

## Preface

This special issue of the journal contains both the two invited talks and the fifteen accepted papers for the Membrane Computing section of the first international conference Bio-Inspired Computing—Theory and Applications, BIC-TA 2006, held in Wuhan, China, from September 18 to September 22, 2006. The conference had four sections: Evolutionary Computing, Neural Computing, DNA Computing, and Membrane Computing, each section with its program committee.

Membrane Computing is a bio-inspired branch of Natural Computing aiming to abstract ideas, models, paradigms useful to computer science starting from the structure and the functioning of the living cell. The domain was initiated in 1998 by Gh. Păun, and it has grown rapidly. Already in 2003, the Institute of Scientific Information (ISI) has nominated membrane computing as a “fast emerging area of computer science”. Full information about this research direction can be found at the website <http://psystems.disco.unimib.it>, with the mirror at <http://bmc.hust.edu.cn/psystems> or <http://bmchust.3322.org/psystems>.

The program committee of the Membrane Computing section of BIC-TA 2006 consisted of Gabriel Ciobanu (Iași, Romania), Rudolf Freund (Vienna, Austria), Oscar H. Ibarra (Santa Barbara, USA), Kamala Krithivasan (Madras, India), Giancarlo Mauri (Milan, Italy), Gheorghe Păun (Chair, Bucharest, Romania and Sevilla, Spain), and Mario J. Pérez-Jiménez (Sevilla, Spain). There were received 24 submissions, and out of them were accepted the 15 papers included in this volume; each paper was subject of two referee reports. The present version of the papers are also improved according to the suggestions made after the presentation in the conference.

The editors are indebted to all contributors to this volume, as well as to the staff of *Progress in Natural Science* journal, for a pleasant and efficient cooperation.

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November 2006