



**18th IFAC Symposium on Information Control Problems in
Manufacturing (INCOM 2024)
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Invited Session:

Smart Supply Chains for Sustainable Manufacturing

Invited Session Code: TBA

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This session mainly concerns with the recent development in smart supply chain management for sustainable manufacturing. The wide disruptions due to the COVID-19 pandemic demonstrate the importance of supply chain flexibility and resilience. Employing advanced information and communication technologies (ICT) can enhance supply chain performance. The integration of ICT and machine learning will increase the ability of a supply chain to automatically adapt to environmental changes, and further make intelligent decisions that best achieve business goals. A smart supply chain includes the intelligent decisions at different stages and different levels, such as strategic decisions on network structure and supplier selection as well as tactical and operation decisions on planning, sourcing, making, delivery, return, and enablement.

However, challenges and barriers exist that prevent manufacturing firms from achieving smart supply chains. They are, e.g., individualization and increased product variety, shorter product life cycles, decentralization, weak ability to adopt new technologies, weak reliability and development of the latest technologies, and new business models. We are interested in both theoretical analysis and real-world applications showing how emerging ICT and artificial intelligence (AI) technologies improve supply chain performance. The technologies include (but are not limited to) internet of things, cyber-physical systems, additive manufacturing/3D printing, cloud computing, AI/machine learning, big data, blockchain, digit twins, etc.

Topics of interest include, but are not limited to:

- Intelligent supply chains and logistics
- Data-driven supply chains and logistics optimization
- New business platforms for intelligent production and supply chains
- Sustainable/green/closed-loop supply chains and manufacturing
- Smart multi-channel supply chains under e-commerce
- Smart supply chain network design and optimization
- Intelligent warehouse management
- Soft computing, forecasting, and uncertain optimization methods with big data
- Cloud based logistics and supply chains
- Environmental, economic, and social impacts of smart supply chains
- Interactions among smart supply chain enabling technologies and performances
- Applications to the fields of sustainable logistics and supply chains, risk management, robust design, network reliability, decision support and related areas

Submission

All contributions must be electronically submitted through the PaperPlaza Conference Manuscript Management System. Guidelines for the preparation of manuscripts are provided on the IFAC website. **Submission as an invited paper requires the invited session code: TBA. Special issues of INCOM 2024 Conference are planned in IFAC and other high-ranking journals.**

Important dates:

Full Paper Submission:	31/01/2024
Notification of acceptance:	15/03/2024
Final paper submission:	15/04/2024
Conference date:	28-30/08/2024