Important dates:

Invited sessions proposal submission	21.10.2024
Draft paper submission	03.02.2025
Reviewing papers (notification)	03.03.2025
Final papers submission	07.04.2025

Useful Manuscript Information

WORD template and sample package:
https://www.ifac-control.org/events/author-guide
Manuscript preparation:
http://www.ifac.papercept.net/conferences/support/support.php
Manuscript submission:
https://ifac.papercept.net/conferences/scripts/start.pl

15th IFAC Workshop on
Intelligent Manufacturing Systems
Koszalin, Poland, 11-12 September 2025

website: ims2025.pl

Sponsored by

IFAC TC 5.1 - Manufacturing Plant Control

Co-sponsored by

IFAC TC 3.2, 4.2, 4.3, 5.2, 5.3 and 7.5

The main focus of the workshop is on methods, techniques, and approaches related to the integration of advanced technologies and artificial intelligence into manufacturing processes. The goal is to enhance efficiency, productivity, flexibility, adaptability, and decision-making in manufacturing operations. The workshop will allow researchers and practitioners to share their achievements, innovations, and insights on intelligent manufacturing systems. Participants can be involved in discussions covering models, approaches, formal solutions, case studies, and real-life implementations. Discussions may be focus on the integration of advanced technologies such as the Internet of Things, edge and cloud computing, machine and deep learning, robotics, automation, data analytics, and advanced manufacturing technologies into manufacturing systems. Consequently, the workshop will encompass the latest research and development in the field, including state-of-the-art technologies and methodologies related to automation, digitalization, and manufacturing. In this context, the workshop's scope includes understanding, exploring, and discussing the latest trends, technologies, methodologies, and challenges in the field of Intelligent Manufacturing Systems. Additionally, it addresses the integration of the concept of Industry 4.0/5.0, aimed at developing a more sustainable, resilient, and human-centric industry.

Meeting topics:

- Integration of advanced computing techniques in manufacturing processes.
- Industrial Internet of Things (IIoT) and its role in transforming the manufacturing landscape.
- Applications and case studies of Industrial AI, Machine Learning, Deep Learning in manufacturing.
- Generative technology and Large Language Models (LLM).
- Applications and case studies of edge to cloud continuum for industrial applications.
- Smart sensors, robotics, and automation in manufacturing.
- Advanced manufacturing technologies.
- Bio-inspired manufacturing systems and self-organization.
- Real-time monitoring, analysis, and optimization of production systems.
- Digital twins and virtual reality applications in manufacturing operations management.
- Product-Service Systems, circular and sustainable manufacturing systems.
- Human-system integration in manufacturing.