

## Special Issue

# Monitoring of Ocean Surface Currents and Circulation

### Message from the Guest Editor

Ocean surface currents, defined here to be the upper few meters of the ocean, are a dynamic and challenging region to monitor due to the complexities of the constantly changing air–sea interface. The currents in the uppermost section of the ocean are driven mainly through the action of wind and surface gravity waves (Stokes drift). Their measurement is challenging as most traditional Eulerian approaches are limited in their applicability in this region. Currently, there are two main approaches for monitoring the surface currents: (1) Lagrangian drifters and (2) high-frequency shore-based Radar systems. In this context, we invite researchers and practitioners to contribute original research papers and review articles that explore a diverse range of topics related to the monitoring of ocean surface currents and circulation in the upper few meters of the ocean. Potential areas for submission include, but are not limited to, the following:

- In situ measurements and techniques;
- Advanced remote sensing techniques;
- Numerical modeling and data assimilation;
- Impacts of ocean surface currents.

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### Guest Editor

Prof. Dr. Charitha Pattiaratchi

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### Deadline for manuscript submissions

20 August 2025



## Journal of Marine Science and Engineering

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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.

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### Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi  
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