
Preface

These proceedings, consisting of two volumes, contain the papers emerged from the Seventh Brainstorming Week on Membrane Computing (BWMC), held in Sevilla, from February 2 to February 6, 2009, in the organization of the Research Group on Natural Computing from the Department of Computer Science and Artificial Intelligence of Sevilla University. The first edition of BWMC was organized at the beginning of February 2003 in Rovira i Virgili University, Tarragona, and the next five editions took place in Sevilla at the beginning of February 2004, 2005, 2006, 2007, and 2008, respectively.

In the style of previous meetings in this series, the seventh BWMC was conceived as a period of active interaction among the participants, with the emphasis on exchanging ideas and cooperation; this time, however, there were much more presentations than in the previous years, but still these presentations were “provocative”, mainly proposing new ideas, open problems, research topics, results which need further improvements. The efficiency of this type of meetings was again proved to be very high and the present volumes prove this assertion.

As already usual, the number of participants was around 40, most of them computer scientists, but also a few biologists were present. It is important to note that several new names appeared in the membrane computing community, also bringing new view points and research topics to this research area.

The papers included in these volumes, arranged in the alphabetic order of the authors, were collected in the form available at a short time after the brainstorming; several of them are still under elaboration. The idea is that the proceedings are a working instrument, part of the interaction started during the stay of authors in Sevilla, meant to make possible a further cooperation, this time having a written support.

A selection of the papers from these volumes will be considered for publication in a special issues of *International Journal of Computers, Control and Communication*. After the first BWMC, a special issue of *Natural Computing* – volume 2, number 3, 2003, and a special issue of *New Generation Computing* – volume 22, number 4, 2004, were published; papers from the second BWMC have appeared in

a special issue of *Journal of Universal Computer Science* – volume 10, number 5, 2004, as well as in a special issue of *Soft Computing* – volume 9, number 5, 2005; a selection of papers written during the third BWMC have appeared in a special issue of *International Journal of Foundations of Computer Science* – volume 17, number 1, 2006); after the fourth BWMC a special issue of *Theoretical Computer Science* was edited – volume 372, numbers 2-3, 2007; after the fifth edition, a special issue of *International Journal of Unconventional Computing* was edited – volume 5, number 5, 2009; finally, a selection of papers elaborated during the sixth BWMC has appeared in a special issue of *Fundamenta Informaticae* – volume 87, number 1, 2008. Other papers elaborated during the seventh BWMC will be submitted to other journals or to suitable conferences. The reader interested in the final version of these papers is advised to check the current bibliography of membrane computing available in the domain website <http://ppage.psyste.ms.eu>.

The list of participants as well as their email addresses are given below, with the aim of facilitating the further communication and interaction:

1. Alhazov Artiom, Hiroshima University, Japan,
aartiom@yahoo.com
2. Ardelean Ioan, Institute of Biology of the Romanian Academy, Bucharest, Romania,
ioan.ardelean@ibiol.ro
3. Bogdan Aman, A.I.Cuza University, Iasi, Romania,
baman@iit.tuiasi.ro
4. Caravagna Giulio, University of Pisa, Italy,
caravagn@di.unipi.it
5. Ceterchi Rodica, University of Bucharest, Romania,
rceterchi@gmail.com
6. Colomer-Cugat M. Angels, University of Lleida, Spain,
Colomer@matematica.UdL.es
7. Cordon-Franco Andrés, University of Sevilla, Spain,
acordon@us.es
8. Csuha-j-Varjú Erzsébet, Hungarian Academy of Sciences, Budapest, Hungary,
csuhaj@sztaki.hu
9. Díaz-Pernil Daniel, University of Sevilla, Spain,
sbdani@us.es
10. Frisco Pierluigi, Heriot-Watt University, United Kingdom,
pier@macs.hw.ac.uk
11. García-Quismondo Manuel, University of Sevilla, Spain,
mangarfer2@alum.us.es
12. Graciani-Díaz Carmen, University of Sevilla, Spain,
cgdiaz@us.es
13. Gutiérrez-Naranjo Miguel Ángel, University of Sevilla, Spain,
magutier@us.es

