research Teams in 2026* published on the official website of NSFC.

The Funding Statistics for the ICFCRT in 2025

Unit: 10,000 yuan

No.	Funding Areas	Projects funded	Direct Funding	Success rate (%)	Average Direct Funding per project
1	Mathematical and Physical Sciences	5	2 880	9.09	576
2	Chemistry Sciences	3	1 800	8.57	600
3	Life Sciences	4	2 400	10.00	600
4	Earth Sciences	3	1 800	6.98	600
5	Engineering and Material Sciences	3	1 800	4.76	600
6	Information Sciences	3	1 800	5.36	600
7	Health Sciences	3	1 800	6.52	600
8	Interdisciplinary Sciences	1	600	4.00	600
Total or Average		**25**	**14 880**	**6.81**	**595.20**

Large Scientific Infrastructure International Cooperation Research Program

The Large Scientific Infrastructure International Cooperation Research Program aims to fully leverage the open cooperation advantages of major scientific infrastructure (major scientific projects, facilities, devices), and their role in attracting and cultivating talent . It supports Chinese and international researchers to conduct research and exchanges based on major scientific infrastructure both in China and abroad.

Following the organizational model of NSFC Major Research Plan program,

Large Scientific Infrastructure International Cooperation Research Program requires the establishment of an international steering expert group for top-level design and academic guidance. Focusing on key areas and directions associated with major scientific infrastructure, as well as core scientific issues raised, this program provides three subcategories: cultivation projects, key projects, and integration projects. The implementation period of each program is generally 5 to 8 years.

Applications for NSFC Major Research Plan program, Large Scientific Infrastructure International Cooperation Research Program should be submitted in English and undergo international review. Regular academic exchange meetings for funded projects are held to promote international collaboration based on major scientific infrastructure both in China and abroad.

Currently, ongoing programs of the Large Scientific Infrastructure International Cooperation Research Program include:

I. National Natural Science Foundation of China and the European Organization for Nuclear Research (NSFC-CERN) Large Scientific Infrastructure International Cooperation Research Program

The European Organization for Nuclear Research (CERN) is the global hub for cutting-edge particle physics research, housing the Large Hadron Collider (LHC) with the highest energy in the world. Its four major detector experiments (ALICE, ATLAS, CMS, and LHCb) utilize the most advanced detection technology to capture new particles and study microscopic phenomena, providing the most sophisticated platform for the development of cutting-edge particle detection technology. This special program funds Chinese researchers to participate in CERN's international collaborative research, promoting scientific innovation, technological development, talent cultivation, and international cooperation in the fields of particle physics and nuclear physics in China.

The scientific objective of this special program is to develop advanced particle detection technologies for the four large detector experiments at the Large Hadron Collider (LHC), and to conduct cutting-edge research in particle physics and nuclear physics. Specifically, it involves precise measurements of the properties of the Higgs boson to understand the origin of mass, precise tests of the Standard Model of particle physics to search for new physics beyond the Standard Model, and to comprehend the asymmetry between matter and antimatter in the universe. Furthermore, it aims to gain a deeper understanding of the non-perturbative properties of quantum chromodynamics, the phase transitions of strongly interacting matter, and the properties of new states of matter.

The Call for Proposals will be released separately.

II. Jinping Large Scientific Infrastructure International Cooperation Research Program (CJPL)

The China Jinping Underground Laboratory (CJPL) and the national major

scientific and technological infrastructure "The Deep Underground and Ultra-low Radiation Background Facility for Frontier Physics Experiments" (Jinping Large Facility), represents the world's deepest underground laboratory with the lowest cosmic-ray muon flux, largest usable space, extremely low radiation background, and top-notch comprehensive conditions. This international cooperation program supports Chinese researchers to collaborate with high-level international scholars in Jinping to jointly conduct research, aiming to promote the construction of CJPL into an internationally leading and open-shared international deep-earth science center.

The scientific objective of this program is to leverage the strengths of CJPL to conduct international collaborations, addressing three major goals: searching for neutrinoless double beta decay, precise measurement of key nuclear astrophysical reactions, and exploring frontier deep underground science. The program aims to improve experimental sensitivity, acquire accurate data, and foster new principles, methods, and technologies crucial for breakthroughs in future underground science experiments.

The Call for Proposals will be released separately.

In 2025, the Large Scientific Infrastructure International Cooperation Research Program received 43 applications and funded 18 projects, with a total funding amount of 69.59 million yuan.

Funding for the Large Scientific Infrastructure International Cooperation Research Program in 2025

Unit: 10,000 yuan

Type	No. of Applications					No. of Awards					Funding for Direct Costs
	Integration Project	Key Project	Cultivation Project	Strategic Research Project	Amount	Integration Project	Key Project	Cultivation Project	Strategic Research Project	Amount	
CERN	1	22	12	—	35	1	9	3	—	13	3 399
CJPL	1	—	6	1	8	1	—	3	1	5	3 560

NSFC Application Code

A. Department of Mathematical and Physical Sciences

A01 Algebra and Geometry

A0101 History of Mathematics, Mathematical Logic, and Axiomatic Set Theory
A0102 Analytic Number Theory and Combinatorial Number Theory
A0103 Algebraic Number Theory
A0104 Structure of Groups and Algebras
A0105 Lie Theory and Its Generalizations
A0106 Representation Theory and Homology Theory
A0107 Algebraic Geometry and Complex Geometry
A0108 Global Differential Geometry
A0109 Geometric Analysis
A0110 Symplectic Geometry and Mathematical Physics
A0111 Algebraic Topology and Geometric Topology
A0112 General Topology and discrete dynamic system

A02 Analysis

A0201 Complex Analysis in One Variable and complex dynamic system
A0202 Complex Analysis in Several Variables
A0203 Complex analytic geometry
A0204 Geometric Measure Theory and Fractals
A0205 Harmonic Analysis and Approximation Theory
A0206 Nonlinear Functional Analysis
A0207 Operator Theory
A0208 Space Theory
A0209 Markov Processes and Statistical Physics
A0210 Stochastic Analysis and Stochastic Processes
A0211 Probability Limit Theory and Randomized Structures

A03 Differential Equations and Dynamical Systems

A0301 Ordinary Differential Equations
A0302 Difference Equations and development equation
A0303 Dynamical Systems and Ergodic Theory
A0304 Elliptic and Parabolic Partial Differential Equations
A0305 Hyperbolic Partial Differential Equations
A0306 Mixed Equations
A0307 Infinite Dimensional Dynamical Systems and Dispersion equation
A0308 Integrable Systems and Their Applications

A04 Statistics and Operations Research

A0401 Data Sampling and causality judgement
A0402 Statistical Inference and multiple statistics
A0403 Statistical learning and Statistical computation
A0404 Bayesian Statistics and Statistical Applications
A0405 Continuous Optimization
A0406 Discrete Optimization/Combinatorial Optimization
A0407 Stochastic Optimization
A0408 Combinatorial Mathematics
A0409 Graph Theory and Its Applications
A0410 optical problems with special structure and optimization software package
A0411 interdisciplinary studies and applications of statistics and operational research

A05 Computational Mathematics

A0501 Fundamental Theories and Construction Methods of Algorithms
A0502 Numerical Algebra
A0503 Numerical Approximation and Computational Geometry
A0504 Basic theory and method in Numerical Solutions of Differential Equations
A0505 Modeling and Computation of Inverse Problems
A0506 Computable Modeling and Numerical Simulation of Complex Problems
A0507 Novel Computational Methods
A0508 Numerical solutions of differential equations driven by applications

A06 Mathematics Intersects with Other Disciplines

A0601 Mathematical Methods in Control
A0602 Mathematical Theories and Methods of computer mathematics and Uncertainty
A0603 Economic Mathematics and Financial Mathematics

A0604 Mathematics in Biology and Life and Health Sciences
A0605 Data driven mathematical life sciences
A0606 Mathematical Theories and Methods in Artificial Intelligence
A0607 Mathematical Theories and Methods in Data Science
A0608 Mathematical Theories in Security
A0609 Mathematical models, theories and algorithm for image and signal processing and analysis

A07 Dynamics and Control

A0701 Analytical Mechanics
A0702 Nonlinear Vibration and Control
A0703 Stochastic Dynamics and Control
A0704 Nonlinear Dynamics of Multibody and High-Dimensional Systems
A0705 Dynamics of Aircraft and Transport Systems
A0706 Rotor Dynamics
A0707 Dynamics of Neural and Intelligent Systems
A0708 Design and Inverse Problems in Dynamics

A08 Solid Mechanics

A0801 Deformation and Constitutive Theories of Solids
A0802 Strength, Damage, Fracture and Fatigue of Solids
A0803 Wave, Vibration and Noise
A0804 Contact, Friction, Surface and Interface Mechanics
A0805 Micro-Nano Mechanics and Multiscale Mechanics
A0806 Optimal Design, Manufacture and Reliability of Materials and Structures
A0807 Mechanics of Composite Materials and Structures
A0808 Mechanics of Multi-Field Coupling and Smart Structures
A0809 Mechanics of Soft Matter and Flexible Structures
A0810 Fluid Solid Coupling Mechanics
A0811 Chemomechanical Coupling
A0812 Experimental Solid Mechanics
A0813 Computational Solid Mechanics
A0814 Mechanics of Materials and Structures under Extreme Conditions
A0815 Physical Mechanics

A09 Fluid Mechanics

A0901 Turbulence and Flow Stability
A0902 Vortex and Separation Flows
A0903 Aerodynamics
A0904 Hydrodynamics
A0905 Multiphase Flow, Porous Flow and Non-Newtonian Fluid Mechanics

A0906 Flow Noise and Aeroacoustics
A0907 Micro-Nano Flows and Interfacial Flows
A0908 Multi-Field, Multi-Medium Coupling Flow and Flow Control
A0909 Experimental Fluid Mechanics
A0910 Computational Fluid Dynamics

A10 Biomechanics

A1001 Biomechanics of Solids and Fluids
A1002 Multiscale Mechanobiology
A1003 Biomechanics of Natural Biomaterials, Biomimetics, and Sports
A1004 Mechanical Principles and Design of Medical Materials and Devices

A11 Aeronautic and Astronautic Mechanics

A1101 Fundamentals of Aerodynamic and Dynamic Design
A1102 Structural mechanics design and performance evaluation
A1103 Flight mechanics and control

A12 Explosion and Impact Dynamics

A1201 Explosion Mechanics
A1202 Impact Dynamics

A13 Environmental Mechanics

A1301 Mechanics of Rock and Soil
A1302 Environmental Fluid Mechanics and Granular Flows
A1303 Mechanics in Extreme Environments and Disasters

A14 Cosmology and Galaxies

A1401 Dark Matter, Dark Energy, Early Universe and Cosmological Models
A1402 Formation and Evolution of Cosmic Structures
A1403 Formation, Structure and Evolution of Galaxies
A1404 Interactions and Nuclear Activities of Galaxies
A1405 Formation, Structure and Evolution of the Milky Way

