# Invited Session on "Enhancing visibility, traceability and transparency in manufacturing systems and supply chains"

## **Invited Session => code tbd**

**INCOM 2021** 

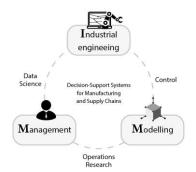
7-9 June 2021 Budapest

17th IFAC Symposium on Information Control Problems in Manufacturing https://incom2021.org/index.html

## **Session Chairs:**

- Prof. Dr. Elias Ribeiro da Silva, University of Southern Denmark, DENMARK
- Prof. Dr. Jannis Angelis, KTH Royal Institute of Technology, SWEDEN
- Prof. Dr.-Ing. Enzo Morosini Frazzon, Federal University of Santa Catarina, BRAZIL

This session is concerned with the development of management decision-support systems in digital, resilient and sustainable manufacturing and supply chain systems in the era of Industry 4.0 based on combination of Industrial Engineering, OR and Data Science:



Source: <a href="https://tc.ifac-control.org/5/2">https://tc.ifac-control.org/5/2</a>

Currently, supply chains and supply networks have reached a point of high efficiency and optimization. However, when not managed correctly, over-optimisation potentially increases several disruption risks. In this context, visibility, transparency, and traceability in supply chains are needed to reduce uncertainty and mitigate such types of risks. Several technologies have been applied in the context of manufacturing systems and supply chains to cope with these issues, such as blockchain, artificial intelligence, analytics, simulation, and so on. At the same time, new approaches also emerged to create adaptive, agile and resilient manufacturing systems and supply chains. **Keywords:** Visibility in supply chains; Adaptive supply chains; Industry 4.0 technologies.

### Track topics:

The track chairs invite scientists, engineers, policy-makers, and decision-makers from government, industry and academia to contribute with theoretical and applied research papers. The session will cover processes and technologies applied to enhance visibility, traceability and transparency in manufacturing systems and supply chain. This session aims to attract high-quality papers in topics such as: adaptive supply chains; simulation, control, and monitoring of resilient production systems and supply chains; sustainable supply chains; digital twins supporting manufacturing systems and supply chain; artificial intelligence and blockchain in supply chains; smart manufacturing technologies in supply chains.

This invited session will be supported by the "Collaborative Research Network on Supply Chain 4.0"

### Submission

For author guidelines, please refer to <a href="www.ifac-control.org">www.ifac-control.org</a>. All papers must be submitted electronically at <a href="https://ifac.papercept.net/">https://ifac.papercept.net/</a>. 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 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 use of the code tbd.

Draft paper submission	30th September 2020
Notification of acceptance/rejection	1st December 2020
Camera-ready final manuscripts	1st February 2021