



## **Wire Arc Additive Manufacturing (WAAM): New Trends and Future Perspectives**

Guest Editors:

### **Dr. Abhay Sharma**

1. Department of Mechanical Engineering, Indian Institute of Technology Jammu, Jagti, NH-44, PO Nagrota, Jammu, India  
2. Joining and Welding Research Institute, Osaka University, Osaka, Japan

### **Dr. Angshuman Kapil**

Department of Materials Engineering, KU Leuven, Campus De Nayer, 2860 Sint-Katelijne Waver, Belgium

Deadline for manuscript submissions:

**30 June 2024**

### **Message from the Guest Editors**

Authors are invited to submit contributions (full length research articles, communications, or reviews) that highlight novel applications of WAAM across diverse industries. Key areas of interest include, but are not limited to, the following:

- **Process Development:** New processes, process hybridization, laser arc, plasma and multi-wire WAAM;
- **Advanced Process Control:** Exploring intelligent algorithms and real-time monitoring systems to enhance control over WAAM processes, ensuring precise deposition and superior part quality;
- **Material Innovation:** Investigating new alloy developments, hybrid material combinations, and the impact of microstructure on mechanical properties to expand the material repertoire for WAAM applications;
- **Multi-Material Printing:** Examining the feasibility and challenges of multi-material printing with WAAM, opening avenues for complex, multi-functional components with diverse material requirements;
- **Industrial Applications:** Showcasing successful case studies and practical implementations of WAAM in various industries, emphasizing efficiency gains, cost-effectiveness, and sustainability.





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*)

## **Contact Us**

---

*Machines* Editorial Office  
MDPI, St. Alban-Anlage 66  
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