

## Special Issue

# Modeling, Guidance and Control of Marine Robotics, 2nd Edition

### Message from the Guest Editors

Marine robotics includes a wide range of devices, from autonomous underwater vehicles (AUVs) and remotely operated vehicles (ROVs) to gliders and unmanned surface vehicles (USVs). These devices can be used for a range of tasks, such as mapping the seafloor, collecting data on ocean currents and water quality, and monitoring marine life. Modeling, guidance, and control are critical aspects of marine robotics that enable robots and autonomous vehicles to perform their intended tasks effectively and efficiently. In recent years, the modeling, guidance, and control of marine robotics have attracted worldwide attention. Submissions can address, but are not limited to, the following topics:

- Modeling of marine robotics;
- Ship performance design and modeling analysis of marine robotics;
- Guidance of marine robotics;
- Video processing for intelligent marine robots;
- Sensing technology for marine robotics;
- Control and operation of marine robotics;
- Development and application of special marine robots;
- autonomous underwater vehicles (AUVs);
- unmanned surface vehicles (USVs)

### Guest Editors

Dr. Zaopeng Dong

School of Naval Architecture, Ocean and Energy Power Engineering,  
Wuhan University of Technology, Wuhan 430062, China

Dr. David Cheneler

Department of Engineering, Lancaster University, Lancaster LA1 4YW,  
UK

### Deadline for manuscript submissions

20 October 2025



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/234200](https://mdpi.com/si/234200)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[appls@mdpi.com](mailto:appls@mdpi.com)

[mdpi.com/journal/  
appls](https://mdpi.com/journal/appls)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)



## About the Journal

### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

---

### 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), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )