

Preface

This volume contains the invited contributions and a selection of papers presented at the 17th International Conference on Membrane Computing (CMC17), held in Milan, Italy, during July 25–29, 2016 (see the website: <http://cmc17.disco.unimib.it> for further information) as well as two selected papers from the Asian Conference on Membrane Computing (ACMC 2016), held in Bangi, Selangor, Malaysia, during November 14–16, 2016 (website: <http://2016.asiancmc.org/>).

The CMC series started with three workshops organized in Curtea de Argeș, Romania, in 2000, 2001, and 2002. The workshops were then held in Tarragona, Spain (2003), Milan, Italy (2004), Vienna, Austria (2005), Leiden, The Netherlands (2006), Thessaloniki, Greece (2007), and Edinburgh, UK (2008).

The 10th edition was organized again in Curtea de Argeș, in August 2009, where it was decided to continue the series as the Conference on Membrane Computing (CMC). The following editions were held in Jena, Germany (2010), Fontainebleau, France (2011), Budapest, Hungary (2012), Chișinău, Moldova (2013), Prague, Czech Republic (2014), and Valencia, Spain (2015).

A regional version of CMC, the Asian Conference on Membrane Computing, ACMC, started in 2012 in Wuhan (China), and continued in Chengdu, China (2013), Coimbatore, India (2014), Hefei, Anhui, China (2015), and Bangi, Selangor, Malaysia (2016).

CMC17 was organized, under the auspices of the International Membrane Computing Society and the European Molecular Computing Consortium (EMCC), by the Research Group on Molecular Computing of the Department of Informatics, Systems, and Communication, at the University of Milano-Bicocca.

CMC17 consisted of three different parts. During the first day, representatives of research groups working on membrane computing presented recent research activities of their groups, the composition of the research teams, and research networks and projects that the groups are involved in. From Tuesday to Thursday the conference continued with standard sessions; invited lectures were given by Matteo Cavaliere (Edinburgh, UK), Thomas Hinze (Cottbus, Germany), Paolo Milazzo (Pisa, Italy), and Agustín Riscos-Núñez (Seville, Spain). The last day of the conference was devoted to interaction between participants, centered around open problems and new research topics. Based on the votes of the participants, one Best Paper Award and two Best Student Paper Awards were bestowed. The Best Paper Award was given to Zsolt Gazdag and Gábor Kolonits for their paper “Remarks on the Computational Power of Some Restricted Variants of P Systems with Active Membranes.” The two Best Student Paper Awards were given once again to Zsolt Gazdag and Gábor Kolonits for the same paper, and to Thomas Hinze, Lea Louise Weber, and Uwe Hatnik for their paper “Walking Membranes: Grid-exploring P Systems with Artificial Evolution for Multipurpose Topological Optimisation of Cascaded Processes.”

The editors are grateful to the Program Committee, the invited speakers, the authors of the papers, the reviewers, and all the participants for their contributions to the success of CMC17.

The support of the Department of Informatics, Systems, and Communication of the University of Milano-Bicocca and of Springer for funding the Prize for the Best Student Paper is gratefully acknowledged.

November 2016

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Membrane Computing

17th International Conference, CMC 2016, Milan, Italy,

July 25-29, 2016, Revised Selected Papers

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(Eds.)

2017, X, 363 p. 52 illus., Softcover

ISBN: 978-3-319-54071-9