

Special Issue

Application of Autonomous Underwater Robotics in Ocean Observation

Message from the Guest Editor

Ocean observation is critical to understanding and addressing global environmental challenges, such as climate change, biodiversity loss, and the sustainable management of marine resources. In this context, autonomous underwater and surface vehicles are emerging as essential tools for exploration, monitoring, and data collection in difficult-to-access marine environments. This Special Issue explores the latest autonomous underwater and surface vehicle applications in oceanographic research, highlighting innovative technologies, methodologies, and operational challenges. Contributions cover various topics, including vehicle design and optimization, advanced techniques and sensors, autonomous navigation strategies, artificial intelligence integration for habitat mapping and data processing, and mapping of wrecks and marine infrastructure 'cables and pipelines'. The aim is to provide a comprehensive overview of the state of the art in the field, promoting dialogue among researchers and professionals to accelerate the development and implementation of robotic solutions that can improve our understanding of marine ecosystems and contribute to their protection.

Guest Editor

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Deadline for manuscript submissions

closed (1 February 2025)



Journal of Marine Science and Engineering

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.0



mdpi.com/si/214855

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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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