

## Special Issue

# Intelligent Fault Detection and Diagnosis in Condition-Based Maintenance

### Message from the Guest Editors

This Special Issue seeks original research articles focusing on advances in all facets of diagnosis and prognosis. We welcome papers that offer new directions and research perspectives and especially that pose new challenges for our community. Contributions that demonstrate successful applications of the methods to complex equipment are particularly interesting. We hope that this Special Issue will be useful and informative for researchers and practitioners in the relevant industrial fields. Research topics of interest in this Special Issue include, but are not limited to, the following:

- Quantification of uncertainties in diagnostics and prognostics;
- Risk management and decision support tools in predictive maintenance;
- Fault monitoring, diagnostics and prognostics by indirect measurements;
- Scalable and transferable diagnostics and prognostics from one type of equipment to another;
- Strategies for the industrial deployment of new solutions;
- Case studies from industrial applications (automotive, aeronautics, manufacturing, food, pharmaceutical, etc.).

### Guest Editors

Prof. Dr. Antoine Tahan

Department of Mechanical Engineering, École de Technologie Supérieure, Montreal, QC H3C 1K3, Canada

Dr. Adaiton Oliveira Filho

Department of Mechanical Engineering, École de Technologie Supérieure, Montreal, QC H3C 1K3, Canada

### Deadline for manuscript submissions

30 September 2025



## Machines

an Open Access Journal  
by MDPI

Impact Factor 2.5  
CiteScore 4.7



[mdpi.com/si/225207](https://mdpi.com/si/225207)

*Machines*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[machines@mdpi.com](mailto:machines@mdpi.com)

[mdpi.com/journal/  
machines](https://mdpi.com/journal/machines)





# Machines

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 4.7



[mdpi.com/journal/  
machines](https://mdpi.com/journal/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

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q1  
(Control and Optimization)

#### Rapid Publication:

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).