Invited Session on “Digital Supply Chain”  
for IFAC MIM 2022

Invited session identification code  
IFAC MIM 202, June 22-24, 2022, Nantes, France

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Session Chairs:
- Prof. Dr. Alexandre Dolgui, IMT Atlantique, FRANCE
- Prof. Dr. Dmitry Ivanov, Berlin School of Economics and Law, GERMANY
- Prof. Dr. Tsan-Ming (Jason) Choi, National Taiwan University, TAIWAN
- Prof. Dr. Bin Shen (Jerry), Donghua University, CHINA

Digital supply chain is a product of long-term evolution in automation, information systems, and artificial intelligence. Automation of manufacturing and logistics processes and replacement of human work by machines has a long history. Usage of information systems such as ERP, MES and WMS for planning and control of enterprise resources, production and material planning, and warehouse management became a standard across the globe. Intelligent manufacturing has been established to use artificial intelligence for some planning and control decisions.

The current stage of development is a transition from automated and intelligent to digital. This transition covers both network and plant levels. At the plant level, digital manufacturing is based on collaboration of machines, machines and products, and humans and machines. These features are materialized through additive manufacturing, robotics, simulation, virtual and augmented reality, and collaboration tools in creating products and services. At the network level, the digital supply chain has been created utilizing Blockchain, Internet-of-Things, e-commerce platforms, and collaborative supplier portals to achieve a seamless end-to-end visibility.

Session topics:
The Invited Session aims to collate the recent research results on how digital technology can be utilized in operations in supply chain management to improve efficiency, productivity, resilience, and sustainability. We are looking at both modeling and empirical studies, ideally motivated by a practical context, which explicitly incorporate the digital technologies such as Blockchain, digital twins, artificial intelligence, robotics, Industry 4.0, big data analytics, and supplier collaboration platforms (but not limited to) in manufacturing and supply chain decision-making at strategic, tactical, and operational levels.

Submission
For author guidelines, please refer to www.ifac-control.org. All papers must be submitted electronically using https://ifac.papercept.net/. 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 25, 2021. 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. Several international journals (IJPR, ANOR, FSM Journal, IJISM) are associated with the MIM 2022 for publication of special issues.

Important dates:
- December 25, 2021: Deadline for the submission
- February 15, 2022: Notification of acceptance/rejection
- March 15, 2022: Deadline for the final submission