A15 Stars and Interstellar Medium

A1501 Interstellar Medium and Star Formation
A1502 Structure and Evolution of Stars, Stellar Atmosphere, Variable Stars, Binary Stars and Multiple Star Systems
A1503 Late Stellar Evolution and Explosion, Compact Objects and Related High-Energy Astrophysical Processes

A16 Solar Physics

A1601 Solar Structure, Solar Activity Cycle, Solar Atmosphere and Solar Magnetic Fields

A1602 Solar Eruption and Its Effects on Interplanetary Space

A17 Planet Science

A1701 Formation and Evolution of the Solar System, Characteristics and Exploration of Solar System Small Bodies

A1702 Exploration, Structure and Atmosphere of Terrestrial Planets and Giant Planets of the Solar System

A1703 Detection and Characteristics of Exo-Solar Planets, Formation and Evolution of Planet Systems

A18 Fundamental Astronomy

A1801 Astrometry, Astronomical Reference System, Astrogeodynamics, History of Astronomy

A1802 Time and Frequency

A1803 Methods and Theories of Celetial Mechenics, Relativistic Fundamental Astronomy

A1804 Application of Fundamental Astronomy on Space Target Monitoring, Navigating and Locating

A19 Astronomical Techniques and Methods

A1901 Technologies and Methods of Optical, Ultraviolet and Infrared Astronomy

A1902 Technologies and Methods of Radio Astronomy

A1903 Technologies and Methods of Space Astronomy and High-Energy Astronomy

A1904 Astronomical Information Technologies, Mass Data Processing and Numerical Simulation Methods

A20 Condensed Matter Physics

A2001 Structures, Phase Transitions and Lattice Dynamics of Condensed Matter

A2002 Mechanical, Thermal, Optical and Electronic Properties of Condensed Matter

A2003 Transport Properties of Condensed Matter

A2004 Electronic Structures of Condensed Matter

A2005 Physics of Semiconductors

A2006 Ferroelectric and Multiferroic Systems

A2007 Magnetism and Spintronics

A2008 Superconductivity and Superfluid

A2009 Strongly Correlated Systems
A2010 Topological Systems in Condensed Matter
A2011 Surface, Interface and Low-Dimensional Physics
A2012 Liquid, Quasicrystalline and Amorphous State Physics
A2013 Soft Matter and Biological Physics
A2014 Emerging and Interdisciplinary Fields in Condensed Matter Physics
A2015 Computation Physics

A21 Atomic and Molecular Physics

A2101 Structure, Collision, and Spectroscopy of Atoms and Molecules
A2102 Interaction of Atoms, Molecules with Photons
A2103 Cold Atom/Molecule Physics and Application
A2104 Cluster Physics
A2105 Atomic and Molecular Physics at conditions
A2106 Atoms and Molecules in External Fields: Properties and Manipulations
A2107 Atomic and Molecular Physics Intersects with Other Disciplines

A22 Optics

A2201 Light Propagation, Detection and Imaging
A2202 Light-Matter Interaction
A2203 Light Field Manipulation and Nonlinear Optics
A2204 Ultrafast Optics and Strong Field Physics
A2205 Quantum Optics
A2206 Micro-and Nano-Optics and Photonics
A2207 Spectroscopy and Solid State Luminescence
A2208 Optical Materials and Device Physics
A2209 Optics in Emerging Spectral Range and Novel Light Sources
A2210 Interdisciplinary Fields Related to Optics

A23 Acoustics

A2301 Linear and Nonlinear Acoustics
A2302 Underwater Acoustics and Aeroacoustics
A2303 Ultrasonics and Ultrasonic Technologies
A2304 Environmental Acoustics
A2305 Bioacoustics and Speech Acoustics
A2306 Acoustic Material, Transducer and Measurement
A2307 Interdisciplinary Fields Related to Acoustics

A24 Quantum Science and Technology

A2401 Quantum Materials and Physical Property Manipulations
A2402 Quantum Structures and Quantum Effects

A2403 Precision Measurement Physics
A2404 Quantum Computation and Quantum Communication
A2405 Quantum Simulation
A2406 Quantum Device Physics
A2407 Novel Quantum Technologies and Interdisciplinary Fields

A25 Fundamental Physics

A2501 Mathematical Physics and Computational Methods in Physics
A2502 Quantum Physics and Quantum Information
A2503 Statistical Physics and Complex Systems
A2504 Relativity, Gravitation and Cosmology
A2505 Theoretical Physics for Interdisciplinary Sciences

A26 Particle Physics

A2601 Quantum Field Theory and String Theory
A2602 Strong Interactions and Hadronic Physics
A2603 Heavy Flavor Physics
A2604 Electroweak Interactions and Higgs Physics
A2605 Precision Tests of the Standard Model and New Physics
A2606 Neutrino and Particle Astrophysics

A27 Nuclear Physics

A2701 Nuclear Structure and Decay
A2702 Nuclear Reaction and Heavy Ion Nuclear Physics
A2703 Intermediate and High Energy Nuclear Physics
A2704 Nuclear Astrophysics
A2705 Nuclear Parameter Measurements and Evaluations

A28 Particle Accelerator, Nuclear Reactor and Particle Detector

A2801 Accelerator Physics
A2802 Accelerator Technology and Application
A2803 Physics and Technology of Nuclear Reactor
A2804 Particle Detection Technology
A2805 Nuclear Electronics Technology
A2806 Online and Offline Data Processing

A29 Plasma Physics

A2901 Basic Processes and Characteristics in Plasmas
A2902 Plasma Matter Interactions
A2903 Plasma Diagnostic Technology

A2904 Magnetic Confinement Fusion Plasmas
A2905 Inertial Confinement Fusion Plasmas
A2906 High Energy Density Physics
A2907 Low Temperature Plasmas
A2908 Space and Astrophysical Plasmas

A30 Nuclear Technology and Application

A3001 Interaction of Particle Beam with Matter
A3002 Radiation Damage in Materials and Devices
A3003 Ion Implantation and Ion Beam Modification of Materials
A3004 Nuclear Analysis Techniques and Applications
A3005 Neutron Techniques and Applications
A3006 Radiation Detection and Imaging
A3007 Radiation Dosimetry and Radiation Protection
A3008 Principles and Techniques of Synchrotron Radiation and Free-Electron Laser
A3009 Beamline Techniques and Experimental Methods
A3010 Application of Nuclear Technology in Other Fields

B. Department of Chemical Sciences

B01 Synthetic Chemistry

B0101 Elemental Chemistry
B0102 Coordination Chemistry
B0103 Cluster and Nanochemistry
B0104 Inorganic Synthesis
B0105 Catalytic Synthetic Reactions
B0106 Asymmetric Synthesis
B0107 Total Synthesis of Natural Products
B0108 New Reactions and New Reagents
B0109 Polymer Synthesis
B0110 Supramolecular Chemistry
B0111 Biomimetic and Green Synthesis
B0112 Synthesis of Functional Molecules/Materials
B0113 Structure and Reaction Mechanisms

B02 Catalysis and Surface/Interface Chemistry

B0201 Fundamental Theories and Characterization Methods
B0202 Catalytic Chemistry

B0203 Surface Chemistry
B0204 Colloid and Interface Chemistry
B0205 Electrochemistry
B0206 Soft Matter Interface Chemistry
B0207 Biomimetic Interface Chemistry

B03 Chemical Theories and Mechanisms

B0301 Chemical Theories and Methods
B0302 Chemical Simulation and Application
B0303 Chemical Thermodynamics
B0304 Chemical Kinetics
B0305 Structural Chemistry
B0306 Photochemistry and Spectroscopy
B0307 Chemical Reaction Mechanism
B0308 Moletronics and Molecular Magnetism
B0309 Polymer Physics and Polymer Physical Chemistry
B0310 Chemical Informatics and Artificial Intelligence
B0311 Chemical Programs and Software

B04 Chemical Measurement Science

B0401 Separation and Analysis
B0402 Electroanalytical Chemistry
B0403 Spectroscopic Theories and Methods
B0404 Chemical and Biosensing
B0405 Chemical Imaging
B0406 Analysis for Life Sciences and Public Safety
B0407 Instrumentation Development and Application of Large-Scale Scientific Facilities
B0408 Operando Chemical Measurement
B0409 Intelligent Chemical Measurement and Data Analysis

B05 Materials Chemistry

B0501 Advanced Characterization and Theoretical Mechanisms
B0502 Functional Inorganic Materials Chemistry
B0503 Functional Organic Materials Chemistry
B0504 Functional Polymer Materials Chemistry
B0505 Composite and Hybrid Materials Chemistry
B0506 Intelligent and Biomimetic Materials Chemistry
B0507 Biomedical Materials Chemistry
B0508 Information Technology Materials Chemistry
B0509 Ecomaterials Chemistry

B0510 Energetic Materials Chemistry
B0511 Functional Specialty Materials

B06 Environmental Chemistry

B0601 Theoretical Environmental Chemistry
B0602 Environmental Analytical Chemistry
B0603 Chemistry in Atmospheric Pollution and Control
B0604 Chemistry in Water Pollution and Control
B0605 Chemistry in Soil Pollution and Remediation
B0606 Chemistry in Solid Waste Pollution and Disposal
B0607 Environmental Toxicology and Health
B0608 Radiochemistry and Radiation Chemistry
B0609 Biosafety and Protective Chemistry
B0610 Interfacial Chemical Behaviors of Pollutants

B07 Chemical Biology

B0701 Molecular Probes for Biological Systems
B0702 Chemical Biology of Biomolecules
B0703 Chemical Biology of Natural Products
B0704 Chemical Genetics
B0705 Biosynthetic Chemistry
B0706 Medicinal Chemical Biology
B0707 Theories, Methods and Technologies of Chemical Biology
B0708 Chemical Biology of Carrier systems
B0709 Translational and Applied Chemical Biology

B08 Chemical Engineering and Industrial Chemistry

B0801 Chemical Engineering Thermodynamics
B0802 Transport Processes
B0803 Reaction Engineering
B0804 Separation Engineering
B0805 Process Intensification and Chemical Engineering Equipment
B0806 Mesoscience and Intelligent Chemical Systems Engineering
B0807 Green Chemical Engineering and Chemical Engineering Safety
B0808 Medicinal and Pharmaceutical Chemical Engineering
B0809 Photochemical and Electrochemical Engineering
B0810 Agricultural and Food Chemical Engineering
B0811 Biomass Chemical Engineering
B0812 Biochemical Engineering and Synthetic Bioengineering
B0813 Fine Chemical Engineering and Specialty Chemicals

B0814 Chemical Product Engineering and Materials Chemical Engineering
B0815 Energy Chemical Engineering
B0816 Chemical Engineering of Resources, Environment and Ecology
B0817 Light Chemical Engineering
B0818 Nuclear Chemical Engineering

