

## Special Issue

# Fault Diagnosis and Health Management of Power Machinery

### Message from the Guest Editors

Modern power-machinery systems are typically operated in harsh operating and environmental conditions. Therefore, it is of significance to develop a proactive program by which to effectively reduce unexpected failures and further improve the effectiveness of power-machinery operation. The knowledge from diagnosis is also utilized to quantify the machinery's health state and track the evolution of machinery performance degradation in support of its remaining useful life prognosis. This Special Issue aims to collect original ideas for the fault diagnosis and prognosis of power-machinery systems. The guest editors invite original contributions on the following topics, but authors are not limited to these: Constructing health indicators; Sensor-data fusion techniques; Condition monitoring and intelligent fault diagnosis; Data-driven, physics-based and hybrid prognostic strategies; Machine learning in fault diagnosis and prognosis; The integration of diagnostic and prognostic decisions in maintenance strategies; Uncertainty quantification.

---

### Guest Editors

Dr. Te Han

Dr. Ruonan Liu

Dr. Zhibin Zhao

Dr. Pradeep Kundu

---

### Deadline for manuscript submissions

closed (30 November 2022)



## Machines

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 4.7



[mdpi.com/si/101781](https://mdpi.com/si/101781)

*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).