

# *EUROSIM2013*

8th EUROSIM Congress on Modelling and Simulation  
Cardiff, Wales, United Kingdom



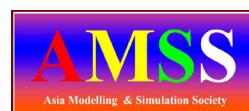
EUROSIM 2013  
Cardiff, Wales 10-13 September 2013

Edited by:  
Khalid Al-Begain  
David Al-Dabass

Alessandra Orsoni  
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and Simulation**

**EUROSIM 2013**

**10–13 September 2013  
Cardiff, Wales, United Kingdom**

## **Proceedings**

# **Eighth EUROSIM Congress on Modelling and Simulation**

# **EUROSIM 2013**

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**Editors**  
Khalid Al-Begain  
David Al-Dabass  
Alessandra Orsoni  
Richard Cant  
Richard Zobel



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IEEE Computer Society Order Number E5073  
ISBN-13: 978-0-7695-5073-2  
BMS Part # CFP1397U-CDR

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Editorial production by Lisa O'Conner  
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# **Chairs' Welcome Message**

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We are delighted to welcome our colleagues from the Europe and the rest of the world to this 8<sup>th</sup> EUROSIM Congress on Modelling and Simulation, held at the Wales Millennium Centre, Cardiff, Wales, United Kingdom 10-12 September 2013. 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 provide new insights into the latest innovations in the field of modelling and simulation.

EUROSIM 2013 is organized by UK Simulation Society and is technically co-sponsored by European Federation of Simulation Societies (EUROSIM), European Council for Modelling and Simulation (ECMS), Asia Modelling and Simulation Section, University of South Wales in Cardiff, Nottingham Trent University and Kingston University. EUROSIM 2013 proved to be very popular and received submissions with authors from nearly 40 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, 109 papers were finally accepted for publication. The papers offer stimulating insights into emerging modelling and simulation techniques and their applications in a wider variety of fields within science, and technology, business, management and industry. We would like to express our sincere thanks to the plenary speakers, authors, session chairs, members of the program committee and additional reviewers who made this conference such an outstanding 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!

EUROSIM2013 Conference Committee

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David Al-Dabass  
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