B09 Energy Chemistry

B0901 Hydrogen Energy Chemistry
B0902 Carbon-based Energy Chemistry
B0903 Thermal Energy Chemistry
B0904 Mechanical Energy Chemistry
B0905 Electro-energy Chemistry
B0906 Photo-energy Chemistry
B0907 Energy Chemistry in Extreme Conditions
B0908 Energy Materials Chemistry

C. Department of Life Sciences

C01 Microbiology

C0101 Microbial Diversity, Classification, and Phylogeny
C0102 Microbial Physiology and Biochemistry
C0103 Microbiomics and Metabolism
C0104 Microbial Genetics and Biosynthesis
C0105 New Microbiological Technologies and Methods
C0106 Microbial Environmental Interaction
C0107 Virology
C0108 Pathogenic Bacteriology
C0109 Pathogenic Mycology and Other Microorganisms

C02 Botany

C0201 Plant Taxonomy
C0202 Phylogenesis and Evolution of Plants
C0203 Plant Photosynthesis and Nitrogen Fixation
C0204 Transport and metabolism of water and nutrients
C0205 Plant Environment Interaction
C0206 Plant Hormones and Growth Regulators
C0207 Plant Reproduction and Development
C0208 Plant Resource Protection and Utilization

C0209 Phytochemistry
C0210 New Technologies and Methods in Botany Research

C03 Ecology

C0301 Environment and Biological Evolution
C0302 Behavioral Ecology
C0303 Physiological Ecology
C0304 Population Ecology
C0305 Community Ecology
C0306 Ecosystem Ecology
C0307 Landscape and Regional Ecology
C0308 Global Change Ecology
C0309 Microecology
C0310 Pollution Ecology and Restoration Ecology
C0311 Soil Ecology
C0312 Protective Biology
C0313 Sustainable Ecology
C0314 Urban Ecology

C04 Zoology

C0401 Animal Evolution and Development
C0402 Animal System and Classification
C0403 Animal Physiology and Behavior
C0404 Animal Breeding and Population Dynamics
C0405 Animal Resources and Protection
C0406 Marine Zoology
C0407 Wildlife Epidemics and Transmission
C0408 Experimental Zoology

C05 Biophysics and Biochemistry

C0501 Structural Biology
C0502 Molecular Biophysics
C0503 Cell Sensing and Environmental Biophysics
C0504 Physical Biology
C0505 Protein, Peptide, and Enzyme Biochemistry
C0506 Biochemistry of sugars and lipids
C0507 Nucleic Acid Biochemistry
C0508 Inorganic Biochemistry and Environmental Measurement and Control
C0509 Biological Processes and Metabolism

C06 Genetics and Bioinformatics

C0601 Structure and function of genetic material
C0602 Gene expression and non coding sequence regulation
C0603 Epigenetic regulation
C0604 Phenotype, Behavior, and Genetic Basis of Diseases
C0605 Genetics and Evolution
C0606 Population genetics and quantitative genetics
C0607 Genomics
C0608 Biological Data Resources and Analysis Methods
C0609 Biological Big Data Analysis

C07 Cell Biology

C0701 The structure, interaction, and function of organelles and subcellular cells
C0702 Cell Signal Transduction
C0703 Cell Proliferation and Cell Cycle
C0704 Cell fate and reprogramming
C0705 Cell Aging, Death and Autophagy
C0706 Cell Polarity and Cell Movement
C0707 Cell Variation and Functional Abnormality
C0708 Cell Metabolism and Steady State Regulation
C0709 Extracellular microenvironment and intercellular communication

C08 Immunology

C0801 Innate immunity
C0802 Adaptive immunity
C0803 Immune Evolution and Environmental Adaptation
C0804 Autoimmunity and immune tolerance
C0805 Tumor Immune Microenvironment
C0806 Infection and Non Infectious Inflammation
C0807 Immunoinformatics and Big Data Analytics
C0808 Vaccine, Antibody, and Immune Intervention

C09 Neuroscience and Psychology

C0901 Molecular and Cellular Neurobiology
C0902 Developmental and Aging Neurobiology
C0903 Structure and function of nervous system and abnormalities
C0904 Neurobiology of the sensory and motor systems
C0905 Behavioral and Emotional Neuroscience
C0906 Cognitive Neurobiology

C0907 Cognitive Psychology
C0908 Developmental and Educational Psychology
C0909 Behavior, Decision Making, and Social Psychology
C0910 Applied Psychology and Others
C0911 Physiology and Medical Psychology
C0912 Psychological Disorders and Cognitive Disorders and Interventions
C0913 New Technologies and Paradigms in Neuroscience and Psychology Research
C0914 Cognitive Simulation, Computing, and Artificial Intelligence

C10 Biomaterials, Imaging, and Tissue Engineering

C1001 Biomechanics and Biorheology
C1002 Biomaterials and Biological Effects
C1003 Tissue Engineering andTissue Regeneration
C1004 Organoids and and Artificial Organs
C1005 Bioimaging, Electronics, and Probes
C1006 Brain-Computer Interaction, Information Processing and Biomimetics
C1007 Nanobiology
C1008 New Technologies and Methods for Biological and Medical Engineering

C11 Physiology and Integrative Biology

C1101 Circulation and Blood Physiology
C1102 Endocrine, urinary, and reproductive physiology
C1103 Respiratory and Digestive Physiology
C1104 Sensory Organs and Exercise Physiology
C1105 Integrative Physiology and Integrative Biology
C1106 Aging and Biological Rhythm
C1107 Nutrition and Metabolic Physiology
C1108 Special Environmental Physiology and Comparative Physiology
C1109 Pathophysiology

C12 Developmental Biology and Reproductive Biology

C1201 Basic Research on stem cells
C1202 Applied research on stem cell
C1203 Early embryonic development and cell lineage establishment
C1204 Tissue and organ development and in vitro construction
C1205 Tissue and Organ Steady State Maintenance and Regeneration Repair
C1206 Germ Cells and Sex Determination
C1207 Fertilization, implantation, and maternal fetal interaction
C1208 Reproductive abnormalities and assisted reproduction

C13 Agriculture and Crop Science

C1301 Agricultural Informatics
C1302 Agronomy and Agromechanics
C1303 Agricultural Biological Systems Engineering
C1304 Crop Physiology
C1305 Crop Stress Biology
C1306 Crop Germplasm Resources
C1307 Crop Genome and Genetics
C1308 Crop Breeding
C1309 Cultivation of Rice Crops
C1310 Cultivation of Wheat Crops and Maize Cultivation
C1311 Cultivation of Other Crops
C1312 Tillage
C1313 Tropical Crop Science

C14 Plant Protection

C1401 Plant Pathology
C1402 Agricultural Entomology
C1403 Crop Immunity and Resistance
C1404 Grass, mouse, and other harmful organisms in farmland
C1405 Plant Chemical Protection
C1406 Biological Control
C1407 New Plant Protection Technology
C1408 Crop Biological Factor Interaction and Ecological Regulation

C15 Horticulture and Plant Nutrition

C1501 Physiology and Cultivation of Fruit Trees
C1502 Fruit Tree Germplasm Resources and Genetics and Breeding
C1503 Fruit Tree Growth and Development
C1504 Physiology and Cultivation of Vegetables, Melons and Fruits
C1505 Vegetable, melon and fruit germplasm resources and genetics and breeding
C1506 Vegetables and Fruit Growth and Development
C1507 Ornamental Horticulture
C1508 Tea Science
C1509 Postharvest Biology of Horticultural Crops
C1510 Edible Mycology
C1511 Facility Horticulture
C1512 Fundamentals of Plant Nutrition
C1513 Fertilizers and Nutrient Management

C16 Forestry

C1601 Wood Physics
C1602 Forest Products Chemistry
C1603 Tree Biology
C1604 Forest Soil Science
C1605 Forest Cultivation
C1606 Forest Informatics and Forest Management
C1607 Forest Conservation
C1608 Tree Genetics and Breeding
C1609 Economic Forestry
C1610 Landscape Architecture
C1611 Desertification and Soil and Water Conservation
C1612 Bamboo Science

C17 Animal Husbandry

C1701 Fundamentals of Animal Husbandry
C1702 Livestock Germplasm Resources and Genetics and Breeding
C1703 Germplasm Resources and Genetics and Breeding of Poultry and Other Economic Animals
C1704 Livestock and Poultry Reproduction
C1705 Animal Nutrition
C1706 Feed Science
C1707 Animal Behavior and Intelligent Breeding
C1708 Beekeeping
C1709 Sericulture

C18 Veterinary Medicine

C1801 Basic Veterinary Medicine
C1802 Veterinary Virology
C1803 Veterinary Bacteriology and Other Microbiology
C1804 Veterinary Immunology
C1805 Veterinary Parasitology
C1806 Veterinary Infectious Diseases
C1807 Chinese Veterinary Medicine
C1808 Veterinary Pharmacology and Toxicology
C1809 Clinical Veterinary Medicine
C1810 Zoonosis
C1811 Veterinary Public Hygiene

C19 Aquatics

C1901 Fundamentals of Aquatics

C1902 Aquatic Organisms Genetics and Breeding
C1903 Aquatic Organisms Reproduction and Development
C1904 Fisheries Resources and Conservation Biology
C1905 Aquatic Animal Nutrition and Feed Science
C1906 Aquaculture
C1907 Aquatic Organisms Immunology
C1908 Aquatic Bioaetiology and Disease Control
C1909 Aquaculture and Fishery Engineering

C20 Food Science

C2001 Food Ingredients
C2002 Food Biochemistry
C2003 Food Microbiology
C2004 Food Composition and Nutrition
C2005 Food and Intestinal Microflora
C2006 Food Processing and Manufacturing
C2007 Food Storage and Preservation
C2008 Food Quality and Safety Testing
C2009 Food Safety Risk Assessment
C2010 Food Safety and Quality Control
C2011 Food Flavor Chemistry and Sensory Evaluation
C2012 New Methods for Food Science Research

C21 Molecular Biology and Biotechnology

C2101 Basic Theories of Frontier Technologies
C2102 Synthetic Biology and Biomodification Technologies
C2103 Biomics Technologies
C2104 Common Biotechnologies
C2105 Cross Fusion Biotechnologies
C2106 Applied Biotechnologies
C2107 Instrument Development for Life Sciences Research

C22 Grass Science

C2201 Grass Germplasm Resources and Genetic Breeding
C2202 Grass Genomics and Basic Biology
C2203 Grass Cultivation Science
C2204 Grass Product Processing and Utilization
C2205 Natural Grassland Restoration
C2206 Grassland Conservation and Sustainable Management
C2207 Grassland Agronomy Systems

