

## **SIMULATION OF MANUFACTURING SYSTEMS**

Simulation is a tool to evaluate the performance of a system, existing or proposed, under different configurations of interest and over a long period of real time. It has become the pre-eminent method for modeling and analyzing the modern complex manufacturing systems, where true competitive advantage can only be achieved by the integration of the internal processes with the external business processes and elements such as customers and suppliers. The general benefit of simulation in manufacturing is that it allows a manager to obtain a *system-wide view* of the effect of changes on his or her manufacturing system, whether it exists or not.

The ***Simulation of Manufacturing System*** special session aims to discuss the recent developments and tools associated with the use of simulation in solving manufacturing enterprise design, analysis and control problems.

Authors are invited to submit papers based on their original work done in a variety of areas related but not limited to the following topics:

- Discrete Event Simulation Languages and Tools
- Simulation in manufacturing system design projects
- Simulation of Supply Chains
- Simulation optimization of process planning
- Scheduling and Inventory Systems
- Application of Genetic, Particle Swarm and Ant colony Algorithm in simulation
- Petri Nets for simulation of Manufacturing Systems
- Simulation in Industrial Product Design
- Simulation in Engineering Processes
- Virtual Reality and Graphical Simulations in Industrial Applications
- Multi-agent Systems and Simulation
- Lean Manufacturing Simulation
- Simulation in Automotive Systems
- Simulation in Robotics
- Simulation in Aerospace
- Simulation of MEMS and NANO Systems
- Intelligent Transport Systems - Simulation
- Intelligent manufacturing systems
- Web-based simulations

### **Session Organizer**

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Important Dates:

<b>1<sup>st</sup> March, 2007</b>	Announcement of a contribution by E-mail to the session organizer
<b>9<sup>th</sup> April, 2007</b>	Submission of 2 page extended abstracts by E-mail to the session organizer
<b>30<sup>th</sup> May, 2007</b>	Acceptance notification after paper review
<b>30<sup>th</sup> June, 2007</b>	Full paper (camera ready) with copy to the session organizer