

**Special Issue on “New Perspectives in Supply Chain and Operations Simulation”
for IFAC MIM 2019**

Invited session identification code 649gd.
IFAC MIM 2019

<https://ifac.papercept.net/>

Session Chairs:

- Prof. Dr. Enzo Frazzon, UFSC, BRAZIL
- Prof. Dr. Dmitry Ivanov, Berlin School of Economics and Law, GERMANY

The need for dynamic analysis in the supply chain and operations management has been recognized and systematically considered in literature. Simulation modelling has been applied to the supply chain and operations management from five different methodical perspectives as follows:

- system dynamics
- agent-based modelling
- discrete-event simulation
- graph theory-based simulation
- optimization-based simulation

Simulation studies on the supply chain and operations management naturally play important roles in research communities since they are able to handle time-dependent and complex problem settings with situational system behaviour changes in time. As such, simulation can be even more powerful than analytical closed form analysis.

Session topics:

Following the success of this Special Session at IFAC INCOM 2018, the session chairs invite scientists, engineers and decision makers from government, industry and academia to contribute theoretical and applied research papers in areas including but not limited to the following topics:

Supply chain design, production system design, Industry 4.0 system design, digital factory simulation, process design, supply chain planning, inventory control, factory planning, lean systems, distribution and logistics, resilience and business continuity ripple effect and bullwhip effect in the supply chain, supply chain risk management, planning supply chain performance under uncertainty, creating flexibility and adaptability in the supply chain, post-disruption supply chain recovery, agent-based simulation, discrete-event simulation, system dynamics, optimization-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 **invited session paper**. Submission as an invited paper requires the **invited session code 649gd**. Several international journals are associated with the MIM 2019 for publication of special issues.

Important dates:

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