C2208 Turfgrass Science
C2209 Grassland Informatics and Smart Grassland Industry

D. Department of Earth Sciences

D01 Geography

D0101 Geomorphology
D0102 Hydrology and Climatology
D0103 Biogeography and Soil Geography
D0104 Environmental Geography and Disaster Geography
D0105 Landscape Geography and Integrated Physical Geography
D0106 Cryospheric Science
D0107 Geographical Environmental Change and Civilization Evolution
D0108 Economic Geography
D0109 Urban Geography and Rural Geography
D0110 Human Geography
D0111 Land Science and Natural Resource Management
D0112 Regional Sustainable Development
D0113 Remote Sensing
D0114 Geographical Information Science
D0115 Geodesy and Cartography
D0116 Geographical Big Data and Spatial Intelligence
D0117 Geographical Observation and Simulation Technology

D02 Geology

D0201 Paleontology, Paleoanthropology, and Paleoecology
D0202 Stratigraphy
D0203 Mineralogy (including Mineral Physics)
D0204 Petrology
D0205 Mineral deposits
D0206 Sedimentology and Basin Dynamics
D0207 Petroleum and Natural Gas Geology
D0208 Coal Geology
D0209 Quaternary Geology
D0210 Precambrian Geology
D0211 Tectonics and Structural Geology
D0212 Exploration Technology and Geological Drilling
D0213 Hydrogeology

D0214 Engineering Geology
D0215 Mathematical Geology and Remote Sensing Geology
D0216 Volcanology and Geothermal Geology
D0217 Biogeology

D03 Geochemistry

D0301 Isotope Geochemistry
D0302 Elemental Geochemistry
D0303 Geochronology
D0304 Organic Geochemistry
D0305 Analytical Geochemistry
D0306 Experimental and Computational Geochemistry
D0307 Emerging and Interdisciplinary Geochemistry
D0308 Petrogeochemistry
D0309 Fossil Fuel Geochemistry
D0310 Surface Geochemistry
D0311 Ore Deposit and Exploration Geochemistry
D0312 Biogeochemistry
D0313 Atmospheric and Marine Geochemistry

D04 Geophysics and Space Physics

D0401 Physical Geodesy
D0402 Satellite Geodesy
D0403 Applied Geodesy
D0404 Gravity
D0405 Geomagnetism
D0406 Geo-electromagnetism
D0407 Seismology
D0408 Earth Interior Physics and Geodynamics (including Geothermy)
D0409 Oil and Gas Geophysics
D0410 Mineral Geophysics
D0411 Engineering and Environmental Geophysics
D0412 Space Physics
D0413 Space Weather
D0414 Physics Experiments and Instruments of the Earth and other Planets

D05 Atmospheric Science

D0501 Synoptic Meteorology
D0502 Climate and Climate System
D0503 Paleoclimate Simulation and Dynamics
D0504 Atmospheric Dynamics

D0505 Atmospheric Physics
D0506 Atmospheric Chemistry
D0507 Ecological Meteorology
D0508 Atmospheric Observation, Remote Sensing, and Detection Technologies and Methods
D0509 Atmospheric Data and Information Technologies
D0510 Atmospheric Numerical Model Development
D0511 Earth System Model Development
D0512 Climate Change: Impacts and Countermeasures
D0513 Atmospheric Environment and Health Meteorology
D0514 Applied Meteorology

D06 Marine Science

D0601 Physical Oceanography
D0602 Marine Chemistry
D0603 Marine Geology and Geophysics
D0604 Biological Oceanography and Marine Bioresources
D0605 Marine Ecology and Environmental Science
D0606 Estuarine and Coastal Science
D0607 Ocean Remote Sensing
D0608 Ocean Physics and Marine Observation & Detection Technologies
D0609 Marine Data Science and Information System
D0610 Ocean System and Global Change
D0611 Ocean Engineering and the Associated Environmental Effects
D0612 Marine Disasters and Disaster Prevention and Mitigation
D0613 Marine Energy and Resources
D0614 Sea-land Coordination and Sustainable Development
D0615 Polar Science

D07 Environmental Geosciences

D0701 Environmental Soil Science
D0702 Environmental Water Science
D0703 Environmental Atmospheric Science
D0704 Environmental Biology
D0705 Engineering Geological Environment and Disasters
D0706 Environmental Geology
D0707 Environmental Geochemistry
D0708 Ecotoxicology
D0709 Basic Soil Science
D0710 Soil Erosion and Soil Fertility
D0711 Environmental Behavior and Effects of Pollutants

D0712 Environment and Health Risk
D0713 Quaternary Environment and Environmental Archaeology
D0714 Environmental Information and Environmental Prediction
D0715 New Technologies and New Methods in Environmental Geosciences
D0716 Regional Environmental Quality and Safety
D0717 Environmental Protection and Sustainable Development

D08 Lunar and Planetary Science

D0801 Planetary Geology
D0802 Planetary Chemistry
D0803 Physics and Dynamics of Planetary Interiors
D0804 Planetary Space Physics
D0805 Planetary Atmosphere and Ocean
D0806 Astrobiology
D0807 Planetary Remote Sensing and Geodesy
D0808 Planetary Exploration and Simulation
D0809 Planetary Formation and Evolution
D0810 Earth-Moon System
D0811 Planetary Resources

E. Department of Engineering and Material Sciences

E01 Metallic Materials

E0101 Design, calculation and characterization of metallic materials
E0102 Preparation and processing of metallic materials
E0103 Service behavior and surface engineering of metallic materials
E0104 Metallic structural materials and mechanical behavior
E0105 Metal matrix composites and structure-function integration
E0106 Metallic low-dimensional and metastable materials
E0107 Metallic functional materials
E0108 Metallic energy and environmental materials
E0109 Metallic information functional materials
E0110 Metallic biomaterials and biomimetic materials

E02 Inorganic Non-metallic Materials

E0201 Artificial crystals and glass materials
E0202 Inorganic non-metallic basic materials

E0203 Carbon based materials and super-hard materials
E0204 Structural ceramics
E0205 Inorganic non-metallic basic composite materials
E0206 Functional ceramics
E0207 Inorganic non-metallic semiconductors and information functional materials
E0208 Inorganic non-metallic energy conversion and storage materials
E0209 Inorganic non-metallic high-temperature superconducting materials and magnetic materials
E0210 Inorganic non-metallic biological materials
E0211 Other inorganic non-metallic materials

E03 Organic Polymer Materials

E0301 Preparation of polymer materials
E0302 Physics of polymer materials
E0303 Processing and molding of polymer materials
E0304 General polymer materials
E0305 Polymer blends and composites
E0306 Polymer materials and the environment
E0307 Intelligent and biomimetic polymer materials
E0308 Biomedical organic polymer materials
E0309 Organic polymer materials with optical, electrical, or magnetic functions
E0310 Other functional organic polymer materials

E04 Mining and Metallurgical Engineering

E0401 Oil-Gas Well Engineering
E0402 Oil and Gas Production
E0403 Storage and Transportation of Oil and Gas
E0404 Basic Theory of Mining
E0405 Mining Engineering
E0406 Intelligent Mine
E0407 Mine Restoration Engineering
E0408 Safety Science and Engineering
E0409 Mining Engineering and Separation of Substances
E0410 Metallurgical Physical Chemistry and Principles of Metallurgy
E0411 Ferrous Metallurgy
E0412 Nonferrous Metals Metallurgy
E0413 Powder Metallurgy and Powder Engineering
E0414 Materials Processing Engineering and Metallurgy E0415 Resource Recycling

E05 Mechanical Engineering

E0501 Robotics and Mechanism
E0502 Transmission and Drive
E0503 Mechanical Dynamics
E0504 Mechanical Structural Strength
E0505 Tribology and Mechanical Surface/Interface Science
E0506 Mechanical Design
E0507 Mechanical Bionics and Biomanufacturing
E0508 Forming Manufacturing
E0509 Machining Manufacturing
E0510 Manufacturing Systems and Intelligentization
E0511 Mechanical Testing and Instrumentation
E0512 Micro/Nano-Scale and Atomic-Level Manufacturing

E06 Energy and Power Engineering & Engineering Thermophysics

E0601 Engineering Thermodynamics
E0602 Internal Flow Fluid Mechanics
E0603 Heat and Mass Transfer
E0604 Combustion
E0605 Multiphase Flow Thermophysics
E0606 Thermal Properties and Thermophysical Measurement Techniques
E0607 Conversion and Utilization of Renewable and New Energy
E0608 Power and Propulsion Engineering

E07 Electrical Science and Engineering

E0701 Electromagnetic field and circuit
E0702 Superconducting and electrical materials
E0703 Electric machines and system
E0704 Power system and integrated energy
E0705 High voltage and discharge
E0706 Power electronics
E0707 Electrical energy storage
E0708 Bio-electromagnetic technology

E08 Architecture and Civil Engineering

E0801 Architecture
E0802 Urban and Rural Planning
E0803 Architectural Physics
E0804 Structural Engineering
E0805 Engineering Materials

E0806 Engineering Construction and Service
E0807 Geotechnical and Foundation Engineering
E0808 Underground and Tunnel Engineering
E0809 Road and Rail Transit Engineering
E0810 Engineering Disaster Prevention

E09 Hydraulic Engineering

E0901 Engineering Hydrology and Water Resources Utilization
E0902 Agricultural and Rural Water Conservancy
E0903 Hydraulics and River Dynamics
E0904 Hydraulic Machinery and Water Conservancy Electromechanical System
E0905 Hydraulic Geotechnical Engineering
E0906 Hydraulic Structures and Hydraulic Materials
E0907 Water Network and Waterway Engineering

E10 Environmental Engineering

E1001 Drinking water engineering
E1002 Urban wastewater treatment and reclamation
E1003 Industrial wastewater treatment and reuse
E1004 Urban and rural water system and ecological cycle
E1005 Air pollution control engineering
E1006 Solid waste recycling and safe disposal
E1007 Environmental pollution control and remediation
E1008 Regional and urban eco-environmental system engineering
E1009 Eco-environmental risk control

E11 Ocean Engineering

E1101 Costal and Ocean Engineering
E1102 Ship Engineering
E1103 Marine Technology
E1104 Navigation and Maritime Technology

E12 Transportation and Vehicle Engineering

E1201 Theories of Transportation System Analysis
E1202 Transportation Planning and Design
E1203 Traffic Information and Control
E1204 Transportation Safety and Environment
E1205 Foundation of Vehicle Design
E1206 Vehicle System Dynamics
E1207 Intelligentization of Vehicle System

E1208 Vehicle Application Engineering

E13 New Conceptual Materials and Common Science of Materials

E1301 New methods for materials design and characterization
E1302 New Material Fabrication techniques and digital manufacturing
E1303 Multi-functional integration of materials and devices
E1304 New composite and hybrid materials
E1305 New conceptual materials
E1306 Essential materials for advanced manufacturing
E1307 Essential engineering materials

