

## Special Issue

# Science and Technology of Advanced Mechanical Engineering Applied to Society, Including Collections from the Latest Papers of KRIS 2023

### Message from the Guest Editors

Humanity faces numerous challenges that have never been faced before. There are fears that if we continue in this way, humanity will not be able to continue living on this planet. People from all fields around the world have discussed and established specific goals to be achieved by 2030: the Sustainable Development Goals (SDGs). Achieving the SDGs requires the development of advanced science and technology in mechanical engineering, including the development of fluid dynamics, thermodynamics, materials science, material processing, control engineering, mechatronics, numerical analyses, etc. The National Institute of Technology (KOSEN) is Japan's largest higher education institution for science and technology, which will host KRIS 2023: KOSEN Research International Symposium 2023 in March 2023. One of the major themes of this international conference is the SDGs. The papers relating to the above technologies to be discussed at this international conference will be published in this Special Issue. The Editors of this Special Issue are happy to receive submissions from colleagues around the world.

### Guest Editors

Prof. Dr. Hirofumi Iyama

Department of Mechanical and Intelligent Systems Engineering,  
National Institute of Technology (KOSEN), Kumamoto College,  
Kumamoto, Japan

Prof. Dr. Akihisa Mori

Department of Mechanical Engineering, Faculty of Engineering, Sojo  
University, 4-22-1 Ikeda, Nishi-ku, Kumamoto City 860-0082, Japan

### Deadline for manuscript submissions

closed (31 January 2024)



## Machines

an Open Access Journal  
by MDPI

Impact Factor 2.5  
CiteScore 4.7



[mdpi.com/si/154664](https://mdpi.com/si/154664)

*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).