Open Invited Track on
"Modeling and Data Analytics in Manufacturing and Supply Chain Operations" for IFAC MIM 2019

Open Invited Track Identification Code **wfhgp**
Now also accepting extended abstracts (included in the program but not the Proceedings)
9th IFAC Conference on Manufacturing Modeling, Management, and Control (MIM 2019)
August 28-30, 2019, Berlin, Germany
https://blog.hwr-berlin.de/mim2019/
https://ifac.papercept.net/

Track Chairs
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Track Topics
In the past decades, mathematical modeling and optimization have played significant roles in solving hard operational and tactical problems emerging from manufacturing and supply chain. Successful examples include production planning, supply chain network design, intermodal transportation, just to name a few. However, many problems remain challenging because of their large problem scales, and/or stochasticity in nature. On the other hand, the rapid rise of data analytics provides exciting opportunities for the Operations Research and Control communities to re-examine these hard optimization problems, as well as newly emerging problems in manufacturing and supply chain.

This track invites researchers to contribute state-of-the-art research in the general area of using data analytics to improve the efficiency of optimization algorithms. The data analytics are broadly defined here to include quantitative methods in machine learning, data mining, predictive analytics, and simulation-based analytics. We also welcome newly emerging areas in operations. Both theoretical and applied research are welcome, as long as the improved efficiency is rigorously proved or computationally shown. Topics to be covered include, but are not limited to, the following:
- Design of manufacturing system and supply chain
- Production planning and control
- Supply chain networks (e.g., using real-time data)
- Manufacturing and supply chain predictive tools
- Inventory control and management (e.g., using sensing data)
- Dynamic resource allocation
- Improving forecasting models using big data
- Machine learning techniques for process control
- Supply chain risk control
- Optimizing systems based on predictive information (e.g., predictive maintenance)
- Newly emerging areas in operations, such as service operations
- Combining optimization and machine learning algorithms
- Simulation-based modeling and optimization for stochastic systems

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 on line by October 31, 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 open invited track paper**. Submission as an invited paper requires the open invited track code **wfhgp**.

Selected papers in this track will be invited to submit their full versions to a special issue of *Flexible Services and Manufacturing Journal*.

Important Dates

- Open Track paper submission closure: January 5th, 2019 (full papers) or January 31st, 2019 (extended abstracts)
- Open Track paper notification of acceptance: February 20th, 2019
- Final paper submission deadline: March 15th, 2019
- Early registration rates expire: March 31st, 2019