F. Department of Information Sciences

F01 Electronics and information system

F0101 Information theory
F0102 Information system and system security
F0103 Communication theories and system
F0104 Communication network
F0105 Mobile communication
F0106 Aerospace communication
F0107 Maritime and underwater communication
F0108 Multimedia communication
F0109 Optical communication
F0110 Quantum communication and its information processing
F0111 Signal theory and signal processing
F0112 Radar principle and technologies
F0113 Information acquisition and processing
F0114 Detection and imaging
F0115 Underwater information acquisition and processing
F0116 Image information processing
F0117 Multimedia information processing
F0118 Circuit and system
F0119 Electromagnetic field and wave
F0120 Terahertz theories and technologies
F0121 Microwave photonics
F0122 Physical electronics
F0123 Sensitive electronics and sensors
F0124 Bio-electronics and bio-information processing
F0125 Medical information detection and processing

F0126 Spectral information acquisition and processing

F02 Computer Science

F0201 Theoretical Foundations of Computer Science
F0202 System Software, Databases, and Enterprise Software
F0203 Software Theories, Software Engineering, and Services
F0204 Computer System Architecture and Hardware Technology
F0205 Network and System Security
F0206 Information Security
F0207 Computer Networks
F0208 Internet of Things and Other Emerging Networks
F0209 Computer Graphics and Virtual Reality
F0210 Computer Image and Video Processing and Multimedia Technologies
F0211 Information Retrieval and Social Computing
F0212 Data Science and Big Data Processing
F0213 Bioinformatics and Digital Health
F0214 New Computing Methods and Applications
F0215 Interdisciplinary Research in Computer Science

F03 Automation

F0301 Control Theories &Technologies
F0302 Control Systems &Applications
F0303 System Modeling Theories & Simulation Technologies
F0304 Systems Engineering Theories &Technologies
F0305 Biological & Medical Informatics: Systems & Technologies
F0306 Automatic Measurement Technologies & Devices
F0307 Navigation, Guidance & Control
F0308 Automation for Intelligent Manufacturing
F0309 Robotics & Intelligent Systems
F0310 Artificial Intelligence-Driven Automation
F0311 Automation for Emerging Fields

F04 Semiconductor Science and Information Devices

F0401 Semiconductor Materials
F0402 Integrated Circuit Design
F0403 Semiconductor Optoelectronic Devices and Integration
F0404 Semiconductor Electronic Devices and Integration
F0405 Semiconductor Device Physics
F0406 Integrated Circuit Devices, Manufacturing, and Packaging
F0407 Micro-Nano Electromechanical Devices and Control Systems
F0408 Novel Information Devices

F0409 Interdisciplinary Research in Semiconductors

F05 Optics and Optoelectronics

F0501 Optical Information Acquisition, Display and Processing
F0502 Photonic and Optoelectronic Devices
F0503 Photonic Devices for Transmission and Switching
F0504 Infrared and Terahertz Physics and Technologies
F0505 Nonlinear Optics
F0506 Lasers
F0507 Spectral Informatics
F0508 Applied Optics
F0509 Optical And Optoelectronic Materials
F0510 Space, Atmospheric, Oceanic and Environmental Optics
F0511 Biological, Medical Optics and Photonics
F0512 Energy and Illumination Photonics
F0513 Micro-Nano Photonics
F0514 Photonic Integration Technologies and Devices
F0515 Quantum Optics
F0516 Optical Problems in Interdisciplinary Research

F06 Artificial Intelligence

F0601 Fundamentals of Artificial Intelligence
F0602 Machine Learning
F0603 Machine vision and Pattern Recognition
F0604 Data Mining and knowledge finding
F0605 Natural Language Processing
F0606 Intelligent Systems and Complexity Science
F0607 Brain-like intelligence and brain machine interface
F0608 Artificial Intelligence Security and governance
F0609 Artificial Intelligence enabling science and technology
F0610 Artificial Intelligence driven by Interdisciplinary disciplines

F07 Information Science in Interdisciplinary Disciplines

F0701 Information Science and Technology in Education

G. Department of Management Sciences

G01 Management Science and Engineering

G0101 Complex Systems Management

G0102 Operations Research and Management
G0103 Decision-Making Theory and Game Theory
G0104 Forecasting and Evaluation Theories and Method
G0105 Management Statistics Theories and Method
G0106 Management Psychology and Behaviors
G0107 Management System Engineering
G0108 Industrial Engineering and Quality Management
G0109 Logistics and Supply Chain Management
G0110 Service Science and Engineering
G0111 Data Science and Management
G0112 Information System and Management
G0113 Risk Management
G0114 Financial Engineering
G0115 Engineering Management and Project Management
G0116 Transportation Management
G0117 Digital Platform Management Theory

G02 Business Administration

G0201 Strategic Management
G0202 Theory of Firm
G0203 Enterprise Technology Management and Innovation Management
G0204 Human Resource Management
G0205 Financial Management
G0206 Accounting and Auditing
G0207 Marketing
G0208 Organization Behaviors
G0209 Business Intelligence and Digital Business
G0210 Corporate Finance
G0211 Enterprise Operation Management
G0212 Corporate Governance
G0213 Entrepreneurship
G0214 International Business Management
G0215 Tourism Management

G03 Economic Sciences

G0301 Econometrics and Economic Statistics
G0302 Behavioral Economics and Experimental Economics
G0303 Mathematical Economics and Computational Economics
G0304 Microeconomics
G0305 Macroeconomic Management
G0306 International Economics and Trade

G0307 Financial Economics
G0308 Public Finance and Public Economics
G0309 Industrial Economics
G0310 Economic Development and Economic Institutions
G0311 Agricultural and Forestry Economics and Management
G0312 Regional Economics
G0313 Population, Labor and Health Economics
G0314 Resources and Environmental Economics

G04 Macro-Management and Policy

G0401 Public Administration and Public Policy
G0402 Theories and Methods of Policy Science
G0403 Governance and Policy of Science and Technology
G0404 Governance and Policy of Innovation
G0405 Governance and Policy of Public Health
G0406 Governance and Policy of Medicine
G0407 Governance and Policy of Education
G0408 Governance and Policy of Culture
G0409 Public Safety and Emergency Management
G0410 Social Governance and Social Security
G0411 Governance of Environment and Ecology
G0412 Governance and Policy of Resource
G0413 Regional Management and Urban Governance
G0414 Digital Governance and Information Resource Management
G0415 Global Governance and Sustainable Development

H. Department of Health Sciences

H01 Respiratory System

H0101 Structural, functional and developmental abnormalities of the respiratory system
H0102 Respiratory infections, inflammation and immunity
H0103 Environmental factors and airway diseases
H0104 Bronchial asthma
H0105 Chronic obstructive pulmonary disease
H0106 Bronchiectasis
H0107 Pulmonary circulation and pulmonary vascular disease
H0108 Interstitial lung disease
H0109 Acute lung injury and acute respiratory distress syndrome

H0110 Sleep-disordered breathing and respiratory regulation
H0111 Respiratory failure and respiratory support
H0112 Pleura, mediastinum, thoracic and diaphragm-related disorders
H0113 Respiratory interventions, tracheal reconstruction and lung transplantation
H0114 New technologies and methods for respiratory disease research

H02 Circulation System

H0201 Abnormalities in cardiac structure, function and development
H0202 Myocardial injury, repair, remodeling and regeneration
H0203 Congenital heart disease
H0204 Abnormal cardiac electrical activity and arrhythmia
H0205 Coronary artery disease
H0206 Pulmonary heart disease
H0207 Myocarditis and cardiomyopathy
H0208 Heart valve disease and pericardial disease
H0209 Heart failure
H0210 Heart/Vascular transplantation and assisted circulation
H0211 Abnormalities in angiogenesis and vascular structure and function
H0212 Vascular injury, repair, remodeling and regeneration
H0213 Abnormal regulation of blood pressure and hypertension
H0214 Atherosclerosis and arteriosclerosis
H0215 Aortic disease
H0216 Peripheral vascular disease
H0217 Lymphatic vessels and lymphatic circulation diseases
H0218 Microcirculation and shock
H0219 Infections and immune-related diseases in circulation system
H0220 New technologies and methods for circulatory system diseases

H03 Digestive System

H0301 Digestive system textural abnormality, dysfunction and dysplasia
H0302 Immune-related diseases
H0303 Abnormal gastrointestinal motility
H0304 Abnormal gastrointestinal homeostasis, mucosal barrier disorders and related diseases
H0305 Gastric acid-related diseases and neuroendocrine dysregulation in digestive system
H0306 Gastrointestinal and abdominal infectious diseases
H0307 Liver metabolic disorders and related diseases
H0308 Drug, toxin and alcohol-induced digestive diseases
H0309 Inflammatory and infectious liver diseases

H0310 Liver injury, repair and regeneration
H0311 Liver protection and artificial liver
H0312 Cholelithiasis and biliary inflammation
H0313 Pancreatic exocrine dysfunction and pancreatitis
H0314 Digestive system organ transplantation
H0315 New technologies and methods for digestive diseases

H04 Reproductive System/Perinatal Medicine/Neonatology

H0401 Male reproductive system structure, function and development abnormalities
H0402 Male reproductive system injury and repair
H0403 Male reproductive system inflammation and infection
H0404 Male reproductive endocrine abnormalities and related diseases
H0405 Spermatogenic abnormalities and male infertility
H0406 Sexual dysfunction
H0407 Mammary structure, function and development abnormalities
H0408 Female reproductive system structure, function and development abnormalities
H0409 Female reproductive system injury and repair
H0410 Female reproductive system inflammation and infection
H0411 Female reproductive endocrine abnormalities and related diseases
H0412 Endometriosis and adenomyosis
H0413 Oocyte development, maturation, fertilization and related abnormalities
H0414 Early embryo development
H0415 Embryo implantation, maternal-fetal interaction, reproductive immunity and related diseases
H0416 Placental development, structure, function and related abnormalities
H0417 Pregnancy related diseases
H0418 Delivery and puerperal related diseases
H0419 Fetus related diseases and embryo origin diseases
H0420 Assisted reproduction
H0421 Neonatal diseases
H0422 New technologies and methods for reproductive system/perinatal medicine/neonatology research

H05 Urinary System

H0501 The structural, functional and development disorders of urinary system
H0502 Injuries and repairs of urinary system
H0503 Primary kidney diseases
H0504 Secondary kidney diseases
H0505 Chronic kidney diseases and its related complication

H0506 Hemodialyses and renal replacement therapies
H0507 Kidney transplantations
H0508 Urolithiasis and urinary tract infections
H0509 Benign diseases of prostate and bladder
H0510 Voiding dysfunction
H0511 New technologies and methods for urological diseases

H06 Locomotor System

H0601 Structural, functional and developmental abnormalities in locomotor system
H0602 Immune related diseases in locomotor system
H0603 Biomedical materials for bone, joint and soft tissue
H0604 Injury and repair of bone, joint and soft tissue
H0605 Transplantation and reconstruction of bone, joint and soft tissue
H0606 Infection of bone, joint and soft tissue
H0607 Fatigue and recuperation of bone, joint and soft tissue
H0608 Degenerative disease of bone, joint and soft tissue
H0609 Sports injury of bone, joint and soft tissue
H0610 Deformity and correction in locomotor system
H0611 New technologies and methods for locomotor system diseases

