

2021 IEEE International Conference on Industrial Informatics (INDIN2021)

Special Session on

SS 04 - Internet of Things (IoT) for Prognostics & System Health Management (PHM) in Industrial Applications

organized by

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Call for Papers

As an emerging field in industrial applications, Internet of Things (IoT) and Prognostics & Health Management (PHM) are gaining interest from academia and industry. An effective PHM framework integrating with IoT techniques such as real-time monitoring, automotive detection and preventive maintenance is facing the challenges from the Industrial Internet, artificial intelligence and advanced manufacturing paradigms.

The special session on the Internet of Things (IoT) and Prognostics & Health Management (PHM) in Industrial Applications invites original papers dealing with prognosis, operation, maintenance, reliability and IoT-based systems of the typical industrial application scenarios. The topic has become a mainstream research direction during the last decade. The special issue aims to present recent developments and achievements of this topic in new hybrid industrial technologies such as Industry 4.0, cyber-physical systems and intelligent manufacturing systems.

This special issue aims at presenting the state-of-the-art theoretical development and applications in this area and bringing academic and industrial practitioners to tackle difficult problems of international concerns. Submissions of real-world case studies are strongly encouraged. Application areas of interest will include but will not be limited to intelligent prognosis, maintenance policies, operation analysis, digital twins and Industrial Internet of Things (IIoT). We welcome both original research articles and review articles.

Topics that are within the scope of the special section include, but are not limited to:

- IoT Infrastructures and technologies for industrial applications
- Model-driven or data-driven approaches in PHM
- Advanced signals processing techniques
- Artificial intelligence in real-time prognosis
- Fault detection, classification and location

- Intelligent maintenance policies in industrial applications
- Industrial internet of services and service-oriented architectures
- PHM applications of advanced manufacturing paradigms
- Industrial digitalization, digital twins in industrial applications
- Challenges, visions and roadmaps in the context of IoT and PHM

Submissions Procedure: All the instructions for paper submission are included in the conference website <https://2021.ieee-indin.org/>