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

Important dates:

Invited sessions proposal submission	21.10.2024
Draft paper submission	16.12.2024
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

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.

IMS 2025
Intelligent Manufacturing Systems

IFAC
INTERNATIONAL FEDERATION OF AUTOMATIC CONTROL

KEYNOTES

- Dmitry Ivanov, Berlin School of Economics and Law, Germany
- Paulina Golińska-Dawson, Poznań University of Technology, Poland
- Marek Zaremba, University of Quebec, Canada

REGULAR SESSIONS

Authors are invited to submit draft papers reporting original research of theoretical or applied nature. Final manuscripts are limited to 6 pages.

INVITED SESSIONS

Invited sessions consist of papers focusing on targeted subjects and presenting a unifying theme. Invited session organizers should submit an abstract that summarizes the aim and the content of the invited session. If at least 5 papers are accepted, the session is included in the workshop program as an invited session, otherwise, the papers will be included in regular sessions.

SPECIAL SESSIONS

Special sessions offer a venue for the presentation of topics of special academic, social or industrial interest, such as emerging research areas or the most recent trends in manufacturing engineering. The format of special sessions is more flexible; it allows a panel discussion, led by the session chair(s), to foster the exchange of opinions among presenters and participants.

POST WORKSHOP PUBLICATION

In many cases, a journal paper, different and much broader than the workshop paper, can be published as a continuation of the presented papers. The organizers will contact several leading journals to enable them to select such potential continuation projects. Examples of these journals are: Journal of Intelligent Manufacturing (JIMS), Production & Manufacturing Research, European Journal of Industrial Engineering (EJIE), International Journal of Industrial Engineering: Theory, Applications and Practice (IJIETAP).

VENUE

Koszalin University of Technology is a public institution of higher education. For over 50 years now, it has been the only public technical university in the Middle Pomerania region. The university carries out educational activities and scientific research in disciplines primarily related to the directions of development of the region.
It has 466 teachers, including 132 professors and more than 200 staff with a Ph.D. degree. It provides education to 4 thousand students in all the available forms and modes of study, and it covers 27 fields of research.

Poland, Koszalin (Coordinates: 54°11’25”N 16°10’54”E)