FOREWORD

This book contains the proceedings of the 6th International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH 2016), which is sponsored by the Institute for Systems and Technologies of Information, Control and Communication (INSTICC) and held in cooperation with the ACM SIGSIM - Special Interest Group on Simulation and Modeling, the Movimento Italiano Modellazione e Simulazione (MIMOS), The Federation of European Simulation Societies (EUROSIM), the Society for the Study of Artificial Intelligence and Simulation of Behaviour (AISB), the European Council for Modeling and Simulation (ECMS), the International Association for Mathematics and Computers in Simulation (IMACS), the AIS Special Interest Group on Modeling and Simulation (AIS SIGMAS), the European Training and Simulation Association (ETSA), the Latvian Simulation Society (LSS), the Bulgarian Modeling and Simulation Association (BULSIM), the Federation of Asia Simulation Societies (ASIASIM) and the Japan Society for Simulation Technology (JSST).

The conference it is also technically co-sponsored by the Liophant Simulation, the Simulation Team, the IEEE Computer Society (IEEE CS) and the Technical Committee on Simulation (IEEE CS - TCSIM).

This conference, which is the sixth in a row, has again met with much interest of the research community worldwide, which is the best proof that, first, the idea of the SIMULTECH conferences that has been conceived some years ago by a group of dedicated people with vision has been a proper choice. And, second, that the research and scholarly community working in the field of broadly perceived simulation has responded with great interest in spite of such an abundance of conferences on all possible topics that we presently face.

This conference, SIMULTECH2016, has again proven that high expectations of the “founding fathers” of this conference series has been fulfilled, and the interest of the research and scholarly community has been not only maintained but even amplified as, in addition to regular participants, many new people have submitted results of their new research. As in the previous editions, the participation of younger scientists is a very important factor.

This year we have again succeeded to bring together top researchers, engineers and practitioners interested in methodologies and applications of modeling and simulation from all parts of the world. The main topics covered in the papers accepted after a careful review process for presentation the conference are: Methodologies and Technologies, and Applications and Tools of modeling and simulation. The papers accepted demonstrate new and innovative solutions. They also highlight technical issues and challenges in this field.

The high quality of the SIMULTECH 2016 program is enhanced by the three keynote lectures, delivered by distinguished speakers who are renowned experts in their fields, known not only for their stature in the respective fields but their innovative and visionary thinking:

- Catholijn Jonker (Delft University of Technology, Netherlands),
- Francesco Casella (Politecnico di Milano, Italy),
- Yaman Barlas (Bogaziçi University, Turkey).

The meeting is complemented with the Special Session on Applications of Modeling and Simulation to Climatic Change and Environmental Sciences (MSCCES) which clearly responds to extremely important challenges faced all over the world.

SIMULTECH 2016 received 76 paper submissions, including special sessions, from 35 countries in all continents, of which 47% were orally presented (18% as full papers). A double blind peer paper review was performed by the International Program Committee members, all of them recognized in at least one of the main conference topic areas, with an invaluable help by leading experts in the fields.

Conferences are also meeting places where collaboration projects can emerge from social contacts amongst the participants. Therefore, in order to promote the development of research and professional networks, the Conference features in its social program a Conference Social Event & Banquet in the evening of July 30th (Saturday).
Building an interesting and successful program for the conference requires the dedicated efforts of many people; we thank them all. Firstly, we must thank the authors, whose research and development efforts are recorded here. Secondly, we thank the members of the International Program Committee and additional reviewers for their diligence and expert reviewing. We also wish to include here a word of appreciation for the excellent organization and support provided by the INSTICC dedicated team. We would like to thank the invited distinguished keynote speakers for their invaluable contribution and for taking the time to synthesize and deliver their great talks. We also like to thank our distinguished panellists for their insightful and outstanding contributions.

We hope that you will enjoy the SIMULTECH 2016 program and your stay in the beautiful city of Lisbon.

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