



## Call for Papers

### IEEE Open Journal of Instrumentation and Measurement (IEEE OJIM) Special Section on

### New Trends in System Monitoring, Diagnostics, Prognostics, and Health Management

System monitoring, diagnostics, prognostics and health management (PHM) are a research hotspot in various fields, including aerospace, high-speed railways, nuclear equipment, manufacturing, transportation, renewable energy, etc. In the past few years, PHM-related methods and technologies have developed rapidly and attracted wide attentions from both academia and industry. Especially, the fusion of digitalization and intelligence accelerates the research of new methods and technologies on system monitoring and PHM.

This *Special Section* of the IEEE OJIM focuses on new trends in system monitoring and PHM. These include method and system development, related sensing technologies, data-driven algorithms, applications, and others. The topics for this special section include, but are not limited to the following:

- Sensing techniques and new sensors for system monitoring
- Data processing methods for system monitoring and PHM
- Data-driven algorithms and methods
- Cyber-physical system for monitoring and PHM
- Digital twin techniques for system monitoring and PHM
- Fusion of digitalization and intelligence for PHM
- Machine learning (ML) and Artificial Intelligence (AI) in system monitoring and PHM
- Modeling, simulation, and algorithm development for system monitoring and PHM
- PHM system development, integration, and implementation
- New applications and systems for monitoring and PHM

Each submitted paper will go through a rigorous review process that is consistent with the IEEE OJIM requirements. **Each accepted paper for this Special Section receives an Open Access fee waiver**; i.e., accepted papers will not be charged Open Access fee. Papers will be published as they are accepted, and the Special Section is intended to be published in the fourth quarter of 2023, consistent with the following schedule:

#### Deadlines

**Submission:** July 1, 2023  
**First decision:** August 15, 2023  
**Final decision:** September 30, 2023  
**Publication Volume:** 2023

For more info and submission instructions, please visit OJIM's official website: <http://ojim.ieee-ims.org/>

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