

## Special Issue

# Condition Monitoring of Internal Combustion Engines, Bearings and Gearboxes

### Message from the Guest Editors

Condition monitoring is one of the key aspects of production and lately, the emerging academic trend as well. It allows us to detect the state of a machine and plan for maintenance upfront. This, on the one hand, may decrease the overall costs of production by increasing total operating time (by excluding unexpected breaks). Currently, the condition monitoring is focused around a single element of bigger more complex machines, thus bearings, motors, heaters or motors are in the spotlight. Proper condition monitoring of the included bearings may therefore be necessary. Moreover, in the time where ecology is more and more respected by the industry, heaters, heat exchangers and coolers should also have maximum cost efficiency, and aside from their internal construction, another way to increase their uptime and longevity is to monitor their condition and plan for maintenance ahead. This Special Issue promotes current and actual trends in research on condition monitoring of internal combustion engines, bearings and gearboxes in various machines.

### Guest Editors

Dr. Mariusz Buciakowski

Institute of Automatic Control, Electronics and Electrotechnics,  
University of Zielona Góra, 65–516 Zielona Góra, Poland

Dr. Piotr Witczak

Institute of Control and Computation Engineering, Faculty of Computer,  
Electrical and Control Engineering, University of Zielona Góra, Licealna  
9, 65–417 Zielona Góra, Poland

### 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/110026](https://mdpi.com/si/110026)

*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 17.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the second half of 2025).