

IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL INFORMATICS INDIN'16

18-21 JULY 2016, FUTUROSCOPE-POITIERS, FRANCE

Special Session on

**“Cyber-Physical Systems: from technological solutions to real
industrial applications”**

Organized by

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Call for Papers

Cyber-Physical Systems (CPS) is a challenging emerging concept that considers the integration of computational and physical capabilities into systems able to interact with humans. This concept leads to several key issues to be solved before its dissemination into various industrial sectors and since few years ago, some works have been jointly led by industrialists and researchers to address them. Up to now, most of these works focus on and validate specific aspects and issues required to the future full deployment of CPS systems. This Special Session intends to propose a review of all the joint industry/research activities that can be seen as a contribution to the definition of future CPS. Papers are requested to provide a part containing a sound discussion from an industrial point of view, being a justified expression of a need for CPS, a study of a technological solution enabling CPS or a knowledge analysis from a real partial (or total) implementation of a CPS. Pure theoretical or highly-conjectural papers are encouraged to be submitted as regular INDIN papers but not to this special session.

Topics of interest include, but are not limited to:

- Product identification and localization
- Information gathering and management
- Communication, supervision and control
- Interoperability with humans and existing information systems
- Safety level and proof of performances
- Deployment methodology and costs
- Industrial needs, acceptability and opportunities
- Environmental, legal and societal aspects

Applications fields may concern but are not limited to:

- Manufacturing & robotics
- Supply chains
- Transportation and logistics
- Energy & smart grids
- Services (health-care...)

IES Technical Committee Sponsoring the Special Session (if any):

- IEEE TC on industrial agents: <http://tcia.ieee-ies.org/>
- IEEE TC on Industrial Cyber-Physical Systems