



## Call for Papers / Invitation to Special Session SS05

### INDUSTRIAL APPLICATIONS OF EMERGING AUTOMATION PARADIGMS AND TECHNOLOGIES

#### Special Session Organizers

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**Sponsored by:** AGH University of Science and Technology at Kraków, and IEEE Industrial Electronics Society

**Aim:** New automation paradigms and technologies allow approaching changes in market trends, i.e. from mass production to mass and extreme customization, and support progress and growth. But they also lead to significant changes in industrial production organization control and management. With the increased digitalization and virtualization of production and logistic systems, automation components become intelligent, management and control infrastructures evolve from centralized to high distributed.

This special session focuses on the application of emerging automation paradigms and technologies in supporting the specification and implementation of many aspects that characterize the "Factory-of-the Future" (see R&D programs from the European Union, National Science Foundation, 'Industrie 4.0 Initiative' of the German Ministry for Research). Benefits and limitations of paradigm's applications and technologies will be exemplified in practical applications. With this, the Special Session should serve as a discussion forum and identify open issues in applications.

Topics of applications include, but are not limited to:

- Security & Safety
- System Engineering
- Sensors & actuators
- Communication technologies
- Service-oriented architecture paradigm
- System-of-systems paradigm

The special session will be supported by the German network of excellence INDIN ([www.indin-nds.de](http://www.indin-nds.de)) and the Collaborative Project EU FP7 IMC-AESOP ([www.imc-aesop.eu](http://www.imc-aesop.eu)). ([www.imc-aesop.eu](http://www.imc-aesop.eu)).

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#### SUBMISSION OF PAPERS

Papers should be submitted electronically. For further details, please refer to the conference web page.

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#### AUTHOR'S SCHEDULE

Deadline for submission of papers: April 8, 2012

Notification of papers acceptance: May 30, 2012

Final manuscripts due: July 8, 2012

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