

Special Issue

Underwater Observation Technology in Marine Environment

Message from the Guest Editors

Encompassing approximately three-quarters of the Earth's surface, the ocean plays a crucial role as a source of sustenance, medicine, and commerce. Advancements in ocean observation technologies are transitioning from traditional single-node, static, and short-term modalities to multiple nodes, dynamic, and long-term modalities, aiming to enhance the density of both temporal and spatial samplings. This issue examines the phenomenon of detecting objects in underwater settings. The most crucial technology for autonomous underwater operations is intelligent computer vision. In underwater environments, it is essential to perform weak illumination and low-quality image enhancement as a preprocessing step for underwater vision. Following image processing, one can suggest employing deep learning-based methods for underwater detection and classification. We invite papers concerning topics including, but not limited to, the following:

- Underwater visual images detection and classification;
- Underwater object classification and detection;
- Deep learning approach;
- Underwater fish species tracking;
- Diffusion networks;
- Fish species detection.

Guest Editors

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Deadline for manuscript submissions

closed (20 July 2025)



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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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