Open Invited Track on "Intelligent Systems supporting Supply Chains Decision Making" for IFAC 2017 World Congress

Open Invited Track identification code xxxxxx

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Session Chairs:

- Prof. Dr.-Ing. Enzo Morosini Frazzon, Federal University of Santa Catarina, BRAZIL
- Prof. Dr.-Ing. Michael Freitag, Universität Bremen, Bremen, GERMANY
- Prof. Dr.-Ing. Carlos Eduardo Pereira, Federal University of Rio Grande do Sul, BRAZIL
- Prof. Dr.-Ing. Bernd Hellingrath, Westfälische-Wilhelms-Universität Münster, GERMANY
- Prof. Dr. Shimon Y. Nof, Purdue University, USA

The integration of supply chains leads to increasing complexity, so that operational planning need to be supported by proper decision making models along with intelligent systems. Decision making models can apply optimization, simulation, or hybrid methods and approaches. At the same time, intelligent systems are composed by data acquisition, transformation, as well as communication systems embedded in technological devices. The proper exchange of data between the operational planning and intelligent systems allows for the emergence of adaptive, agile and resilient supply chains. The session will cover the technology-based integration of different supply chain tasks, such as: production planning and scheduling, transportation and logistics planning and scheduling, inventory planning, manufacturing systems as well as coupled services and technologies which can lead to improved supply chains.

Track topics:

The track chairs invite scientists, engineers and decision makers from government, industry and academia to contribute with theoretical and applied research papers. The aim of this session is to attract high-quality papers in areas including but not limited to the following topics: Inventory control, production planning and scheduling; Supply chains and networks; Simulation technologies in manufacturing; Operations Research in manufacturing; Modeling, simulation, control and monitoring of manufacturing processes; Monitoring, diagnosis and maintenance of manufacturing systems; Smart manufacturing systems; Maintainability, reliability, safety and dependability of production systems. Special attention will be directed towards practical relevance and approaches that can foster innovation in manufacturing supply chains.

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. Submission details are available on the congress 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 open invited track code (xxxxxxx). Several international journals are associated with the symposium for publication of special issues.