

# 13<sup>th</sup> International Workshop on Service-Oriented, Holonic and Multi-agents Manufacturing Systems for Industry of the Future

Université Savoie Mont Blanc (USMB) - Annecy, France

September 28 – 29, 2023



## Call for Papers

It is our pleasure to invite you to the 13<sup>th</sup> International Workshop on Service-Oriented, Holonic and Multi-Agent Manufacturing Systems for Industry of the Future (SOHOMA2023), organized by the Université Savoie Mont Blanc - USMB at Annecy (France), in collaboration with University Politehnica of Bucharest (CIMR - Research Centre in Computer Integrated Manufacturing and Robotics), Polytechnic University Hauts-de-France (LAMIH - Laboratory of Industrial and Human Automation Control, Mechanical Engineering and Computer Science) and Polytechnic Institute of Bragança (CeDRI - Research Centre in Digitalization and Intelligent Robotics).

The main objective of SOHOMA workshops is to foster innovation in smart and sustainable manufacturing and logistics systems and in this context to promote concepts, methods, and solutions for the digital transformation of manufacturing through service orientation in holonic and agent-based control with distributed intelligence.

The theme of the SOHOMA 2023 Workshop is **“Sustainability for the digital manufacturing era”**. In this edition, the workshop focuses on how the technological enablers of the industry of the future can drive the sustainability for industries, products, processes, and logistics.

### Workshop topics

- Modelling of discrete event dynamic industrial systems
- Multi-Agent Systems and control with distributed intelligence in industry
- Product intelligence: concepts, architectures, implementation, use cases
- Holonic Manufacturing Execution Systems
- Intelligent Manufacturing Systems
- Dynamic and green infrastructure for sustainable manufacturing
- Mixed production planning and scheduling
- Virtual factory, networked supply chains and customer-oriented logistics
- Manufacturing Integration Framework
- Digital Twins with resource and product virtualization
- Edge and Fog Computing for Industrial Internet of Things
- Industrial Internet of Things / Physical Internet
- Cloud Manufacturing and resource virtualization
- Servitization and Product-Service System
- Intelligent process automation
- Swarm intelligence in manufacturing
- Multi-robot systems in manufacturing, control, and applications
- Bio-inspired theories for smart manufacturing and evolutionary robotics
- Big Data streaming and the contextual enterprise
- Artificial intelligence and machine learning in large scale manufacturing
- Predictive resource health monitoring and maintenance
- Cyber-Physical Production Systems and Industry 4.0
- Manufacturing as a Service, product design for open manufacturing
- Universal Manufacturing: models, cloud manufacturing, enterprise specifications
- Digitalization of supply chains and Logistics 4.0
- Reconfigurable manufacturing systems
- Humans-Systems integration in Industry 4.0 environments
- Ethics of autonomous intelligent systems

### Paper Submission

Papers must be submitted via the Submission menu of the SOHOMA'23 website for any of the above topics or for the Special Sessions defined for this Workshop. The paper content must be an original work written in English, not published or being considered elsewhere. Papers are limited to 12 pages formatted in the Springer Book format for Studies in Computational Intelligence according to the instructions given at <https://www.springer.com/series/7092>

All papers accepted and duly presented at the Workshop will be included in the SOHOMA'23 post conference proceedings volume published in the Springer series "Studies in Computational Intelligence", indexed in the Scopus, DBLP Computer Science and WoS databases. Selected and extended papers will be proposed for publication on a special issue of a journal on the workshop domain

### Important Dates

Proposals of Special Sessions:	February 20, 2023
Full paper submission:	May 15, 2023
Notification of acceptance/Rejection:	June 15, 2023
Final camera-ready paper submission:	July 10, 2023
Early registration and fee payment:	July 15, 2023
SOHOMA 2023 Workshop	September 28-29, 2023

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### Registration Fees

	Registration fees	
	Before August 20th	After August 21st
Students *	200 €	300 €
Academics / Researchers	350 €	450 €
Companies	400 €	500 €

\* Students must provide a valid university ID

### Scientific and Academic partners

