



IEEE Conference on Industrial Cyber-Physical Systems (ICPS)

Emden, Germany, 12-15 May 2025

<https://icps2025.ieee-ies.org>

Call for Papers - Special Session on

Integrating Smart Workers in ICPS: Work Planning, Scheduling and Active Assistance

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Technical Outline of the Session and Topics:

Integrating ICPS with Smart Workers is essential for tackling modern manufacturing challenges like work planning, scheduling, and worker assistance. ICPS enables real-time data collection and analysis through interconnected devices, while Smart Workers have the potential to optimize tasks with intelligent decision-making. This synergy may enhance resource allocation, minimize downtime, and support workers via decision systems, augmented reality, predictive maintenance, or task management. In several European projects, such as ArtWork or TwinMaP, research and industry have joined forces to address research questions regarding the efficient and safe collaboration of workers and ICPS under dynamic conditions.

Topics:

- Representing and modelling Smart Workers (e.g. AAS)
- Simulating Smart Workers in an ICPS environment
- Intelligent planning of work on stations and product sequencing
- Adaptive, context-aware digital assistance and decision support
- Smart Workplaces for Smart Workers

Author's schedule: *Same as the ICPS Conference*

All the instructions for paper submission are included on the conference website: icps2025.ieee-ies.org