



## Recent Developments in Machine Design, Automation and Robotics

Guest Editor:

### **Dr. Raul D. S. G. Campilho**

Department of Mechanical Engineering, ISEP-School of Engineering, Polytechnic of Porto, R. Dr. António Bernardino de Almeida, 431, 4200-072 Porto, Portugal

Deadline for manuscript submissions:

**closed (30 April 2025)**

### **Message from the Guest Editor**

The competitiveness of companies in the global market highly depends on the efficiency of industrial processes, which rely on technologically advanced machines and equipment. Moreover, through the extensive use of automation and robotics, it is possible to attain the required product quality, production flexibility to adapt to new product references, production rate, and low fabrication costs. Throughout time, automation and robotics became the best way to achieve the goals of the market. Therefore, these technologies are subject to continuous evolution, constantly presenting new solutions. Major advances and developments were recently experienced, both academically and industrially, with emphasis on the following:

- Collaborative robotics (cobots)
- Advanced control systems in automation
- Additive manufacturing for machine design
- Smart factory and Industry 4.0
- Sustainable manufacturing and green design
- Machine learning in robotics

This Special Issue intends to bring together a significant number of contributions in this area through the publication of high-quality original works in the field, subsequently promoting its dissemination through the Open Access system.





an Open Access Journal by MDPI

## 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

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

**Journal Rank:** JCR - Q2 (Engineering, Mechanical) / CiteScore - Q1 (Control and Optimization)

## Contact Us

---

*Machines* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/machines](http://mdpi.com/journal/machines)  
[machines@mdpi.com](mailto:machines@mdpi.com)  
[X@Machines\\_MDPI](https://twitter.com/Machines_MDPI)