

THE 4TH IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL CYBER- PHYSICAL SYSTEMS ICPS 2022

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Special Session on

Industrial Predictive Maintenance: Technologies, Architectures and Applications

Organized by

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Call for Papers

The industrial maintenance represents 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 cyber-physical systems applied to industrial predictive maintenance. In this regard, three main challenges are identified: (i) the technologies comprising smart sensors, (ii) the architectures considering edge, fog and cloud approaches, and (iii) the applications, including artificial intelligence. Thus, the aim of this session is to compile and discuss recent research and developments related with predictive maintenance applied to equipment, machinery and plants towards a sustainable, efficient and intelligent manufacturing sector.

Topics of interest include, but are not limited to:

- Novel sensors and edge monitoring solutions;
- Industrial automation architectures for predictive maintenance
- Condition monitoring and related decision support systems
- Cognitive computing and computer vision for process monitoring
- Novelty detection and incremental learning systems
- Multi-fault diagnosis and data fusion strategies