SOHOMA'2021 : 11th Workshop on Service Oriented, Holonic and Multi-Agent Manufacturing Systems for Industry of the Future
18-19 Nov 2021 Cluny (France)

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CALL FOR PAPERS

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Venue:
Arts et Metiers Institute of Technology Cluny, FR

Scientific Partners

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Registration fees:

	Before 1/11/2021	After 1/11/2021
Ph.D. students:	200€	300€
Regular:	350€	450€

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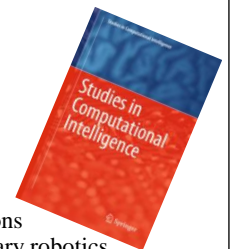**Website:** https://sohoma2021.sciencesconf.org/

It is our pleasure to invite you to participate in the 11th International Workshop on Service Oriented, Holonic and Multi-Agent Manufacturing Systems for Industry of the Future - SOHOMA'21, organized by Arts et Metiers Institute of Technology of Cluny (https://artsetmetiers.fr/fr/campus/cluny) in collaboration with University Politehnica of Bucharest (the CIMR Research Centre in Computer Integrated Manufacturing and Robotics), Polytechnic University Hauts-de-France (the LAMIH Laboratory of Industrial and Human Automation Control, Mechanical Engineering and Computer Science) and Polytechnic Institute of Bragança (the CeDRI Research Centre in Digitalization and Intelligent Robotics). The SOHOMA'21 workshop has the scientific support from the IEEE-IES Technical Committee on Industrial Agents, from the GdR-MACS of the CNRS (https://gdr-macs.cnrs.fr/) and from the General Association of Engineers in Romania AGIR.

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 and agent-based control with distributed intelligence. The theme of SOHOMA 2021 Workshop is **Convergence of factory asset and process lifecycle with product lifecycles in Cyber-Physical System - based production**

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
- Computing and Service Oriented manufacturing
- Servitization and Product-Service Systems
- Swarm intelligence in manufacturing
- Multi-robot systems in manufacturing, control and applications
- Bio-inspired theories for smart manufacturing and evolutionary robotics
- Big Data steaming 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
- Digitalization of supply chains and Logistics 4.0
- Performance evaluation of industrial emerging behaviour
- Holonic hybrid supervised control of industrial processes
- Humans in Industry 4.0
- Ethics of autonomous intelligent systems

Papers submission

Papers must be submitted via the **Submission** menu of the SOHOMA'21 website for any of the above topics or for the Special Sessions defined for this Workshop. The paper's content, written in English must be original, 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'21 post conference Proceedings volume published in the Springer series "Studies in Computational Intelligence", indexed in the Scopus, DBLP Computer Science and WoS databases. Selected, extended papers will be proposed for publication in a special issue of one journal representative for the workshop's domain.

Important dates
30 April: proposal of special sessions
~~15 July~~ **15 September** for some latecomers : **full paper submission**
12 October: notification of acceptance
26 October: camera ready paper submission, early registration and fee payment
18-19 November: workshop

Conference will be held mostly face-to-face on the ENSAM campus of Cluny. Virtual attendance will be proposed for people with important health/Covid restrictions.