## Preface

This volume contains the papers emerged from the Sixth Brainstorming Week on Membrane Computing (BWMC), held in Sevilla, from February 4 to February 8, 2008, 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 four editions took place in Sevilla at the beginning of February 2004, 2005, 2006, and 2007, respectively.

In the style of previous meetings in this series, the sixth BWMC was again a period of active interaction among the participants, with the emphasis on exchanging ideas and cooperation, with only a few ("provocative", of any length between 5 and 55 minutes, depending on the interaction with audience) presentations scheduled in the first days of the meeting and with most of the time devoted to the joint work. The efficiency of this type of meetings was again proved to be very high and the present volume proves this assertion.

Among the features of the 2008 BWMC, we mention the usual high number of participants, the presentation of a PhD thesis in membrane computing (this was the case also in the last years), the presentation of new results, and, especially, of new applications.

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 *Fundamenta Informaticae*. 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

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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 – now in press. Other papers elaborated during the sixth 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 Milano web page http://psystems.disco.unimib.it (with a mirror in China, at http://bmc.hust.edu.cn/psystems); soon, possibly before the publication of this volume, the page will have a new address, http://ppage.psystems.eu, a new look and a new host – Vienna.

The Sixth Brainstorming Week on Membrane Computing was dedicated to the memory of Nadia Busi, one of the most active researchers in membrane computing, a friendly, highly creative, and reliable member of our community, who passed away last year.

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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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> Gheorghe Păun Mario de Jesús Pérez-Jiménez (Sevilla, April 10, 2008)