Welcome Message from the Chairs

We are very pleased to welcome our colleagues from Asia and other parts of the world to the third international conference on Intelligent Systems, Modelling and Simulation, ISMS2012, being held in Kota Kinabalu, 8 - 10 February 2012. This is the third event in a series of prestigious, high quality international conferences dealing with all aspects of intelligent systems and their cross relationship with mathematical modelling and computer simulation. The first conference was held over a 3 day period, 27 – 29 January 2010 in Liverpool, United Kingdom and proved to be an excellent success with 81 papers included in the proceedings. The second event in the series, ISMS2011, was held in 2 cities: day 1 on 24 January in Kuala Lumpur, Malaysia and days 2 and 3 on 27 and 28 January in Phnom Penh, Cambodia, and once more proved to be an event of outstanding scientific quality with 75 papers included in the proceedings. Like previous years, 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. Only the third such event in this series, we are pleased and proud it has attracted such interest and submissions. We are hopeful that its outstanding technical content contributed by leading researchers in the field from Asia, Europe 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 Asia or beyond, perhaps in another 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

ISMS2012 is technically sponsored by IEEE Computer Society UK & RI section, IEEE Region 10 (Asia Pacific area), Asia Modelling and Simulation Society (AMSS), UK Simulation Society, European Simulation Federation (EUROSIM), European Council for Modelling and Simulation (ECMS), University of Malaysia in Sabah, University of Technology Malaysia (UTM), Kingston University and Nottingham Trent University, UK. ISMS2012 proved to be very popular and received submissions from over 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, 134 papers were finally chosen for inclusion in the proceedings. The papers offer stimulating insights into emerging intelligent systems technologies and their interaction with mathematical modelling, computer simulation and 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, Ismail Saad, Mohd Harun Abdullah, Jasmy Yunus, Zuwairie Ibrahim
General, Conference and Program Chairs