

## Special Session Proposal – INCOM 2024 Vienna

# Data-driven optimization methods for sustainable and flexible manufacturing systems

**Keywords**: Simulation, optimization, flexible production systems, supply chain & logistics, sustainability

In an era marked by rapid technological advancements and growing environmental concerns, the global manufacturing landscape is undergoing a profound transformation. The pursuit of sustainability has become an imperative, not only to mitigate the environmental impacts of industrial processes but also to ensure the long-term viability of manufacturing industries. Simultaneously, the demand for flexible manufacturing systems is on the rise, driven by ever-changing market dynamics and consumer preferences.

This call for scientific papers seeks contributions that delve into the intersection of sustainability and flexibility in manufacturing systems through data-driven optimization methods. We welcome original research papers, review articles and case studies on the following topics (but not limited to):

- Data analytics and machine learning applications for sustainable manufacturing.
- Simulation and oSptimization for eco-friendly manufacturing processes.
- Data-driven decision support systems for green supply chain & logistics management.
- Sustainability metrics and performance evaluation through data analysis.
- Big data analytics and Industry 4.0 technologies in sustainable manufacturing.
- Data-driven approaches to human-centric sustainable manufacturing.
- Success stories and best practices from industry.

#### **Organizers**

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### **Key dates**

Deadline for paper submission: January 31, 2024

Notification of acceptance/rejection: March 15, 2024
Final paper submission: April 15, 2024
INCOM 2024, Vienna (Austria): August 28-30, 2024

# INVITATION CODE: TBD

#### Paper submission

Please proceed as an invited paper and indicate the invited session identification code xxxx. Papers reporting original research (limited to 6 pages in IFAC format) are welcome. Guidelines for the preparation of manuscripts are provided on the conference website:

- https://www.incom2024.org/cfp/
- https://www.ifac-control.org/conferences/authors-guide
- https://ifac.papercept.net/