
Preface

This volume contains the papers presented at the **Tenth Workshop on Membrane Computing, WMC10**, which took place in Curtea de Argeş, Romania, from August 24 to August 27, 2009.

The first three workshops on Membrane Computing were organized in Curtea de Argeş, Romania – they took place in August 2000 (with the proceedings published in *Lecture Notes in Computer Science*, volume 2235), in August 2001 (with a selection of papers published as a special issue of *Fundamenta Informaticae*, volume 49, numbers 1–3, 2002), and in August 2002 (with the proceedings published in *Lecture Notes in Computer Science*, volume 2597). The next six workshops were organized in Tarragona, Spain, in July 2003, in Milan, Italy, in June 2004, in Vienna, Austria, in July 2005, in Leiden, The Netherlands, in July 2006, in Thessaloniki, Greece, in June 2007, and in Edinburgh, UK, in July 2008, with the proceedings published as volumes 2933, 3365, 3850, 4361, 4860, and 5391, respectively, of *Lecture Notes in Computer Science*, Springer-Verlag.

The tenth edition of WMC took place in Posada Hotel in Curtea de Argeş (<http://www.posada.ro/>) and it was organized by the National College “Vlaicu Vodă” from Curtea de Argeş, the University of Piteşti, Romania, and the Institute of Mathematics of the Romanian Academy, Bucharest, under the auspices of the European Molecular Computing Consortium (EMCC) and IEEE Computational Intelligence Society Emergent Technologies Technical Committee Molecular Computing Task Force, with the support of the Council of Argeş County and of Sevilla University.

Being an anniversary edition of the workshop, ten researchers with fundamental contributions to membrane computing were invited to deliver talk covering important directions of research in this area. These invited speakers were: Erzsébet Csuhaj-Varjú, Budapest, Hungary; Rudolf Freund, Vienna, Austria; Pierluigi Frisco, Edinburgh, UK; Marian Gheorghe, Sheffield, UK; Oscar H. Ibarra, Santa Barbara, USA; Vincenzo Manca, Verona, Italy; Solomon Marcus, Bucharest, Romania; Giancarlo Mauri, Milano, Italy; Mario J. Pérez-Jiménez, Sevilla, Spain; Grzegorz Rozenberg, Leiden, The Netherlands.

Full papers associated with the invited talks or only extended abstract are included in the present volume.

The volume also contains the 29 accepted papers. Each of them was subject of three or four referee reports. The program committee consisted of Matteo Cavaliere (Trento, Italy), Erzsébet Csuhaj-Varjú (Budapest, Hungary), Rudolf Freund (Vienna, Austria), Pierluigi Frisco (Edinburgh, UK), Marian Gheorghe (Sheffield,

UK), Thomas Hinze (Jena, Germany), Oscar H. Ibarra (Santa Barbara, USA), Florentin Ipate (Pitești, Romania), Shankara Narayanan Krishna (Mumbai, India), Vincenzo Manca (Verona, Italy), Giancarlo Mauri (Milano, Italy), Radu Nicolescu (Auckland, New Zealand), Linqiang Pan (Wuhan, China), Gheorghe Păun (Bucharest, Romania, and Sevilla, Spain) – chair, Mario J. Pérez-Jiménez (Sevilla, Spain), Claudio Zandron (Milano, Italy).

Different from the previous editions of the workshop, this time there were introduced in the program also seven papers which were submitted after the deadline; they are included in the present volume in a short form and got only 10 minutes for the presentation.

During the workshop several prizes were awarded, some of them of an anniversary type (e.g., the youngest participant, the person who participated in most editions of WMC, the author of the largest number of papers in membrane computing, the author of the first PhD thesis in membrane computing and so on), as well as a *best paper* award and another for *important contributions to membrane computing*.

The Organizing committee consisted of Gheorghe Păun – Chair, Costel Gheorghe – Co-chair, Gheorghe Barbu – Co-chair, Paul Radovici, Ileana Popescu, Nicolae Lazăr.

The invited papers and a selection of regular papers, improved according to the discussions held in Curtea de Argeș and additionally refereed, will be published in a special issue of *Lecture Notes in Computer Science*.

Details about membrane computing can be found at *the P systems Webpage*: <http://ppage.psyste.ms.eu> and its mirror <http://bmc.hust.edu.cn/psyste.ms>. The workshop web site, designed by Mihai Ionescu is <http://wmc10.psyste.ms.eu/>.

The workshop was sponsored by the Council of Argeș County, Pitești, Romania, being part of the events included in the program of Argeș and Muscel Days, 2009. The present volume was published by the Research Group on Natural Computing from Sevilla University, with the support of Proyecto de Excelencia con Investigador de Reconocida Valía, de la Junta de Andalucía, grant P08 – TIC 04200. Further local support by the City Hall of Curtea de Argeș and Hotel Posada is gratefully acknowledged.

The editors warmly thank the programme committee, the invited speakers, the authors of the papers, the reviewers, and all the participants, as well as all who contributed to the success of WMC10.

Gheorghe Păun
 Mario J. Pérez-Jiménez
 Agustín Riscos-Núñez
 Editors
 July 16, 2009