

Invited Session on “Operations in Industry 4.0—Cooperation and Learning of Machines and Beyond” for IFAC MIM 2019

Invited Session (code c3w35 - use this identification code in the submission)

9th IFAC Conference on Manufacturing Modeling, Management, and Control (MIM 2019)
Berlin, Germany, 28/29/30 August 2019

<https://blog.hwr-berlin.de/mim2019/> <https://ifac.papercept.net/>

Session Chairs

- Asst. Prof. Frederik Schulte, Delft University of Technology, The Netherlands
- Prof. Rudy R. Negenborn, Delft University of Technology, The Netherlands

The ongoing technological transformation—often referred to as Industry 4.0 or Smart Industry—provides new opportunities and challenges to cost-efficiently as well as sustainably design, operate, and maintain systems of machines. Multiple (autonomous) machines are exposed to highly altered working conditions and new kinds of tasks. Standardization, interconnection, and automation of physical resources enable advanced networking and intelligent collaboration among machines as well as humans and machines. Data management and distribution in large-scale (machine) data is critical to achieve self-aware and self-learning systems of machines with effective capacity management and system workload control. This development calls for new and advanced approaches in operations management and development of physical components to leverage the technological potential and avoid costly investment failures.

Session topics

Academics, practitioners from industry, and policy makers are invited to contribute theoretical and applied research papers in the problem area of operations management, (warehouse) logistics, and the design of production components for Industry 4.0. The session aims to attract a wide spectrum of related work on models, surveys, empirical research, and case studies. A variety of methodologies such as (agent-based) simulation, data-driven optimization, and machine learning techniques may be applied to address particular topics of practical relevance for industrial innovation.

Submission

For author guidelines, please refer to www.ifac-control.org. All papers must be submitted electronically using Symposium Manuscript Management System (CMMS). All papers must be prepared in a two-column format in accordance with the IFAC manuscript style. Please use the official IFAC instructions and template to prepare your contribution as full-length draft paper and submit it online by December 15, 2018.

Submission details are available on the symposium website. All submissions must be written in English. All papers that conform to submission guidelines will be peer-reviewed by IPC members. The corresponding author submits the paper online (pdf format) as invited session paper. **Submission as an invited paper requires the invited session code c3w35. Several international journals are associated with the MIM 2019 for publication of special issues.**

Paper submission closure	December 15, 2018
Notification of acceptance/ rejection	February 20, 2018
Deadline for the final submission	March 15, 2019