
Preface

These proceedings contain the papers emerged from the Eighth Brainstorming Week on Membrane Computing (BWMC), held in Sevilla, from February 1 to February 5, 2010, 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 six editions took place in Sevilla at the beginning of February 2004, 2005, 2006, 2007, 2008, and 2009, respectively.

In the style of previous meetings in this series, the eighth BWMC was conceived as a period of active interaction among the participants, with the emphasis on exchanging ideas and cooperation. Already last year the number of presentations had the tendency to increase, and this was true also for the 2010 edition: there were 31 talks. Actually, also the number of participants was significantly greater than in 2009 – see the list in the end of this preface. However, in the style of the of this series of meetings, 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 volume prove this assertion.

The papers included in this volume, 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 *Romanian Journal of Information Science and Technology* (published by the Romanian Academy). 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 Com-*

puter 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; a selection of papers elaborated during the sixth BWMC has appeared in a special issue of *Fundamenta Informaticae* – volume 87, number 1, 2008; finally, after the seventh BWMC, a special issue of *International Journal of Computers, Control and Communication* was published – volume 4, number 3, 2009. Other papers elaborated during the eighth 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:

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Mario de Jesús Pérez-Jiménez
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