H07 Endocrine System/Metabolic Abnormalities and Nutritional Support

H0701 Endocrine system immune-related diseases
H0702 Pineal gland, hypothalamus, pituitary and related diseases
H0703 Thyroid, parathyroid and related diseases
H0704 Adrenal gland associated diseases
H0705 Gonads and related diseases
H0706 Physiological regulation and dysfunction of islets
H0707 Imbalance of glucose homeostasis and insulin resistance in target organs
H0708 Diabetes mellitus
H0709 Abnormal regulation of energy metabolism and obesity
H0710 Abnormal lipid metabolism
H0711 Physiological regulation and dysfunction of adipose tissue
H0712 Bone turnover, abnormal bone metabolism and abnormal calcium and phosphorus metabolism
H0713 Amino acids and nucleic acid metabolic abnormalities
H0714 Abnormal metabolism of water, electrolyte, trace elements and vitamins, acid-base imbalance
H0715 Malnutrition and nutritional support
H0716 New technologies and methods for endocrine system diseases/metabolic abnormalities and nutritional support

H08 Hematologic System

H0801 Hematopoiesis, hematopoiesis regulation and hematopoietic microenvironment
H0802 Erythrocyte and related diseases
H0803 Leukocyte and related diseases
H0804 Megakaryocyte, platelet and related diseases
H0805 Bleeding, coagulation, fibrinolysis and thrombosis
H0806 Aplastic anemia and bone marrow failure
H0807 Myelodysplastic syndromes
H0808 Myeloproliferative neoplasm
H0809 Leukemia
H0810 Lymphoma and lymphocytic diseases
H0811 Myeloma and plasma cell diseases
H0812 Infection associated with blood system diseases and its treatment
H0813 Hematopoietic stem cell transplantation and its complications
H0814 Immunotherapy and cell therapy for hematologic disease
H0815 Blood transfusion, blood regeneration and blood products
H0816 New technologies and methods for hematological diseases

H09 Nervous System

H0901 Neurodevelopmental and metabolic abnormalities
H0902 Disorders of consciousness and cognitive dysfunction
H0903 Sensory disorders, pain and analgesia
H0904 Dyskinetic diseases
H0905 Anaesthesia and sedation
H0906 Abnormalities of cerebrovascular structure, function and related disorders
H0907 Neurological immune abnormalities and related diseases
H0908 Diseases associated with neurological barrier and cerebrospinal fluid circulation disorders
H0909 Inflammation, infection and related diseases of the nervous system
H0910 Nerve injury, repair and regeneration
H0911 Neuromuscular junction and muscle diseases, autonomic nerve diseases
H0912 Neurodegeneration and associated disorders
H0913 Abnormal neural electrical activities and paroxysmal diseases
H0914 Protection and regulation of neurological function
H0915 New technologies and methods for neurological diseases

H10 Mental Health and Psychological Health

H1001 Biological rhythm disorders and associated diseases
H1002 Sleep and sleep disorders

H1003 Organic mental disorders
H1004 Substance dependence and other addictive disorders
H1005 Schizophrenia or other psychotic disorders
H1006 Anxiety disorders, obsessive-compulsive disorders and stress-related disorders
H1007 Mood disorders
H1008 Psycho-behavioral disorders in children and adolescents
H1009 Other behavioral and psychiatric disorders
H1010 Psychological assessment and intervention of psycho-behavioral disorders
H1011 New technologies and methods for mental disorders and psychological health

H11 Medical Immunology

H1101 Immune system development and differentiation abnormalities
H1102 Immune response abnormalities
H1103 Immune regulation abnormalities
H1104 Inflammation, infection and immunity
H1105 Organ transplantation and transplant immunity
H1106 Hypersensitivity reaction diseases
H1107 Autoimmune diseases
H1108 Immunodeficiency diseases
H1109 Neuroendocrine-immune abnormalities
H1110 Regional immune and mucosal immune diseases
H1111 Vaccine and immunoprophylaxis
H1112 Immunotherapy and related mechanisms
H1113 New technologies and methods for medical immunology research

H12 Dermatology

H1201 Abnormalities of skin morphology, structure, and function
H1202 Immune-mediated skin diseases
H1203 Infectious skin diseases
H1204 Non-infectious skin diseases
H1205 Skin appendages and related diseases
H1206 New techniques and approaches for dermatology research

H13 Ophthalmology

H1301 Corneal and ocular surface related diseases
H1302 Lens and cataract
H1303 Sclera, uvea and ocular immunology related diseases
H1304 Glaucoma, optic nerve and visual pathway related diseases

H1305 Retina, choroid and vitreous related diseases

H1306 Vision, optometry and myopia, amblyopia and ocular muscle disorder related diseases

H1307 Ocular manifestations due to systemic disease and orbital diseases

H1308 Ocular tissue transplantation

H1309 New technologies and methods for ophthalmic research

H14 Otorhinolaryngology head and neck science

H1401 Olfactory, nasal and anterior skull base diseases

H1402 Throat and neck diseases

H1403 Ear and lateral skull base diseases

H1404 Auditory abnormalities and balance disorders

H1405 Otorhinolaryngology head and neck development related diseases

H1406 New technologies and methods for otorhinolaryngology head and neck research

H15 Oral and Craniofacial Sciences

H1501 Diseases related to the development of oral craniomaxillofacial tissues and organs

H1502 Defect restoration and regeneration of oral craniomaxillofacial tissues and organs

H1503 Dental pulp and periapical tissue diseases

H1504 Periodontal and oral mucosal diseases

H1505 Saliva, salivary glands, oral and maxillofacial, nerves and jaw benign diseases

H1506 Taste, oral and maxillofacial pain, occlusion and temporomandibular joint diseases

H1507 Restoration of tooth defects or missing and correction of dentognathic deformities

H1508 Biomechanics and biomaterials of oral craniomaxillofacial tissues

H1509 New technologies and methods for oral craniomaxillofacial research

H16 Emergency and Critical Care Medicine

H1601 Sepsis

H1602 Organ function failure and support

H1603 Cardiac-pulmonary resuscitation

H1604 Poisoning and heat stroke

H1605 New technologies and methods for emergency and critical care medicine

H17 Trauma/Burns/Plastic Surgery

H1701 Trauma

H1702 Burns and chimatlon
H1703 Wound healing and scar management
H1704 Deformity, injury, repair and regeneration of surface tissues and organs
H1705 Transplantation and reconstruction of surface tissues and organs
H1706 Craniomaxillo-facial deformity and its correction
H1707 New technologies and methods for trauma/burn/plastic surgery research

H18 Oncology

H1801 Tumor etiology
H1802 Tumorigenesis
H1803 Tumor cell-fate
H1804 Tumor genetics and evolution
H1805 Tumor epigenetics
H1806 Tumor immunology
H1807 Tumor metabolism
H1808 Tumor microenvironment
H1809 Tumor recurrence and metastasis
H1810 Tumor stem cells
H1811 Interdisciplinary oncology
H1812 Cancer prevention
H1813 Cancer diagnosis
H1814 Cancer chemotherapy
H1815 Targeted cancer therapy
H1816 Cancer radiotherapy
H1817 Cancer physical therapy
H1818 Cancer immunotherapy
H1819 Cancer biotherapy
H1820 Comprehensive cancer therapy
H1821 Cancer therapy resistance
H1822 Cancer rehabilitation
H1823 Rare tumors and cancer with special characteristics
H1824 Solid tumors in children
H1825 Big data and artificial intelligence for Oncology
H1826 Clinical Translational research in Oncology
H1827 New technologies and methods for oncology

H19 Gerontology

H1901 Mechanism and regulation of aging
H1902 Aging-related diseases
H1903 New technologies and methods for gerontology

H20 Rehabilitation Medicine

H2001 Rehabilitation treatment and rehabilitation mechanism
H2002 Rehabilitation evaluation
H2003 New technologies and new methods for rehabilitation medicine research

H21 Medical Virology and Viral Infection

H2101 Respiratory viruses and infections
H2102 Digestive tract viruses, picorna viruses and infections
H2103 Hepatitis viruses and infections
H2104 Retroviruses and infections
H2105 Herpes viruses and infections
H2106 Arboviruses and infections
H2107 Hemorrhagic fever viruses and infections
H2108 Human papilloma virus, rabies virus, parvovirus, prion and other viruses and infections
H2109 New technologies and methods for medical virology and viral infection

H22 Medical Pathogens and Infection

H2201 Pathogenic bacteria and infections
H2202 Pathogens fungi and infections
H2203 Parasites and infections
H2204 Mycoplasma, chlamydia, rickettsia, spirochetes and infections
H2205 Infectious diseases and vectors
H2206 Mutation and drug resistance of pathogens
H2207 Hospital-acquired infections
H2208 Sexually transmitted diseases
H2209 New technologies and methods for the study of non-viral medical pathogens and their infections

H23 Medical Genetics

H2301 Genetic diseases
H2302 Rare diseases
H2303 New technologies and methods for medical genetics research

H24 Medical Aspects of Specific Environments

H2401 Adaptation changes and injury mechanism of organism in specific environments
H2402 New technologies and methods for evaluation and protection of medical problems in specific environments

H25 Forensic Medicine

H2501 Forensic pathology and forensic clinical medicine
H2502 Forensic material evidence and forensic anthropology
H2503 Forensic toxicology
H2504 New technologies and methods for forensic medicine research

H26 Laboratory Medicine

H2601 Biochemical test
H2602 Microbiological analysis
H2603 Cytological and hematological examination
H2604 Immunological test
H2605 Molecular biology test
H2606 New technologies and methods for laboratory medicine

H27 Medical Imaging/Nuclear Medicine

H2701 Magnetic resonance imaging
H2702 X-rays and CT, electrons and ion beams
H2703 Ultrasonic medicine
H2704 Diagnosis and treatment in nuclear medicine
H2705 Medical optical imaging
H2706 Molecular imaging
H2707 Bio-electromagnetic imaging
H2708 Data processing, analysis and visualization for medical images
H2709 Big data and artificial intelligence for medical images
H2710 Interventional medicine and engineering
H2711 New technologies and methods for medical imaging/nuclear medicine

H28 Biomedical Engineering/Regenerative Medicine

H2801 Brain-computer interaction, neural engineering and rehabilitation engineering
H2802 Medical signal detection, recognition, processing and analysis for human
H2803 Biomedical sensing
H2804 Electromagnetic and physical therapy
H2805 Biomedical system modeling and simulation
H2806 Medical information system and telemedicine
H2807 Treatment planning, navigation and robot assistance
H2808 Nanomedicine
H2809 Biomaterials and biomimetic materials for medical uses
H2810 Mechanism and regulation of tissue/organ regeneration
H2811 Tissue and organ construction
H2812 Organ chip and system

H2813 Medical devices and instruments for detection and treatment
H2814 New technologies and methods for biomedical engineering/regenerative medicine