14. Gutiérrez-Escudero Rosa, University of Sevilla, Spain,
`rgutierrez@us.es`
15. Henley Beverley, University of Sevilla, Spain,
`bhenley@us.es`
16. Ipate Florentin, University of Pitesti, Romania,
`florentin.ipate@ifsoft.ro`
17. Ishdorj Tseren-Onolt, Abo Akademi, Finland,
`tishdorj@abo.fi`
18. Krassovitskiy Alexander, Rovira i Virgili University, Tarragona, Spain,
`alexander.krassovitskiy@estudiants.urv.cat`
19. Leporati Alberto, University of Milano-Bicocca, Italy,
`leporati@disco.unimib.it`
20. Martínez-del-Amor Miguel Angel, University of Sevilla, Spain,
`mdelamor@us.es`
21. Mauri Giancarlo, University of Milano-Bicocca, Italy,
`mauri@disco.unimib.it`
22. Mingo Postiglioni Jack Mario, Carlos Tercero University, Madrid, Spain,
`jmingo@inf.uc3m.es`
23. Murphy Niall, NUI Maynooth, Ireland,
`nmurphy@cs.nuim.ie`
24. Obtulowicz Adam, Polish Academy of Sciences, Poland,
`A.Obtulowicz@impan.gov.pl`
25. Orejuela-Pinedo Enrique Francisco, University of Sevilla, Spain,
`eorejuela@us.es`
26. Pagliarini Roberto, University of Verona, Italy,
`roberto.pagliarini@univr.it`
27. Pan Linqiang, Huazhong University of Science and Technology, Wuhan, Hubei,
China,
`lqpan@mail.hust.edu.cn`
28. Păun Gheorghe, Institute of Mathematics of the Romanian Academy, Bucharest,
Romania, and University of Sevilla, Spain,
`george.paun@imar.ro`, `gpaun@us.es`
29. Pérez-Hurtado-de-Mendoza Ignacio, University of Sevilla, Spain,
`perezh@us.es`
30. Pérez-Jiménez Mario de Jesús, University of Sevilla, Spain,
`marper@us.es`
31. Porreca Antonio, University of Milano-Bicocca, Italy,
`porreca@disco.unimib.it`
32. Riscos-Núñez Agustín, University of Sevilla, Spain,
`ariscosn@us.es`
33. Rogozhin Yurii, Institute of Mathematics and Computer Science,
Chisinau, Moldova,
`rogozhin@math.md`

34. Romero-Jiménez Alvaro, University of Sevilla, Spain,
`Alvaro.Romero@cs.us.es`
35. Sburlan Dragoş, Ovidius University, Constanţa, Romania,
`dsburlan@univ-ovidius.ro`
36. Sempere Luna José María, Polytechnical University of Valencia, Spain,
`jsempere@dsic.upv.es`
37. Vaszil György, Hungarian Academy of Sciences, Budapest, Hungary,
`vaszil@sztaki.hu`
38. Woods Damien, University of Sevilla, Spain,
`dwoods@us.es`
39. Zandron Claudio, University of Milano-Bicocca, Italy,
`zandron@disco.unimib.it`

As mentioned above, the meeting was organized by the Research Group on Natural Computing from Sevilla University (<http://www.gcn.us.es>)– and all the members of this group were enthusiastically involved in this (not always easy) work. The meeting was supported from various sources: (i) Proyecto de Excelencia de la Junta de Andalucía, grant TIC 581, (ii) Proyecto de Excelencia con investigador de reconocida valía, de la Junta de Andalucía, grant P08 – TIC 04200, (iii) Proyecto del Ministerio de Educación y Ciencia, grant TIN2006 – 13425, (iv) IV Plan Propio de la Universidad de Sevilla, (v) Consejería de Innovación, Ciencia y Empresa de la Junta de Andalucía, well as by the Department of Computer Science and Artificial Intelligence from Sevilla University.

Gheorghe Păun
Mario de Jesús Pérez-Jiménez
(Sevilla, April 10, 2009)