## **Preface**

After the success of the First International Conference CASYS'97, on Computing Anticipatory Systems, the non-profit association CHAOS, Centre for Hyperincursion and Anticipation in Ordered Systems, organised the Second International Conference CASYS'98, at HEC - Liège, Belgium, August 10-14, 1998.

At this second conference CASYS'98, 115 papers were proposed by 230 authors and coauthors coming from 29 different countries, in several parallel symposiums on anticipatory systems, epistemology, logics, neural and cognitive computation, computing systems, soft computing, chaos and non-linear systems, mathematical and physical systems, information systems, control and robotics, as well as anticipation, cognition and music.

All the published papers have been referred by members of the international committees of CASYS'98.

As for CASYS'97, the proceedings of CASYS'98 were published in three volumes, following the advice of the reviewers:

- 43 papers, including the papers of the authors who received an award, were published in the Conference Proceedings CP 465 of the American Institute of Physics, USA.

- 45 papers are published in the volumes 3 and 4 of the International Journal of Computing Anticipatory Systems.

This third volume of the International Journal of Computing Anticipatory Systems contains papers dealing with Computing Systems and Soft Computing, Mathematical, Physical and Biological Systems, Information and Engineering Systems.

The participants were pleased to congratulate Professor Dr Agnessa Babloyantz who accepted to receive this year, the CHAOS AWARD for her outstanding scientific works on Chaos and Neural Computation in the Brain. Agnessa Babloyantz is a very famous collaborator of Professor Dr Ilya Prigogine, Nobel Prize in Chemistry.

I am pleased to thank Professor Pedro Roberto Medina Martins, the Vice-President of CASYS'98, for his active collaboration.

Professor Ernst von Glasersfeld, who received the CHAOS'97 AWARD, was able to come this year at CASYS'98 as the Invited Speaker and present a paper on A Model for the Construction of Elementary Concepts.

I would like to thank warmly all the reviewers, the chairpersons of the symposiums sessions and the authors of this conference CASYS'98.

Daniel M. Dubois, Director of CHAOS, President of CASYS.