

Asian Conference on Membrane Computing (ACMC 2015)

Anhui University

Hefei, Anhui, China

November 12-15, 2015

Call for Papers

ACMC 2015 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 Fourth edition of ACMC with the three editions having successfully taken place in Wuhan, China, 2012, Chengdu, China, 2013 and Coimbatore, South India 2014 and also a geographical expansion of CMC (Conference on Membrane Computing) which is held every year from 2000 in different European Countries.

Membrane computing (P systems theory) is a branch of natural computing aiming to abstract computing ideas and models from the structure and the functioning of living cells, as well as from the way the cells are organized in tissues or higher order structures. This research area was initiated by Gheorghe Păun in 1998 and now has grown into a vigorous scientific discipline in computer science.

ACMC 2015 is planned as a friendly interactive conference with several keynote lectures, paper presentations 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 and the accommodation fee will be posted soon on the conference page.

Topics

The fourth Asian Conference on Membrane Computing (ACMC 2015) 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
- ✧ Computational power and computational efficiency of membrane computing models
- ✧ Small universal membrane computing models

Applications of membrane computing

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

Implementation of membrane computing models

- ✧ Software implementation
- ✧ Hardware implementation
- ✧ Biological implementation
- ✧ Other implementation

Bio-Inspired Optimization Techniques

- ✧ Genetic algorithm (inspired by DNA and process of natural selection)
- ✧ Membrane algorithms (Inspired by cells), etc

ACMC 2015 also welcome the submissions from other research areas related to membrane computing or dealing with cellular computing such as DNA computing.

Publication

Papers accepted for presentation will appear in a conference proceeding of ACMC 2015. The pre-proceedings volume (edited in Latex) will be available during the conference. A selection of papers, additionally refereed, will be considered for publication in an SCI-indexed or ISI-indexed international journal associated with BWMC 2015 (Thirteenth Brainstorming Week on Membrane Computing, 2015, University of Seville, Spain). An additional selection of papers, additionally refereed, will be considered for publication in Lecture Notes in Computer Science (LNCS) associated with CMC 2015 (International Conference on Membrane Computing, 2015, Valencia, Spain). More possibilities are also being considered for the accepted papers. Details will be given soon.

Best Paper Awards

All submitted papers are eligible for the Best Conference Paper Award. After the reviewing process is completed, those papers that are nominated will be reviewed by the Awards Committee. Finalists will be required to present their paper during the conference. A cash award and certificate will be presented at the Awards Ceremony during the conference.

Important Dates

Last date for submission of paper: 10 August 2015

Acceptance notification: 10 September 2015

Camera Ready Paper: 25 September 2015

Early bird Registration Last date: 10 October 2015

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 <http://2015.asiancmc.org/wp-content/uploads/2015/03/typeinst.rar>). Submissions have to be sent to electrically to X. Zhang, at acmc2015@ahu.edu.cn in the format of PDF. If the 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 ACMC2015. The web page: <http://2015.asiancmc.org/>

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Anhui University

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Anhui University, Hefei, China

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