Preface

In the era of continuous changes in the internal organizational settings and external business environments, such as new regulations and business opportunities, modern enterprises are subject to extensive research and study. A challenge that is already characterized as the futuristic aspect of the 21st century enterprise is complexity and agility. With globalization of economy, business processes are scattered not only throughout the labyrinth of their own enterprise, but also across different enterprises, and far beyond the national boundaries. The growing phenomenon of business process outsourcing is an obvious manifestation of this trend. Increasing competition, customer demands, and emerging technologies also take their tool on modern enterprise by requiring swift adaptation to the changes. Training of employees to learn their roles and see the role of others as they are enacted, imitating group decisions, and creating realistic virtual situations are other aspects of the overall study about modern enterprises. All this puts enterprises on ever-improving, redesigning, and adapting track that requires adequate tools, methods and approaches. As a complex socio-technical phenomenon, a profound understanding, analysis, and design of a modern enterprise and its interwoven business processes require tools that are effective, efficient, and practice proven.

**Modeling** and **simulation** are the tools and methods that are effective, efficient, economic, and widely used in enterprise study and within the holistic approach of business process management. Complementary deliverables of modeling (conceptual modeling) and simulation in enterprise study constitute a whole cycle of study of these complex systems. In its turn, modeling and simulation also requires to be based on engineering principles, systematic approach, sound and rigorous theories and methodologies.

In order to monitor and study processes and interaction of actors in a realistic and interactive environment, animation and gaming are the other two rapidly growing fields associated with enterprise and organizational study, and business process management.

In order to address these challenges, find and improve solutions, and demonstrate application of modeling and simulation in the study of enterprise, its organization and underlying business processes, these proceedings include a collection of papers presented at EOMAS 2009. In addition, EOMAS also included a panel of experts on “Simulation modeling and visualization for innovative teaching” and a keynote presentation.

June 2009

Joseph Barjis
Workshop Chair
EOMAS 2009
Organization

The EOMAS workshop is annually organized as an international forum for researchers and practitioners in the field of Enterprise & Organization Modeling and Simulation. Organization of this workshop, the panel, and peer review of the contributions made to this workshop are accomplished by an international team of outstanding experts in the fields of Enterprise Modeling and Simulation.

Workshop Organizers

Workshop Chair

Joseph Barjis
Delft University of Technology, Netherlands

Program Co-chairs

Johann Kinghorn
Stellenbosch University, South Africa
Srini Ramaswamy
University of Arkansas at Little Rock, USA
Program Committee

Antonia Albani
Delft University of Technology, Netherlands

Anteneh Ayanso
Brock University, Canada

Joseph Barjis
Delft University of Technology, Netherlands

Ygal Bendavid
Polytechnic and Academia RFID, Canada

Tatiana Bouzdine-Chameeva
BEM - Bordeaux Management School, France

Manuel I. Capel-Tuñón
University of Granada, Spain

Rodney Clarke
University of Wollongong, Australia

Jan Dietz
Delft University of Technology, Netherlands

Samuel Fosso Wamba
University of Wollongong, Australia

Ashish Gupta
Minnesota State University Moorhead, USA

Oleg Gusikhin
Ford Research and Advanced Engineering, USA

Johann Kinghorn
Stellenbosch University, South Africa

Fabrice Kordon
Universit Pierre and Marie Curie, France

Peggy Daniels Lee
Penn State Great Valley, USA

Selma Limam Mansar
Carnegie Mellon University - Qatar, Qatar

Mikael Lind
University College of Boras, Sweden

Oswaldo Lorenzo
Instituto de Empresa, Spain

Prabhat Mahanti
University of New Brunswick, Canada

Yuri Merkuryev
Riga Technical University, Latvia

Vojtech Merunka
Czech University of Life Sciences Prague, Czech Republic

Martin Molhanec
Czech Technical University in Prague, Czech Republic

Murali Mohan Narasipuram
City University of Hong Kong, China

Alta van der Merwe
University of South Africa, South Africa

Oleg V. Pavlov
Worcester Polytechnic Institute, USA

Viara Popova
De Montfort University, UK

Ghaiith Rabadi
Old Dominion University, USA

Sríini Ramaswamy
University of Arkansas at Little Rock, USA

Han Reichgelt
Southern Polytechnic State University, USA

Peter Rittgen
University College of Boras, Sweden

Natalia Sidorova
Eindhoven University, Netherlands

Yutaka Takahashi
Senshu University, Japan

José Tríbolet
Technical University of Lisbon, Portugal

Alexander Verbraeck
Delft University of Technology, Netherlands

Gerald Wagner
University of Nebraska at Omaha, USA

Auxiliary Reviewers

Rick van Krevelen
Delft University of Technology, Netherlands

Irina Rychkova
École Polytechnique Federale de Lausanne, Switzerland
Sponsoring Institutions

- SIGMAS (Special Interest Group on Modeling And Simulation of the Association for Information Systems)

- SIGSIM (Special Interest Group on Simulation of the Association for Computing Machinery)

- CAiSE 2009 (International Conference on Advanced Information Systems Engineering)