Congratulations to Academician Changxu Shi on the Occasion of His Winning the 2010 Chinese Science & Technology Grand Prize

Ju Li^{1,2} Kai Chen² Zhiwei Shan² Guanjun Qiao² Jun Sun² Evan Ma^{2,3}

On behalf of friends and colleagues at MIT and Johns Hopkins University, as well as students and faculty at the Center for Advancing Materials Performance from the Nanoscale (CAMP-Nano) at Xi'an Jiaotong University, we would like to express our hearty congratulations to Academician Shi on the occasion of his winning the highest science and technology award of China. This very well deserved "Life Achievement Award" recognizes the brilliant scientific career of Dr. Shi. The entire disciplines of materials science and nanosciences in China should also feel much gratified by this prize, for it was Dr. Shi who had vigorously planned and promoted these fields in their early formative years.

As a famous metallurgist and materials scientist, Shi is broadly regarded as "the father of superalloys in China" for his seminal contributions to the development of high-temperature alloys and applications such as directionally solidified, hollow-cast single crystalline blades of turbine engines. Furthermore, as a master organizer, strategist and communicator, Dr. Shi has played a key role in the founding of the National Natural Science Foundation of China and the Chinese Academy of Engineering, and in devising key R&D programs such as 863 and 973. Dr. Shi is also well known as a leader in fostering the burgeoning fields of materials science and engineering and nanoscience and nanotechnology in China, by interacting, planning, educating and practicing. His work ethics and boundless energy are legendary among Chinese scientists. Dr. Shi's work has not only profoundly influenced the development of science in China, but also left lasting footprints in the materials technology of China.

Being an alumnus of the National Northwestern Institute of Technology (predecessor of the present-day Northwestern Polytechnical University), Mr. Shi has deep connections to the historical city of Xi'an. As a close friend of Academician Huijiu Zhou and the honorary director of the Academic Committee of the State Key Laboratory for Mechanical Behavior of Materials at Xi'an Jiaotong University, Dr. Shi has provided guidance for the construction and development of the Key Lab for decades. The Lab has won quite a few state-level awards in science and technology in recent years and made significant progress in basic research and applications. The recent establishment of the Center for Advancing Materials Performance from the Nanoscale (CAMP-Nano), in a sense, followed Dr. Shi's vision of developing nanoscience and nanotechnology in China that is fully integrated with the international community. The students, scientists and educators at CAMP-Nano, inspired by Dr. Shi's vision, are trying to make the best science and technology of the world arise again from the ground of the ancient capital of China.

^{*} Popartment of Nuclear Science and Engineering and Department of Materials Science and Engineering, MIT, USA.

² Center for Advancing Materials Performance from the Nanoscale (CAMP-Nano) & Hysitron Applied Research Center in China (HARCC), State Key Laboratory for Mechanical Behavior of Materials, Xi'an Jiaotong University, Xi'an 710049, China,

³ Department of Materials Science and Engineering, Johns Hopkins University, Baltimore, Maryland, USA.