



## Maritime Autonomous Vessels

Guest Editors:

**Dr. Haitong Xu**

Centre for Marine Technology  
and Ocean Engineering  
(CENTEC), Instituto Superior  
Técnico, Universidade de Lisboa,  
Av. Rovisco Pais, 1049-001  
Lisboa, Portugal

**Dr. Lúcia Moreira**

Centre for Marine Technology  
and Ocean Engineering  
(CENTEC), Instituto Superior  
Técnico, Universidade de Lisboa,  
Av. Rovisco Pais, 1049-001  
Lisboa, Portugal

**Dr. Carlos Guedes Soares**

Centre for Marine Technology  
and Ocean Engineering  
(CENTEC), Instituto Superior  
Técnico, Universidade de Lisboa,  
Av. Rovisco Pais, 1049-001  
Lisboa, Portugal

Deadline for manuscript  
submissions:

**closed (31 March 2022)**



[mdpi.com/si/86596](https://mdpi.com/si/86596)

### Message from the Guest Editors

The main goal of this special issue is to address the key challenges, thereby promoting research on marine autonomous ships. Topics of interest of this special issue include, but are not limited to, the following aspects:

- Intelligent and autonomous marine ships
- Mathematical models for marine ships
- AIS data analysis
- Maritime safety and risk assessment for autonomous ships and respective regulations
- Guidance, navigation and Control system design and applications
- Path following, path planning, trajectory planning and automatic collision avoidance for marine ships
- Machine learning methods and its application in marine autonomous ships
- Measurements and experiments in relationship to the behaviour of ships
- Sea trials and ship model tests
- Data Acquisition system and multi-sensor data fusion
- Multi-objective optimization design
- Applications of autonomous vessels in environmental monitoring, mapping and surveillance, search and rescuing operations, habitat mapping, marine biology and geology, hydrographic explorations
- Automatic berthing and unberthing
- Automated onboard systems

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Tony Clare**

School of Natural and  
Environmental Sciences,  
Newcastle University, Newcastle  
upon Tyne NE1 7RU, UK

## Message from the Editor-in-Chief

The *Journal of Marine Science and Engineering* (JMSE; ISSN 2077-1312) is an international peer-reviewed open access journal which provides an advanced forum for studies related to marine science and engineering. The journal aims to provide scholarly research on a range of topics, including ocean engineering, chemical oceanography, physical oceanography, marine biology and marine geosciences. We invite you to publish in our journal sharing your important research findings with the global ocean community.

## Author Benefits

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

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

**Journal Rank:** JCR - Q1 (*Engineering, Marine*) / CiteScore - Q2 (*Ocean Engineering*)

## Contact Us

---

*Journal of Marine Science and  
Engineering* 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/jmse](http://mdpi.com/journal/jmse)  
[jmse@mdpi.com](mailto:jmse@mdpi.com)  
[X@JMSE\\_MDPI](#)