

## Special Issue

# Design and Application of Underwater Vehicles and Robots

### Message from the Guest Editors

Autonomous underwater vehicles (AUVs) are a challenging issue of modern robotic science. AUVs are an extremely heterogeneous group of vehicles of various sizes that are able to operate in a submarine environment with a certain degree of autonomy. In some applications, an AUV is more often referred to as an unmanned undersea vehicle (UUV). Underwater gliders are a subclass of AUVs. This Special Issue will accept high-quality articles that contain original research results as well as review articles, and will allow readers to learn more about technologies related to the potentiality of AUVs, including, but not limited to, the following topics:

- Autonomous underwater vehicles;
- AUV design;
- AUV control;
- AUV guidance, navigation and path planning;
- AUV attitude estimation;
- Underwater target tracking;
- Vehicle modeling and simulation;
- Cooperative underwater vehicle manipulator systems;
- Intelligence and autonomy for underwater robotic vehicles;
- Underwater glider design and applications.

### Guest Editors

Prof. Dr. Tomás Salgado-Jiménez

Center for Engineering and Industrial Development-CIDESI, Santiago de Queretaro, Queretaro 76125, Mexico

Dr. Alfonso Gómez-Espinosa

Tecnologico de Monterrey, Campus Queretaro, Ave. Epigmenio González 500, Fracc. San Pablo, Santiago de Queretaro, Queretaro 76130, Mexico

### Deadline for manuscript submissions

30 November 2025



## Machines

an Open Access Journal  
by MDPI

Impact Factor 2.5  
CiteScore 4.7



[mdpi.com/si/177226](https://mdpi.com/si/177226)

*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).