Preface

The 14th Brainstorming Week on Membrane Computing (BWMC) was held in Sevilla, from February 1 to February 5, 2016, in the organization of the Research Group on Natural Computing (RGNC) from the Department of Computer Science and Artificial Intelligence of Universidad de Sevilla. The first edition of BWMC was organized at the beginning of February 2003 in Rovira i Virgili University, Tarragona, and all the next editions took place in Sevilla at the beginning of February, each year.

In the style of previous meetings in this series, the 14th edition of BWMC was conceived as a period of active interaction among the participants, with the emphasis on exchanging ideas and cooperation. Several “provocative” talks were delivered, mainly devoted to open problems, research topics, conjectures waiting for proofs, followed by an intense cooperation among the 40 participants – see the list in the end of this preface. The efficiency of this type of meetings was again proved to be very high and the present volume illustrates this assertion.

The 2016 edition of the Brainstorming enjoyed a special visit from a group of undergraduate Physics students, under the initiative of Prof. Ricardo Graciani-Díaz, from the University of Barcelona. Their presence and interest was a powerful catalyst for many interactions, which have given rise to a couple of papers in this volume. In addition, each student wrote a short note on his/her experience.

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 papers from this volume will be considered for publication in special issues of *Theoretical Computer Science*, which will also contain a selection of papers from ACMC 2016 (the Asian Conference on Membrane Computing, to be held at Universiti Kebangsaan, in November 14th-16th).
After each BWMC, one or two special issues of various international journals were published. Here is their list:

- BWMC 2008: *Fundamenta Informaticae* – volume 87, number 1, 2008;
- BWMC 2010: *Romanian Journal of Information Science and Technology* – volume 13, number 2, 2010;
- BWMC 2014: *Fundamenta Informaticae*, volume 134, numbers 1-2, 2014;

Other papers elaborated during the fourteenth 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.psystems.eu.

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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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As mentioned above, the meeting was organized by the Research Group on Natural Computing from Universidad de Sevilla (http://www.gcn.us.es) – and all the members of this group were enthusiastically involved in this (not always easy) work.

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