

This item was submitted to Loughborough's Institutional Repository (https://dspace.lboro.ac.uk/) by the author and is made available under the following Creative Commons Licence conditions.



Attribution-NonCommercial-NoDerivs 2.5

You are free:

• to copy, distribute, display, and perform the work

Under the following conditions:



Attribution. You must attribute the work in the manner specified by the author or licensor.



Noncommercial. You may not use this work for commercial purposes.



No Derivative Works. You may not alter, transform, or build upon this work.

- · For any reuse or distribution, you must make clear to others the license terms of
- Any of these conditions can be waived if you get permission from the copyright holder.

Your fair use and other rights are in no way affected by the above.

This is a human-readable summary of the Legal Code (the full license).

Disclaimer 🗖

For the full text of this licence, please go to: http://creativecommons.org/licenses/by-nc-nd/2.5/

Editorial

Phenomenal advances in computer technology together with progress in the areas of mathematical modelling in recent decades have made simulation procedures very powerful tools for the analysis and design of almost all types of industrial and economic processes. Accurate and reliable predictions about the outcome of complex natural transport processes and performance of novel designs for industrial equipments are routinely made using modern simulation methodologies. Annually held international Industrial Simulation Conferences (ISC), organised and run by the EUROSIS in conjunction with various organisations, provides an important forum for the presentation and exchange of new ideas related to the development and application of computer simulation techniques in a very diverse and wide ranging area of industrial relevance.

We are very pleased to be able to co-organise the 7th ISC at Loughborough University with the EUROSIS. In continuation with its rich tradition, the ISC'2009 will provide an excellent overview of industrial simulations and related research within the European Community and the rest of the world. The varied simulation work presented in the conference relate to a wide ranging problems of industrial importance. These include robotics and automotive industry, sensors and process control, traffic simulation, multibody simulation, biomedical engineering, data mining, manufacturing processes, chemical engineering, etc. More information on the areas of the conference can be found in the programme. Although various engineering disciplines are covered as separate themes, the focus of the conference remains interdisciplinary. This allows one from a particular area to learn from the simulation methods in another area and apply them in his/her own areas.

The present proceedings consists of the papers which were selected after a rigorous refereeing process for presentation at ISC'2009. We received 76 papers for the conference out of which 69 were accepted. We are pleased to see a high standard of the papers originating from many countries in the world. The conference programme will be further enhanced by keynote lectures by three renowned experts, namely, Prof Allison Noble (Oxford University, UK), Prof Adel Sharif (University of Surrey, UK) and Professor Philip Eames (Loughborough University, UK), an invited lecture by Mr Duncan Forgan (University of Edinburgh, UK), software demonstration and a number of visits to various laboratories at Loughborough University.

Loughborough is a town in Leicestershire, central England with a population of more than 57,000 as of 2004. It is about 90 minutes away from London by train and only a short distance away from major cities of Leicester, Nottingham and Derby. It is the administrative centre for the Charnwood district and home to Loughborough University. Loughborough University, which is celebrating its centenary in 2009, has been at the core of many scientific and technological advances and continues to excel as a premier research and teaching institute in the UK. For example, the Sunday Times University Guide awarded the university the coveted 'University of the Year'

title for the year 2008-2009 in recognition of its excellent all-round performance among all the higher education institutes in the UK

On behalf of the Organising and International Programme Committees of ISC' 2009, we would like to welcome you to Loughborough. We are certain that ISC'2009 will provide an important platform for the development of new opportunities, collaborations, ideas and inspirations.

Diganta Bhusan Das, Vahid Nassehi, Lipika Deka Editors, Conference Proceedings, ISC 2009, Loughborough, UK