**Invited Session on "Production and Supply Chain Planning in the Semiconductor Industry"
for IFAC MIM 2019**

IFAC MIM 2019, August 28-30, 2019, Berlin, Germany

Session Chairs

- Gerald Reiner, Vienna University of Economics and Business, Austria
- Emel Arikan, Vienna University of Economics and Business, Austria
- Hans Ehm, Infineon Technologies AG, Munich, Germany
- Boualem Rabta, University of Klagenfurt, Austria

Semiconductor supply chains are characterized with complex manufacturing processes, long cycle times, and high capital intensity, coupled with volatile customer demand, short product lifecycles, and limited visibility. Economic challenges forced it to become one of the most innovative and advanced industries not only with respect to chip-design and production technologies but also with respect to supply chain operations.

Sophisticated optimization models have long been implemented in parts of the system, and the interactions are studied with advanced simulation models. The industry is also in the forefront of testing and implementing Industry 4.0 technology and automated decision making tools. These advances in digital technologies and increased availability of all sorts of data require a precise understanding and modelling of the existing production and supply chain processes. As such, the Invited Session aims at providing an overview about the state of the art in modelling and analysis of production and supply chain processes in the semiconductor industry.

The session chairs invite researchers to contribute theoretical and applied research papers, specifically addressing semiconductor industry, in areas including but not limited to the following topics:

Production planning and scheduling, Demand planning, Supply chain planning, Equipment maintenance and productivity, Quality control, Capacity planning; Inventory Management, Industry 4.0, Big Data analytics, Circular Supply Chains, Semantic web technologies, B2B Ontologies, Integrated Sales and Operations Planning, Discrete and agent based simulation

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 an invited session paper. Submission as an invited paper requires the invited session code.

Important dates

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