

Special Issue

Autonomous Underwater Vehicles in Extreme Environment

Message from the Guest Editors

Autonomous underwater vehicles are effective tools for many maritime applications. Most applications of autonomous underwater vehicles are in benign environments where the risks are known and well controlled. In recent years there has been an increase in the number of deployments of autonomous underwater systems in extreme environments. To improve the performance of these vehicles in extreme environments, researchers must develop novel methods to ensure safe operations of AUVs. This special issue aims to publish novel solutions that enable AUV missions in extreme environments. We will seek to publish the latest research in the following areas:

- Mission planning and control
- Structural models and structural analysis
- Sensors operation regime for risk control
- Safety functions for risk control
- Multiple vehicle mission control and planning
- Probabilistic and stochastic models for risk quantification
- Condition monitoring systems

Developments in these fields will enable AUVs to be systematically deployed in extreme environments.

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About the Journal

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.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).