### **ACMC 2013**

Chengdu-China Nov. 4-7

www.acmc2013.org



# Call for papers

ACMC 2013 is one of the flagship conferences on Membrane Computing, aiming to provide a high-level international forum for researchers working in membrane computing and related areas, especially for the ones from the Asian region. This conference is the continuation of the first ACMC, which was successfully held in Wuhan, 2012, China, and also a geographical expansion of CMC (Conference on Membrane Computing), which has been held thirteen times in different European countries.

Like artificial neural networks, evolutionary algorithms, swarm intelligence, cellular automata and DNA computing, membrane computing is also a branch of natural computing or nature-inspired computing and was initiated by Gheorghe Păun in 1998. It aims to abstract computing models, called membrane systems or P systems, from the structure and the functioning of the living cell as well as from the cooperation of cells in tissues, organs, and populations of cells. This research area has grown into a vigorous scientific discipline and has attracted a large number of researchers all over the world.

ACMC 2013 is planned as a friendly interactive conference with several introductory tutorials, several keynote lectures and some specialized sessions, which will cover a wide range of topics on membrane computing, including theory, applications, implementation and various aspects related to membrane computing. The registration fee will be of about 250 Euros per person. This fee covers the participation, the special dinner, the tourist programme, as well as the lunches. The accommodation, to be paid by each participant, will be available at various prices. Various accommodation possibilities will be posted soon on the conference page.

# **Topics**

The second Asian Conference on Membrane Computing (ACMC2013) provides an open platform to bring together scholars worldwide to present their recent work on membrane computing. The topics of this conference are as follows (but not limited to):

Theoretical aspects of membrane computing

- Various variants of computing models: cell-, tissue- and neural-like P systems
- Computing power of membrane computing models
- Computing efficiency of membrane computing models

Applications of membrane computing

- Robots controller design
- Modeling using P systems for biological systems, ecological systems, traffic systems, etc.
- Membrane-inspired optimization algorithms for various problems
- Other applications

Implementation of membrane computing models

- Software implementation
- Hardware implementation
- Biological implementation

#### • Other implementation

# **Publishing**

A pre-proceedings volume (edited in Latex) will be available during the conference. A selection of papers, additionally refereed, will be considered for publication in (one of) the following (ISI-indexed) SCI-indexed international journals:

- (1) International Journal of Computers, Communications and Control (IJCCC)
- (2) Romanian Journal of Information Science and Technology (ROMJIST)

The other papers, also additionally refereed, will be considered for publication in a domestic EI-indexed journal. Details will be given during the conference.

# **Important Data**

Submission deadline: **Monday June 10, 2013** Acceptance notification: Friday July 26, 2013

Camera-ready version and early registration: Thursday August 15, 2013

## **Submission**

Authors are invited to submit their original research contributions (including significant work-in-progress) on membrane computing, its applications and related subjects. Papers (of reasonable length) should be formatted according to the usual Lecture Notes in Computer Science (LNCS) article style (please refer to <a href="http://acmc2013.org/file/LatexTemplate.zip">http://acmc2013.org/file/LatexTemplate.zip</a>). Submissions have to be sent electronically to G. Zhang, at <a href="macmc2013@gmail.com">acmc2013@gmail.com</a>, in the format of pdf or ps. If a paper is accepted, the source files in the format of Latex will be required. To ensure inclusion of an accepted contribution into the (pre)proceedings volume, at least one of its authors must be registered with ACMC2013. The web page: <a href="http://www.acmc2013.org/">http://www.acmc2013.org/</a>

## Host institutions

Southwest Jiaotong University, Chengdu, China Xihua University, Chengdu, China

# **Sponsors**

European Molecular Computing Consortium National Natural Science Foundation of China Southwest Jiaotong University, Chengdu, China Xihua University, Chengdu, China

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