Welcome Message from the Chairs
ISMS 2010

We are very pleased to welcome our colleagues from Europe, Asia and other parts of the world to the UK Simulation Society first international conference on Intelligent Systems, Modelling and Simulation ISMS2010 being held in Liverpool, United Kingdom. This is the first conference in a series of prestigious, high quality events dealing with all aspects of intelligent systems and their cross relationship with mathematical modelling and computer simulation. The conference Program Committee has organized an exciting and balanced program comprising presentations from distinguished experts in the field, and important and wide-ranging contributions on state-of-the-art research that provides new insights into the latest innovations in intelligent systems, their modelling and computer simulation applied to a very wide spectrum of applications in science, technology, business and industry. The first such event in Liverpool, we are extremely pleased and proud it has attracted such a large number of submissions. We are hopeful that its outstanding technical content contributed by leading researchers in the field from Europe, Asia and worldwide will ensure its continued success for the future. No plans have yet been finalized for the location of next year's event, but it would be appropriate to choose another interesting location in Europe or beyond, perhaps in a suitable location to enjoy the weather in the mid winter season.

The main themes addressed by this conference are:

- Intelligent Systems
- Hybrid Intelligent Systems & Hybrid Soft Computing
- Methodologies, Tools and Operations Research
- Bio-informatics and Bio-Medical Simulation
- Discrete Event and Real Time Systems
- Image, Speech and Signal Processing
- Industry, Business and Management
- Human Factors, Social & Economic Sciences
- Engineering: Civil, Mechanical, Chemical, Industrial, Manufacturing and Control
- Energy, Power Generation and Distribution
- Transport, Logistics, Harbour, Shipping and Marine Simulation
- Virtual Reality, Visualization and Computer Games
- Parallel and Distributed Architectures and Systems
- Internet Modelling, Semantic Web and Ontologies
- Mobile/Ad hoc wireless networks, mobicast, sensor placement, target tracking
- Performance Engineering of Computer & Communication Systems
- Circuits, Sensors and Devices
- e-Science and e-Systems

ISMS2010 is technically sponsored by IEEE Computer Society UK & RI section, Asia Modelling and Simulation Society (AMSS), UK Simulation Society, European Simulation Federationl (EUROSIM), European Council for Modelling and Simulation (ECMS), Liverpool University, University of Technology Malaysia (UTM), Norway University of Science and Technology, and Nottingham Trent University, UK. ISMS2010 proved to be very popular and received submissions from nearly 30 countries. The conference program committee had a very challenging task of choosing high quality submissions. Each paper was peer reviewed by several independent referees of the program committee and, based on the recommendation of the reviewers, 81 papers were finally chosen for inclusion in the proceedings. The papers offer stimulating insights into emerging computer modelling and simulation techniques and their applications. We express our sincere thanks to the plenary speakers, authors, track chairs, Program Committee members, and additional reviewers who have made this conference a success. Finally, we hope that you will find the conference to be a valuable resource in your professional, research, and

educational activities whether you are a student, academic, researcher, or a practicing professional. Enjoy!

**David Al-Dabass, Athanasios Pantelous, Hissam Tawfik, Atulya Nagar,
Ajith Abraham, Richard Zobel**
Genera, Conference and Program Chairs