

3<sup>rd</sup> IFAC Conference on Embedded Systems, Computational Intelligence  
and Telematics in Control (CESCIT 2018)

4-6 June 2018

<http://www.cescit2018.org>

**Open Invited Track on:**

**Smart Control in Industry**

**Organizers:**

- Michael Fritscher (Zentrum für Telematik e.V.)
- Christian Lilge (Zentrum für Telematik e.V.)
- Prof. Dr. Klaus Schilling (Zentrum für Telematik e.V.)

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**Abstract:**

In the recent years, requirements in the industry have dramatically changed: Tiny batches or completely individual productions, higher environment constraints, management of the whole product lifecycle, after-sale services, severely cut-down product cycles, less buying and more renting, ("x as a Service") and a lot more. "Industrie 4.0" and the Industrial Internet Consortium (IIC) are platforms to cope with these drastic changes.

This session shows how to adapt and apply modern control methods to these challenges to archive both flexible and adaptive industry plants and to support novel business models.

**IFAC technical committee(s) for evaluation:**

This contribution has a multi area nature, the keywords:

- Process control, manufacturing
- Intelligent systems and instrumentation (smart systems, sensors, actuators and distributed systems)
- Internet of things

## **Detailed description:**

Relevant Topics are (not exclusive):

- Telemaintenance in control systems
- Model-based monitoring and predictive maintenance of industrial plants
- Flow of materials in modern plants
- Highly flexible production nets - batch size of one
- Novel and innovative approaches of human-machine interactions in industry
- Business model driven control approaches
- Digital twins