The central theme of the 9th IFAC Conference on Manufacturing Modelling, Management and Control MIM 2019 will be

Digital and Resilient Manufacturing Networks 4.0

The aim of MIM 2019 is to bring together researchers and practitioners to present and discuss emerging topics in modern manufacturing modeling, management, and control. MIM’2019 will follow a rich tradition of previous IFAC conferences and symposia in Manufacturing and Logistics held in Germany. IFAC MIM’2019 will focus in particular on the most innovative methods proposed in the last few years in the context of digitalization, risk management, and resilience in production and logistics systems in the 21st century.

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

- Design and reconfiguration of manufacturing systems
- Facility planning and materials handling
- Industry 4.0 systems
- Inventory control, production planning and scheduling
- Risk management, resilience and flexibility
- Pricing and outsourcing
- Logistics, supply chains and networks
- Supply network dynamics and control
- Control theory applications to production systems and supply chains
- Market responsive supply chains
- Enterprise modelling, integration and networking
- Information, systems, control and interoperability
- Information management for the Net-enterprise
- Modeling, simulation, control and monitoring of manufacturing processes
- Robotics in manufacturing
- Intelligent manufacturing systems
- Intelligent transportation
- Service oriented architecture for production management and control
- Knowledge management in production
- Fostering innovation in manufacturing
- Monitoring, diagnosis and maintenance of manufacturing systems
- Complex adaptive systems and emergent synthesis in manufacturing
- Web-enabled manufacturing control and wireless automation
- Design for reusability
- Maintainability, reliability, safety and dependability of production systems
- Quality management
- Virtual reality
- Sensor networks, ubiquitous computing, active identifiers, wireless communication in manufacturing
- Distributed systems and multi-agents technologies
- Discrete event systems in manufacturing
- Simulation technologies
- Operations Research
- Probabilistic models in industrial plant control
- Industrial and applied mathematics for production
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.

Authors may submit a contribution independently of invited sessions. They are invited to submit papers (6 pages) reporting original research of theoretical or applied nature as contributed paper. 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-PapersOn-Line (Elsevier). Special issues are planned in a number of prestigious International Journals.