

Call for Papers

SS01 - New technologies applied to industrial supervision systems and predictive maintenance

Organized and Co-Chaired by (sorted by last name)

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❖ **FOCUS.** The industrial maintenance represent one of the main players towards the next generation of factory automation under the Industry 4.0 framework. This special session is focused on the discussion of emerging technologies, such as artificial intelligence, data analytics, cognitive computing, computer vision, industrial internet of things and cyber-physical systems, among others, applied to industrial supervision and predictive maintenance challenges.

❖ TOPICS

This special session will be focusing on (but not limited to) the following topics:

- ❖ Condition monitoring and decision support systems,
- ❖ Processes modelling and operation optimization,
- ❖ Cyber-physical systems for industrial application supervision,
- ❖ Cognitive computing and computer vision for process monitoring,
- ❖ Novelty detection and incremental learning systems
- ❖ Multi-fault diagnosis and data fusion strategies,
- ❖ Novel sensors and edge monitoring solutions.

❖ **AIM.** The aim of the Special Session is to bring together researchers and practitioners from the industry and academia and provide them with a platform to report on recent advances and developments in the newly emerging areas of artificial intelligence, data analytics, cognitive computing, computer vision, industrial internet of things and cyber-physical systems, among others, applied to equipment, machinery and plants towards a sustainable, efficient and intelligent manufacturing sector.

❖ **CONFERENCE FORMAT.** The conference will comprise multi-track sessions for regular papers, to present significant and novel research results with a prospect for a tangible impact on the research area and potential implementations, as well as work-in-progress (WiP) and industry practice sessions.

❖ AUTHOR'S SCHEDULE (2021)

❖ Regular and special sessions papers

Submission deadline May 7
Acceptance notification June 4
Deadline for final manuscripts July 14

❖ Work-in-progress/Industry practice papers

Submission deadline June 11
Acceptance notification July 7
Deadline for final manuscripts July 14