



Call for Participation WS05 – From Siloed to Synergy: Unleashing the Power of the IEC 61499 Community

Organizers and Chairs

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FOCUS. Industrial automation domain is transitioning from centralized to distributed systems as each component from small devices such as sensors and motors to PLCs, becomes smarter and interconnected, spanning from the shop floor to the cloud. There is a growing requirement to design industrial systems in a distributed manner to facilitate this distributed intelligence. IEC 61499 defines a domain-specific modelling language for developing such distributed industrial control systems. This workshop offers a platform for researchers and industry experts in the domain to explore recent findings and advancements related to IEC 61499. Additionally, we will facilitate an interactive discussion session aimed at identifying and addressing the primary challenges in developing IEC 61499-based PLC software for factory automation and its implementation in industrial scenarios.

TOPICS

- ❖ Architecture and design of IEC 61499-based applications
- ❖ Scalability of IEC 61499-based software
- ❖ IEC 61499-based next-generation cloud-edge automation system
- ❖ Industrial use cases of IEC 61499
- ❖ Current research challenges in IEC 61499

WORKSHOP FORMAT

Full day Workshop, based on invited presentations.

This Workshop will include four presentations from academia and one from industry. The first presentation will include a use case demonstration and is allocated a 1-hour timeslot. Each academic presentation will be allocated a 30-minute timeslot, including time for questions. Discussion sessions will be organized at the end of the workshop.

Registration fees are waived for workshop organizers and presenters. However, please note that the payment of conference registration is required for organizers and speakers who intend to attend the main conference. For any detail regarding registration to the Workshop, please refer to the Call for Workshops as well as the ETFA 2024 website.

WORKSHOP PRESENTERS

- ❖ **Dr. Franco Cavadini**, Gr3n SA, Switzerland
- ❖ **Dr. Polina Ovsianikova**, Aalto University, Finland
- ❖ **Prof. Valeriy Vyatkin**, Aalto University, Finland and Luleå University of Technology, Sweden
- ❖ **Prof. Wenbin (William) Dai**, Shanghai Jiao Tong University, China
- ❖ **Dr. Jörg Walter**, OFFIS - Institut für Informatik, Oldenburg, Germany