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Preface

As programme and conference chair of the 18th European Simulation Multiconference ESM2004, I would like to welcome you to the city of Magdeburg and to our conference venue, the Herrenkrug Park Hotel. This year, ESM is welcoming contributions by authors from all five continents of the globe. At the time of writing, the number of papers that are due to be published in the proceedings was just over 100.

In a field as broad as simulation, which forms an element of practically all branches of Science and Technology, a conference as general as ESM will always contain an extremely diverse set of topics. It remains a challenge to select tracks that will provide a suitable coverage of the needs of the simulation community. This year, the conference will have eight tracks. Some of these are new compared to 2003, reflecting changing emphases in the field of simulation, others have been renamed or regrouped, and some well-established tracks remain. For the first time (to my knowledge) the conference includes contributions on simulation from the point of view of Philosophy. Also new is the track on Agent-Based Simulation. The conference title: "Networked Simulations and Simulated Networks" reflects the large number of papers dealing with either agent-based or distributed simulations or with the simulation of technical and biological networks.

Another "first" for ESM in 2004 is the emancipation of the Analytical and Stochastic Modelling Techniques and Applications (ASMTA) track as a sub-conference within ESM. ASMTA has reached what is considered by the SCS to be a critical mass, and its proceedings are being published in a separate volume.

The keynote presentation will be given by Stefan Greiner, from DaimlerChrysler Research in Esslingen, Germany. Dr. Greiner will give us some insights into the challenges and potential of simulation in the field of automobile reliability and quality engineering.

There will be an excursion to the Fraunhofer Institute, which is located in the nearby research area of the city, where the University, Fraunhofer Institute for Factory Operation and Automation and Max Planck Institute for the Dynamics of Complex Systems are situated. There, we will be shown some of the research activities in simulation and virtual reality currently being pursued in the Virtual Development and Training Centre. I also recommend visiting the site of the German National Garden Show together with the Museum of Science and Technology just a few hundred meters from the conference hotel.

As with any large and complex undertaking, many people were involved in the organisation of the conference. First of all, I would like to thank the track chairs for acquiring papers and organising the refereeing; thanks go also to members of the Program Committee and to the referees. I would also like to thank SCS Europe for awarding the conference to Magdeburg this year and to Rainer Rimane for taking care of many of the formalities. The local organisation was provided by members of my home institution, the Institute for Simulation and Graphics at the University of Magdeburg, in particular Petra Specht, Petra Janka and Volkmar Hinz. And last, but certainly not least, I would like to thank Martina Seidel, who had the daunting task of coordinating over 100 papers and authors and of producing the conference proceedings; without her, the conference would certainly not have been possible.

Graham Horton
ESM 2004 Programme and Conference Chair

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