

**6<sup>th</sup> EUROSIM Congress on Modelling and Simulation**  
**September 9-13, 2007**  
**Ljubljana, Slovenia**

<http://www.eurosim2007.org>



**Announcement of a special session:**

## **Modeling and Simulation in Mechatronics**

Mechatronics is an interdisciplinary engineering science that combines knowledge from several disciplines such as mechanics, electrical engineering, electronics, control theory and computer science. Mechatronic devices are widely used in industrial automation, automotive products, consumer products, etc. and will continue growing in importance in the future.

The interdependence of various physical effects in mechatronic systems is a significant challenge when designing and optimizing mechatronic products. Modeling and numerical simulation have proven themselves as tools for developing mechatronic systems in a virtual environment before real prototypes are built and tested. As an intermediate step in the development process, hardware-in-the-loop (HIL) and software-in-the-loop (SIL) concepts can be used to test and optimize subsystems of mechatronic devices.

The special session on "Modeling and Simulation in Mechatronics" will provide a platform to present and discuss the latest developments and achievements in this field. Interested authors are requested to submit papers on relevant topics such as

- Development of modeling and simulation environments
- Development and use of multidomain models
- HIL- and SIL test environments and scenarios
- Industrial automation
- Industrial robots
- Mobile and autonomous robots
- Automotive
- Mechatronic consumer products

or any other related topics not listed above.

### **Session organizer:**

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### **Deadlines:**

Announcement of a contribution (to facilitate session organization):

**1 March 2007** (by E-mail to the session organizer)

Submission of 2 page extended abstract or draft paper:

**9 April 2007** (by E-mail to the session organizer)

Acceptance notification after paper review:

**30 May 2007**

Full paper (camera ready) due to:

**30 June 2007** (to the conference server with copy to the session organizer)

See also instructions: <http://www.eurosim2007.org/Instructions.html>