H29 Radiation medicine

H2901 Radiation injury and prevention
H2902 Medical radiobiology
H2903 New technologies and methods for radiation medicine research

H30 Preventive medicine

H3001 Environmental hygiene
H3002 Occupational health and diseases
H3003 Human nutrition
H3004 Food hygiene
H3005 Maternal and child health care
H3006 Children and adolescent health
H3007 Hygienic toxicology
H3008 Hygienic analytical chemistry
H3009 Infectious disease epidemiology
H3010 Epidemiology of non-communicable diseases
H3011 Epidemiological methods and health statistics
H3012 Behavior/psychological factors and health
H3013 Endemiology
H3014 New technologies and methods for preventive medicine research

H31 Chinese medicine

H3101 Zang-fu organs, qi, blood and body fluids
H3102 Etiology and pathogenesis
H3103 Basis of syndromes
H3104 Treatment principles and methods
H3105 Chinese medicine prescription
H3106 Chinese medicine diagnosis
H3107 Acupoints and Meridians
H3108 Chinese medicine internal medicine
H3109 Chinese medicine surgery
H3110 Chinese medicine orthopedics
H3111 Chinese medicine gynecology
H3112 Chinese medicine pediatrics
H3113 Chinese medicine ophthalmology
H3114 Chinese medicine otolaryngology and oral science
H3115 Chinese medicine oncology

H3116 Chinese medicine geriatrics
H3117 Chinese medicine health and rehabilitation
H3118 Acupuncture and moxibustion
H3119 Tuina and Massage
H3120 Ethnic medicine
H3121 New technologies and methods for Chinese medicine research

H32 Chinese materia medica

H3201 Chinese materia medica resources
H3202 Chinese medicinal identification
H3203 Chinese medicinal substances
H3204 Substances in pharmacodynamics
H3205 The processing of Chinese materia
H3206 Chinese materia medica preparation
H3207 Theories in the properties of Chinese materia medica
H3208 Neuropsychopharmacology of Chinese medicine
H3209 Cardio-cerebrovascular pharmacology of Chinese medicine
H3210 Anti-tumor pharmacology of Chinese medicine
H3211 Endocrinological and metabolic pharmacology of Chinese medicine
H3212 Anti-inflammatory and immune pharmacology of Chinese medicine
H3213 Antiviral and anti-infective pharmacology of Chinese medicine
H3214 Digestive and respiratory pharmacology of Chinese medicine
H3215 Urologic and reproductive pharmacology of Chinese medicine
H3216 Metabolism and pharmacokinetics of Chinese medicine
H3217 Toxicology of Chinese medicine
H3218 Ethnopharmacy
H3219 New techniques and methods for Chinese materia medica research

H33 Integrative medicine

H3301 Basic theory of integrated Chinese and western medicine
H3302 Clinical basis of integrated Chinese and western medicine
H3303 New technologies and methods for research on integrated Chinese and western medicine

H34 Materia medica

H3401 Synthetic medicinal chemistry
H3402 Medicinal chemistry of natural products
H3403 Microbial drugs
H3404 Biotechnology drugs
H3405 Marine drugs
H3406 Special drugs and orphan drugs

H3407 Drug design and drug informatics
H3408 Pharmaceutics
H3409 Pharmaceutical materials
H3410 Pharmaceutical analysis
H3411 Drug resources
H3412 New technologies and methods for pharmaceutical research

H35 Pharmacology

H3501 Neuropsycho-pharmacology
H3502 Cardio-cerebrovascular pharmacology
H3503 Geriatric pharmacology
H3504 Pharmacology of anti-inflammatory and immunomodulatory drugs
H3505 Pharmacology of anti-tumor drugs
H3506 Pharmacology of anti-infective drugs
H3507 Pharmacology of metabolic disease drugs
H3508 Pharmacology of the digestive and respiratory system
H3509 Pharmacology of the blood, urinary and reproductive system
H3510 Drug metabolism and pharmacokinetics
H3511 Clinical pharmacology
H3512 Drug toxicology
H3513 New technologies and methods for pharmacological research

T. Department of Interdisciplinary Sciences

T01 Physical sciences
T02 Intelligence sciences and Intelligent manufacturing
T03 Life and health sciences
T04 Convergence sciences
T05 Scientific instruments

Notes: the Department of Interdisciplinary Sciences (DIS) does not have separate application codes. When applying for a project of DIS, applicants shall first select an subject reference code (T01, T02, T03, T04, or T05), and then accurately select the application code(s) from those of aforementioned eight science departments as required.

Appendix

Contact information for the National Natural Science Foundation Departments

Department Name		Telephone Number
Department of Mathematical and Physical Sciences		
Division of Planning		62326910 62326911
Division of Mathematics		62325025
Division of Mechanics		62327178
Division of Astronomy		62325940
Division I of Physics		62325055
Division II of Physics		62325069
Department of Chemical Sciences		
Division of Planning		62326906 62329320
I	Synthetic Chemistry	62327462
II	Catalysis and Surface/ Interface Chemistry	62327035
	Chemical Theory and Mechanism	62327167
III	Materials Chemistry	62328253
	Environmental Chemistry	62328181
IV	Chemical Measurement	62327173
	Environmental Chemistry	62327075
	Chemical Biology	62327169
V	Chemical Engineering and Industrial Chemistry	62327111 62328370
Department of Life Sciences		
Division of Planning		62326916 62327200 62327193
Division I of Biology	Microbiology	62329221
	Botany	62329135
	Zoology	62326914
Division II of Biology	Genetics and Bioinformatics	62329341
	Cell Biology	62328408
	Developmental Biology and Reproductive Biology	62329170

Department Name		Telephone Number
Division of Biomedicine	Immunology	62329630
	Neuroscience and Psychology	62327213
	Physiology and Integrative Biology	62325489
Division of Interdiscipli nary Research	Biophysics and Biochemistry	62329246
	Biomaterials, Imaging and Tissue Engineering	62327842
	Molecular Biology and Biotechnology	62326915
Division of Environment and Ecology	Ecology	62329321
	Forestry Science	62329321
	Grassland Science	62329321
Division of Agriculture and Food Sciences	Basic Agriculture and Crop Science	62326919 62329585
	Food Sciences	62327133
Division of Agricultural Environment and Horticulture	Plant Protection	62327082
	Horticulture and Plant Nutrition	62329494
Division of Agriculture Animal	Animal Husbandry	62327196
	Veterinary Science	62327196
	Aquatic Science	62329105
Department of Earth Sciences		
Division of Planning		62327157 62326900
I	Science of Geography	62327161
II	Geology	62327652
	Geochemistry	62329887
III	Environmental Geosciences	62327159
	Geophysics and Space Physics	62327619
	Lunar and Planetary Science	62327619
IV	Marine Science	62328528
V	Atmospheric Science	62327654
Department of Engineering and Materials Sciences		
Division of Planning		62326887 62326884
Division I of Materials Sciences	Metallic Materials	62327144
	Inorganic nonmetallic materials	62328234

continued table

Department Name		Telephone number
Division II of Materials Sciences	Organic polymer materials	62328337
	New concept and general science of materials	62327138
Division I of Engineering Sciences	Mining and Metallurgical Engineering	62327136
	Engineering Thermophysics and Energy Utilization	62327131
Division II of Engineering Sciences	Mechanical Design and Manufacturing	62327084
Division III of Engineering Sciences	Environmental Engineering	62327092
	Ocean Engineering	62327137
Division IV of Engineering Sciences	Architecture and Civil Engineering	62327135
	Transportation and Vehicle Engineering	62327142
Division V of Engineering Sciences	Electrical Science and Engineering	62328301
	Hydraulic Engineering	62328362
Department of Information Sciences		
Division of Planning		62329778
I	Electronics and technology	62327143
II	Computer Science Artificial Intelligence Information Sciences	62327929
III	Automation	62327149
IV	Information Devices and Optics and Photo Electronics	62327351
Department of Management Sciences		
Division of Planning		62326898
I	Management science and engineering	62327156
II	Business administration	62326972
III	Macro-management and policy	62327155
	Economic Sciences	62326660
Department of Medical Sciences		
Division of Planning		62328991 62328047 62328952 62328941
I	Respiratory system, circulatory system, hematological system	62328559 62328941

Department Name		Telephone number
III	Nervous system, mental health and psychological health, gerontology	62327199
IV	Reproductive system/perinatal medicine/neonatology, medical immunology, medical genetics	62327207
V	Special medicine, forensic medicine, medical imaging/nuclear medicine, biomedical engineering/regenerative medicine	62327198
VI	Locomotor System, emergency and intensive care medicine, trauma/burns/plastic surgery, rehabilitation medicine, medical virology and virus infection, Human Pathogens and Infections, laboratory medicine	62328775 62327465
VII	Oncology (hematological system not included)	62329157 62328944
VIII	Dermatology, radiation medicine, preventive medicine	62328962
IX	Materia medica, pharmacology	62327212
X	Traditional Chinese medicine, Chinese materia medica, integrated Chinese and western medicine	62328634 62328552
Department of Interdisciplinary Sciences		
Division of Planning		62325654
T01	Physical Sciences	62328382
	Intelligence sciences and Intelligent manufacturing	62329489
	Life and health sciences	62327096
	Convergence sciences	62328922
T05	Scientific instruments	62325654
Department of International Programs		
Division of Planning		62329547 62327017 62329034
I	The Research Fund For International Scientists	62328949 62327244 62327413
II	International (Regional) Cooperation and Exchange Program	62326747 62325452 62327441

continued table

Department Name		Telephone number	Department Name		Telephone number
II	Digestive system, urinary system, endocrine system, metabolism, and nutrition support, ophthalmology, otorhinolaryngology head and neck science, oral and craniomaxillo-facial science	62328790 62328680	III	International Cooperation related to large scientific facilities or international big science programs	62325143 62327014
Bureau of Planning			Division of Asian, African and International Organizations		62329253 62326998
General Office		62328042 62325277 62326980	Division of American and Oceanian Affairs		62327145 62326479
Division of Projects		62325562 62326978 62329336	Division of European Affairs		62325351 62328433
Division of Talents		62326547 62325932 62328046	Office for Hong Kong, Macao and Taiwan Affairs		62328256 62326943
Division of Joint Funds		62328041 62329897	Service Center for Administrative Affairs		
Division of Major Tasks		62327914 62328222	Department I		62328591
Bureau of Finance			Center for Science Communication and Achievement Transformation		
Secretary of the Bureau		62327094 62328485	General Office		62326876
Division of Budget Management		62325245 62327225 62328383	Sino-German Centre for Research Promotion		
Bureau of International Cooperation			Telephone Number		82361200
Division of Planning		62325454 62325793			

Programs of Joint Funds

Joint Funds are established by NSFC and funding partners such as relevant sectors, provincial governments and enterprises to support basic research in agreed scientific and technological fields.

