Conference Chairs

#### **Honorary President**

Prof. Dr. Andreas Zaby, President Berlin School of Economics and Law (DF)

#### **General Conference Chair**

Prof. Dr. Dmitry Ivanov (DE)

#### **International Program Committee Chair**

Prof. Dr. Alexandre Dolgui (FR)

**Committee Vice-Chair from** 

#### Industry

Arvid Holzwarth, MBA (SupplyOn, DE)

#### **General Conference**

#### Co-Chair

Prof. Dr. Farouk Yalaoui (FR)

#### **NOC Chair**

Prof. Dr. Harald Gleißner (DE)

#### **International Program Committee members**

El-Houssaine Aghezzaf (BE) Zhibin Jiang (CN) Hassane Alla (FR) Lionel Amodeo (FR) Ronald Askin (US) Zbigniew Banaszak (PL) Natalia Bakhtadze (RU) Jonathan F. Bard (US) John J. Bartholdi (US) Olga Battaïa (FR) Daria Battini (IT) Wilhelm Bauer (DE) Lves Benvoucef (FR) Bopava Bidanda (US) Neila Bhouri (FR) Sergio Cavalieri (IT) Felix T.S. Chan (HK) Long Chen (MO) Tsan-Ming Choi (HK) Feng Chu (FR) Ajay Das (US) Joshua Davan (ISR) Xavier Delorme (FR) Stephen Disney (UK) Alexandre Dolgui (FR) Peter Fleming (UK) Enzo Morosini Frazzon (BR) Michael Freitag (DE) Stanley Gershwin (US) Christoph Glock (DE) Kannan Govindan (DK) Bernard Grabot (FR) Robert Grubbström (SE)

Oleg Gusikhin (US) Dmitry Ivanov (DE

Richard Hartl (AT) Sandra Hirche (DE) Dimitris Kiritsis (CH) Chien-Ho Ko (TW) Ton de Kok (NL) Holger Kohl (DE) Mikhail Kovalvov (BY) Andrew Kusiak (US) Yuri Levin (CA) Eva Navarro Lopez (UK) Marco Macchi (IT) Semvon M. Meerkov (US) Stefan Minner (DE) Laszlo Monostori (HU) Helena Navas (PT) Andrew Nee (SG) Mariana Netto (FR) Shimon Y. Nof (US) Hervé Panetto (FR) Kriengsak Panuwatwanich

Anatoly Pashkevich (FR) Erwin Pesch (DE) Christian Prins (FR) Jean-Marie Proth (FR) Nidhal Rezg (FR) Antonio Barros Ruano (PT) Zaki Sari (DZ) Boris Sokolov (RU)

Jörn Schönberger (DE)

Frank Schultmann (DE) Suresh P. Sethi (US) Fabio Sgarbossa (IT) David Simchi-Levi (US) Alexander Smirnov (RU) Thomas Spengler (DE) Sarah Spurgeon (UK) Kathryn Stecke (US) Gabor Sziebig (NO) Marco Taisch (IT) Manoi Tiwari (IN) Tullio Tolio (IT) Marcos de Sales Guerra Tsuzuki (BR) Francois Vernadat (LU) Agostino Villa (IT) Stefan Voss (DE) Lin Wang (CN) Georg Weichart (AT) Frank Werner (DE) Wilhelm Wilbert (US) Dash Wu (CA) Xiolan Xie (FR) Alice Yalaoui (FR) Farouk Yalaoui (FR) Candace A. Yano (US) Janan Zaytoon (FR) Noureddine Zerhouni

This photo is property of Sean Pavone/Shutterstock.com Scientific sponsors www.ifac-control.org/about/participation

#### **Main Sponsor:**



OF AUTOMATIC CONTROL

#### **IFAC Technical Committee Main-Sponsor:**

- TC 5.2 Manufacturing Modelling for Management and Control

#### **IFAC Technical Committee(s) Co-Sponsor:**

- TC 1.3 Discrete Event and Hybrid Systems
- TC 3.2 Computational Intelligence in Control
- TC 4.3 Robotics
- TC 5.1 Manufacturing Plant Control
- TC 5.3 Enterprise Integration and Networking
- TC 5.4 Large Scale Complex Systems
- TC 7.4 Transportation systems
- TC 9.1 Economic, Business, and Financial Systems

#### **IEEE Technical Committee Co-Sponsor:**

- SMCS TC Cyber-Physical Cloud Systems

#### **Technical Co-Sponsors:**













**National Scientific Sponsor:** 

#### **Industrial Sponsors:** Major Sponsor:

SIEMENS



**Lead Sponsors:** 









## 9<sup>th</sup> IFAC Conference

on Manufacturing Modeling, Management, and Control

### MIM 2019 - Call for Papers

28/29/30 August 2019 Berlin, Germany







Final paper submission deadline 31 March 2019 Early registration rates expire 28/29/30 August 2019 IFAC MIM 2019 Conference in Berlin

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

# Digital, Resilient and Sustainable Manufacturing 4.0

Digitalization, resilience, and sustainability

shape current and future trends in manufacturing modelling. management, and control. The aim of MIM 2019 is to bring together researchers and practitioners in industrial engineering. manufacturing systems, operations research, supply chain management, and business informatics 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. 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 design, implementation and operation of modern manufacturing systems in digitalization era, including (but not limited to) the following:

- Analytics, optimization and machine learning in manufacturing and supply chains
- Digital supply chain
- Data-driven applications in manufacturing
- Design and reconfiguration of manufacturing systems
- · Facility planning and materials handling
- Industry 4.0
- Digital manufacturing networks and smart operations
- Artificial intelligence applications to manufacturing
- Inventory control, production planning and scheduling
- · Risk management, resilience and flexibility
- · Logistics, supply chains and networks
- Supply network dynamics and control
- Control theory applications to production systems and supply
- Operations and supply chain simulation
- Sustainable manufacturing
- · Business analytics for manufacturing systems
- · 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
- 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

# 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.

## Call for Contributed Papers 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-PapersOnLine (Elsevier). Special issues are planned in a number of prestigious International Journals.

#### Copyright conditions:

"All publication material submitted for presentation at an IFAC-sponsored meeting (Congress, Symposium, Conference, Workshop) must be original and hence cannot be already published, nor can it be under review elsewhere. The authors take responsibility for the material that has been submitted. IFAC-sponsored conferences will abide by the highest standard of ethical behavior in the review process as explained on the Elsevier webpage (https://www.elsevier.com/authors/journal-authors/policies-and-ethics), and the authors will abide by the IFAC publication ethics guidelines (http://www.ifac-control.org/events/organizers-guide/PublicationEthicsGuidelines.

Accepted papers that have been presented at an IFAC meeting will be published in the proceedings of the event using the open-access IFAC-PapersOnLine series hosted on ScienceDirect (http://www.sciencedirect.com). To this end, the author(s) must confer the copyright to IFAC when they submit the final version of the paper through the paper submission process. The author(s) retain the right to use a copy of the paper for personal use, internal institutional use at the author(s)' institution, or scholarly posting at an open website operated by the author(s)

or their institution, limited to noncommercial use.

For latest and additional information, please visit