

14th International Workshop on Service-Oriented, Holonic and Multi-Agent Manufacturing Systems for Industry of the Future (SOHOMA 2024)

Augsburg Technical University of Applied Sciences– Augsburg, Germany
September 26 – 27, 2024



Call for Spot Light Session Papers:

KNOWLEDGE & TECHNOLOGY TRANSFER BETWEEN SCIENCE & INDUSTRY

It is our pleasure to invite you to the *14th International Workshop on Service-Oriented, Holonic and Multi-Agent Manufacturing Systems for Industry of the Future (SOHOMA2024)*, organized by the Augsburg Technical University of Applied Sciences (Germany), 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 and developments towards a data-driven Industry of the Future that seamlessly integrates engineering and operations of manufacturing, logistics systems and (dynamic) supply chains. In this context, the workshop focuses on concepts, methods, and solutions for the digital transformation of manufacturing through service orientation in holonic and agent-based control with distributed artificial intelligence.

The theme of the SOHOMA 2024 Workshop is **"Industrial Artificial Intelligence in the data-driven Industry of the Future: Models, Architectures, and Applications"**. In this edition, the workshop focuses on exploring the intricacies of cross-enterprise data sharing and the strategic use of artificial intelligence (AI) within manufacturing systems. Thereby, the workshop focuses on (but is not limited to) methods, tools, and architectures for the value-adding application and integration of AI in industrial production and logistics for the transformation to a data-driven industry of the future.

What is a Spot Light Session?

Spot Light Sessions are a novel and optimized form to provide a larger space for discussion and exchange of scientific results and topics. They are a combined form of oral presentation and panel discussion participation. They are a combined form of a traditional oral presentation and joint final panel discussion with all spot light presenters. Accepted Spot Light papers will be part of the workshop proceedings like regular papers.

SLS-02: Knowledge and Technology Transfer between Science and Industry

In today's rapidly evolving technological landscape, the synergy between academia and industry is crucial for driving innovation forward. With emerging paradigms such as Artificial Intelligence, Digital Twins, the Asset Administration Shell, and data spaces at the forefront of technological advancements, facilitating seamless knowledge transfer becomes imperative on the way towards the Industry of the Future. The journey from scientific breakthroughs to real-world industrial applications and vice versa is often fraught with challenges. Identifying and overcoming these obstacles require a deep understanding of the unique requirements and constraints of both worlds. Especially, how to provide industrial purpose sustainably when applying advanced technologies.

This session delves into the key barriers hindering seamless knowledge transfer, ranging from technological complexities to cultural differences, and offers strategies to surmount them. Moreover, it examines the essential requirements for successful technology and knowledge transfer, emphasizing the importance of interdisciplinary collaboration and collaborative transfer spaces like research factories, labs, or transfer centers. By showcasing inspiring success stories of impactful transfers from science to industry and vice versa, this session provides invaluable insights and best practices for fostering effective collaboration and innovation.

Paper Submission

Papers must be submitted via the submission menu on the SOHOMA 2024 website. The paper content must be original work not published or being considered elsewhere. The workshop language is English. Papers are limited to 12 pages formatted in the Springer book series "Studies in Computational Intelligence" according to the instructions given on the workshop's website.

All papers accepted and duly presented at the workshop will be included in the SOHOMA 2024 post-conference proceedings volume published in the Springer series "Studies in Computational Intelligence", indexed Web of Science, Scopus, ISI Proceedings and DBLP Computer Science. Selected, extended papers will be proposed for publication in special issues of journals representative for the workshop's domain.

Important Dates

Submission of Spot Light Session Papers	June 30, 2024	extended to July 7, 2024
Notification of acceptance	August 1 st , 2024	
Early-bird registration until	August 30, 2024	
Final paper submission	September 8, 2024	
SOHOMA 2024 Workshop	September 26 - 27, 2024	

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Registration Fees

	Before August 30, 2024	After August 31, 2024
Students*	200 €	300 €
Academia	350 €	450 €
Industry	400 €	500 €

* Students must provide a valid university ID