Copyright conditions:

Call for invited sessions and tracks

Invited sessions consist of 5-6 papers of the regular format 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. A code will be assigned to such a session. The invited author should submit their papers by using this code. If at least 5 papers are accepted, the session is included in the conference program as an invited session. If an invited session is not accepted, accepted papers submitted to this session will be included in regular sessions. Invited sessions, grouped together in a track must be submitted independently. The track chairs are asked to contact the organizers prior to session proposal submissions.

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Conference website:
http://www.mim2022.com

IFAC Triennial International Conference

INTERNATIONAL FEDERATION OF AUTOMATIC CONTROL

22/23/24 June 2022
Nantes, France

mim 2022

10th IFAC Manufacturing Modelling, Management and Control Conference

Wed. June 22, 2022
Fri. June 24, 2022
"New challenges for management and control in the Industrie 4.0 era"

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AIMS AND SCOPE OF MIM 2022

The general theme of the 10th IFAC Conference on Manufacturing Modelling, Management and Control will be

"New challenges for management and control in the Industrie 4.0 era".

The aim of this meeting is to bring together researchers and practitioners to present and discuss emerging topics in modern decision aid theory, manufacturing modeling, management, and control. MIM'2022 will follow a rich tradition of previous IFAC conferences and symposia in Manufacturing and Logistics held in France. IFAC MIM'2022 will focus in particular on the most innovative methods proposed in the last few years in the context of applications of artificial intelligence in industry, taking into account the role of new technologies (e.g., blockchains, IoT, edge computing) and emerging scientific domains (e.g., big data, analytics, risk management) in the production management and control. Also, many other related topics will be considered, e.g. human-centric production, optimization under specific workforce constraints, explainability and ethics in decision aid models, human-machine interaction issues, generative design approaches, etc. and their place in new decision aid tools in industry.

60th Volume Anniversary of IJPR (Taylor & Francis)

At IFAC MIM 2022, we will celebrate the 60th Volume Anniversary of the International Journal of Production Research (IJPR). Several specific talks, workshops and tracks will be dedicated to this anniversary. A large number of articles will be selected for publication of extended versions in IJPR after the conference.

CONFERENCE TOPICS

The conference will cover all topics related to specification, design, implementation and operation of modern production systems and supply chains, including (but not limited to) the following:

- Artificial intelligence and decision aid techniques
- Blockchains and smart contracts
- Big data and advanced analytics
- Cloud manufacturing and distributed systems
- Complex adaptive systems and emergent synthesis in manufacturing
- Decision aid in transportation and logistics
- Decision aid in design of process and production systems
- Design and reconfiguration of manufacturing systems
- Discrete event systems and simulation in manufacturing
- E-commerce and auction based approaches in production planning
- Facility planning and materials handling
- Fostering innovation in manufacturing
- Green manufacturing, sustainable production and supply chains
- Industrial and applied mathematics for production
- Information, systems, control and interoperability
- Intelligent manufacturing systems and smart factory
- Inventory control, production planning and scheduling
- IoT, edge computing and blockchains
- Knowledge management in production

- Logistics, supply chains and networks
- Maintenance, quality, reliability, safety and dependability
- Management issue in robot/human collaborations in manufacturing
- Modeling, control and monitoring of production systems
- Place of virtual reality in production management
- Pricing, outsourcing and market responsive supply chains
- Probabilistic & statistical models in industrial plant control
- Reconfigurable supply network dynamics and control
- Risk management and control
- Service oriented architecture for production management and control
- Warehouse design, management and control

Call for contributed papers

Authors are invited to submit papers (6 pages) reporting original research of theoretical or applied nature. They can submit a contribution either to an invited session, if it fits with the session, or as regular one. All paper submissions as well as Invited Session Proposals must be electronically submitted through the PaperPlaza Conference Manuscript Management System. Post-conference Proceedings will be published in IFAC-PapersOnLine (Elsevier) with DOI, the articles of Proceedings will be in open access. IFAC journals will also select papers for post-conference publications. Special issues are planned in IJPR and a number of other prestigious International Journals for extended version of selected papers.