The Joint Funds are designed to leverage the guiding role of the National Natural Science Fund, channel and integrate societal resources into basic research, foster collaboration of relevant sectors, enterprises and regions with universities and research institutions, cultivate scientific and technological talents, and enhance the capacity for independent innovation in related fields, industries and regions across China.

Based on years of implementation of the Programs of Joint Funds, starting from 2025, NSFC establishes the Joint Fund for Private Enterprise Innovation and Development in partnership with private enterprises, to guide and encourage innovation-oriented private S&T enterprises to increase investment in basic research. NSFC also collaborates with local governments and enterprises to establish the Major Special Program of the Joint Funds to further strengthen the national strategic scientific and technological capabilities and to systematically advancing mission-oriented basic research and market-oriented applied basic research.

The Joint Funds are an integral part of the National Natural Science Fund. The application, review and management of the Joint Funds shall be carried out in accordance with the Regulations of the National Natural Science Foundation of China, *Measures for Fund Management of NSFC-funded Projects* and *Measures for Management of Joint Funds Programs* and other relevant regulations.

The total number of projects (including applications and ongoing projects) of all types of Joint Funds for which a researcher applies (including the applicant and main participants) or is currently undertaking (including the PI and main participants) shall not exceed two. Projects for which the funding period expires in the year of application are not counted toward this limit.

In 2026, the Joint Funds announced in this Guide include the Joint Fund for Regional Innovation and Development, the Joint Fund for Corporate Innovation and Development, NSAF Joint Fund, the Joint Fund for Meteorology, the Joint Fund for Railway Basic Research, the Joint Fund for Railway Innovation and Development, Joint Fund for Geology, the Joint Fund for Basic Research of Large Aircraft, the Joint Fund for Earthquake Science, and the Joint Fund for Cultural Relics.

Guidelines of other Joint Funds will be announced on the NSFC official

website.

Research outcomes supported by Joint Fund projects shall acknowledge the name of the Joint Fund and the project approval number.

Applications to the Joint Funds should be prepared according to the requirements and outlines specified for each Joint Fund in this *Guide*. Please select "Joint Fund" for funding category, "Key Project", "Integration Project" or "Young Researcher Project (Xinjiang)" for subcategories, and select the name of the Joint Fund in the "Annotations" section.

For Key Project, the number of collaborative research institutions shall not exceed two. For Integration Project, the number of collaborative research institutions shall not exceed four.

The funding duration of Key Project and Integration Project will be 4 years with the period specified as from January 1, 2027 to December 31, 2030 in the application form, while Young Researcher Project (Xinjiang) has a funding period of 3 years specified as from January 1, 2027 to December 31, 2029 in the application form.

Joint Fund for Regional Innovation and Development

The Joint Fund for Regional Innovation and Development is jointly funded by NSFC and provincial governments. It aims to leverage the guiding role of the National Natural Science Fund, attract outstanding scientific research teams across the country to address major needs in regional economic and social development. The Fund supports basic research and applied basic research on key scientific issues, encourages cross-regional and cross-sectoral collaborations, and enhances regional innovation capabilities.

In 2026, in order to better serve regional economic and social development and promote talent cultivation in local areas, the Fund encourages applicants from host institutions located in the 11 participating provinces or Autonomous regions to apply for funding and work on the research directions proposed by the 11 regions, namely the Inner Mongolia Autonomous Region, Jiangxi Province, Guangxi Zhuang Autonomous Region, Hainan Province, Guizhou Province, Yunnan Province, Xizang Autonomous Region, Gansu Province, Qinghai Province, Ningxia Hui Autonomous Region, and Xinjiang Uygur Autonomous Region. Applicants from host institutions outside these regions should collaborate with qualified higher education institutions, research institutes, enterprises or innovation-oriented private S&T companies in these regions.

In 2026, the Joint Fund for Regional Innovation and Development will provide funding in the form of Key Projects, Integration Projects and Young Researcher Projects (Xinjiang). The funding period of Key Projects and Integration Projects is 4

years, and the funding period of Young Researcher Projects (Xinjiang) is 3 years. The average funding amount in direct costs for Key Projects is about 2.6 million yuan per project. The average funding amount in direct costs for Integration Projects is detailed in the relevant sections of this Guide. The average funding amount in direct costs for Young Researcher Projects (Xinjiang) is about 400,000 yuan per project.

Joint Fund for Corporate Innovation and Development

The Joint Fund for Corporate Innovation and Development is jointly funded by NSFC and enterprises. It aims to leverage the guiding role of the National Natural Science Fund, attract excellent scientific research teams to address urgent needs in the industrial development. The Fund supports the basic research focusing on core scientific issues in key technology areas, seeks to integrate the knowledge innovation and technological innovation, so as to enhance the innovation capabilities of Chinese enterprises.

For 2026, an pilot initiative, applicants for Joint Fund for Corporate Innovation and Development will not be counted within the total limit on the number of applications and funded projects that a researcher can apply for and hold at the same time. But once an application is officially accepted, it will be counted within the limit. The total number of projects of Joint Fund for Corporate Innovation and Development applied for and undertaken by a researcher (including PI and main participants) shall not exceed 1. Projects for which the fudning period expires in the year of application are not counted toward this limit.

In 2026, the Joint Fund for Corporate Innovation and Development will provide funding in the form of Key Projects and Integration Projects with a funding period of 4 years. The average funding amount in direct costs for Key Projects is 2.6 million yuan per project. The average funding amount in direct costs for Integration Projects is detailed in the relevant sections of this Guide.

NSAF Joint Fund

The NSAF Joint Fund is jointly funded by the NSFC and China Academy of Engineering Physics (CAEP). It aims to leverage the platform and management advantages of the National Natural Science Fund, encourage and mobilize scientists and teams from universities and research institutes nationwide to focus on fundamental research related to areas addressing the national strategic demands, explore new research directions, cultivate high-tech talents, and enhance innovation capabilities.

In 2026, the NSAF Joint Fund will provide funding in the form of Key Projects and Integration Projects with a funding period of 4 years. The average funding amount in direct costs for Key Projects is 2.6 million yuan per project. The average funding amount in direct costs for Integration Projects is detailed in the relevant sections of this Guide.

Joint Fund for Meteorology

The Joint Fund for Meteorology is jointly established by the NSFC and the China Meteorological Administration (CMA). It aims to implement the important instructions of President Xi Jinping on meteorological work, accelerate the STI in meteorological field, and strengthen basic research. It intends to solve and break through important scientific bottlenecks closely related to the core technologies of meteorological industry, cultivate outstanding talents, enhance independent innovation capability, and promote high-quality development of the meteorological services in China.

In 2026, the Joint Fund will provide funding in the form of Key Projects and Integration Projects with a funding duration of 4 years. The average funding amount in direct costs for Integration Projects and Key Projects will be about 10 million and 2.6 million yuan per project respectively.

Joint Fund for Railway Basic Research

The Joint Fund for Railway Basic Research is jointly established by the NSFC, China Railway, CRRC Corporation Limited, China Railway Group Limited, China

Railway Construction Corporation Limited, China Railway Signal & Communication Corp and Mass Transit Railway Corporation Limited. By leveraging the guiding role of the National Natural Science Fund, it aims to attract and mobilize scientific research resources of the whole society, and advance fundamental research on major scientific issues, key technical problems and common problems in the fields of railway equipment manufacturing, engineering construction, and operation management in China, so as to enhance the innovation capabilities in railway technology.

In 2026, the Joint Fund for Railway Basic Research will provide funding in the form of Key Projects and Integration Projects with a funding period of 4 years. The average funding amount in direct costs will be 2.6 million yuan for each project. The average funding amount in direct costs for Integration Projects is detailed in the relevant sections of this Guide.

Joint Fund for Railway Innovation and Development

The Joint Fund for Railway Innovation and Development is jointly established by the NSFC, the National Railway Administration of China, and China Energy Investment Corporation. By leveraging the guiding role of the National Natural Science Fund, it aims to attract and mobilize the strength of higher education institutions and research institutions across the country, advance the basic, cutting-edge, and exploratory research in railway engineering construction, equipment manufacturing, transportation services, safety assurance, green intelligence etc., and promote the integrated development of railway technology and basic science, so as to enhance independent innovation capabilities.

In 2026, the Joint Fund for Railway Innovation and Development will provide funding in the form of Key Projects with a funding period of 4 years. The average funding amount in direct costs will be 2.6 million yuan for each project.

Joint Fund for Geology

The Joint Fund for Geology is established by the NSFC and the China Geological Survey. It aims to address national strategic demands, promote the high-quality development of China‘s geological cause, encourage excellent talents to dedicate to basic, forward-looking and innovative research on basic geological problems and key technological approaches that may affect and restrict the major resource and environmental security.

In 2026, the Joint Fund for Geology will provide funding in the form of Key Projects with a funding period of 4 years. The average funding amount in direct costs

will be 2.6 million per project.

Joint Fund for Basic Research of Large Aircraft

The Joint Fund for Basic Research of Large Aircraft is jointly established by the NSFC and the Ministry of Industry and Information Technology. Focusing on the major national strategic needs in the field of large aircraft, it intends to advance major fundamental, forward-looking, and innovative research on the basic theories and key technologies in the field of large aircraft, so as to consolidate the foundation for the long-term development of large aircraft.

In 2026, the Joint Fund for Basic Research of Large Aircraft will provide funding in the form of Key Projects with a funding period of 4 years. The average funding amount in direct costs will be 2.6 million per project.

Joint Fund for Earthquake Sciences

The Joint Fund for Earthquake Sciences is jointly established by the NSFC and the China Earthquake Administration. It aims to leverage the guiding role of the NSFC, attract and retain outstanding talents in relevant research fields across the country, strengthen basic frontier research aimed at addressing major national needs for earthquake safety, and promote the sustainable development of China's earthquake sciences and the continuous improvement of its independent innovation capabilities.

In 2026, the Joint Fund for Earthquake Sciences will provide funding in the form of Key Projects with a funding period of 4 years. The average funding amount in direct costs will be 2.6 million per project.

Joint Fund for Cultural Relics

The Joint Fund for Cultural Relics is jointly established by the NSFC and the National Cultural Heritage Administration. It aims to address key scientific issues in archaeology and cultural relics protection and utilization based on the theories and methods of natural sciences, utilizing interdisciplinary scientific research methods that converge multiple disciplines and integrate multiple tools. The fund promotes technological innovation and talent cultivation in cultural relics, providing scientific and technological support for the high-quality development of the cultural relics industry.

In 2026, the Joint Fund for Cultural Relics will focus on the urgent needs for high-quality development in the cultural relics sector, concentrating on core areas

such as the origin and development of Chinese civilization, archaeological techniques and methods, mechanisms and diagnosis of cultural relics deterioration, conservation techniques and materials for cultural relics, and the revitalization and utilization of cultural relics. It will provide funding in the form of Key Projects with a funding period of 4 years. The average funding amount in direct costs will be 2 million per project.

Fiscal Year 2026

Guide to Programs