



## “Microelectromechanical Systems in Industrial Environments”

**The Theme:** Sensors, actuators, and transducers based on microfabrication techniques are nowadays common in the industrial sector. Temperature, pressure or humidity sensors have been commercially available for years, and other sensors such as accelerometers and gyroscopes have reached a price that makes them affordable for many applications. Much research is now directed towards the packaging or interfacing of the MEMS devices already developed. Nevertheless, regardless of the commercial availability of many devices, there is still room for improvement in the design, optimization, fabrication or materials used for these microsystems. This Special Section will deal both with the design and the use in industry of microfabricated devices and systems. Manuscripts submitted to this Special Section **must clearly state the proposed application** and demonstrate how the described approach can help in solving a real problem. Topics of interest of this Special Section include, but are not limited to:

- Modelling, CAD, and simulation of microsystems
- Design and optimization of MEMS. Design for manufacturability
- Exploitation of physical phenomena present at the microscale
- New materials and processes for MEMS
- Fabrication and packaging technologies
- Reliability of MEMS devices
- Interfacing of MEMS and microelectronics devices
- Use of microsensors and microactuators in industrial environments
- Micromechatronics systems

This Special Section is organized by the Technical Committee on MEMS of the IEEE Industrial Electronics Society.

### Manuscript Preparation and Submission

Follow the guidelines in “Information for Authors” in the IEEE Transaction on Industrial Electronics <http://iee-ies.org/tie/>. Please submit your manuscript in electronic form through Manuscript Central web site: <http://mc.manuscriptcentral.com/tie-ieee>. On the submitting page #1 in popup menu of manuscript type, select: SS on MEMS in Industrial Environments.

### Timetable

**Deadline for manuscript submissions**  
Information about manuscript acceptance

**February 15, 2011**  
**June 2011**

### Guest Editors

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