Special Issue

Advances in Diagnostics and Prognostics in the Era of Industry 4.0

Message from the Guest Editors

This Special Issue seeks original research papers focusing on advances in all facets of diagnostics and prognostics. We welcome papers that offer new research directions and insights. Of particular interest are original contribution papers that demonstrate successful application of the algorithms and methods to complex equipment. We hope that this Special Issue will be useful and informative to both researchers and practitioners. We also hope to deliver readers promising new ideas and directions for future research. Research topics that are of interest for this special issue include but not limited to:

- Fault detection, diagnostics, and prognostics
- Physics of failure modeling and simulation
- Integration of physics-based models and data-driven algorithms
- Health monitoring sensors and sensing
- Sensor-driven maintenance and inspection models
- Edge computing solutions for scalable diagnostics and prognostics
- Managing uncertainty and risk in predictive maintenance
- Design and management of predictive maintenance platforms
- Industrial applications

Guest Editors

Prof. Dr. Ratna Babu Chinnam

Chair, Department of Industrial & Systems Engineering, Wayne State University, 4815 Fourth Street, Detroit, MI 48201, USA

Dr. Murat Yildirim

Director, Cyber-Physical Systems Laboratory, Industrial & Systems Engineering Department, College of Engineering, Wayne State University, 4815 Fourth Street, Detroit, MI 48201, USA

Deadline for manuscript submissions

closed (31 December 2022)

Machines

About the Journal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.
Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.
There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso
CISE - Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.9 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).