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.

Guest Editor

Prof. Dr. Charitha Pattiaratchi

School of Engineering, The UWA Oceans Institute, The University of Western Australia, Perth, WA 6009, Australia

Deadline for manuscript submissions

closed (20 April 2026)

Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0

mdpi.com/si/192742

Journal of Marine Science and Engineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jmse@mdpi.com

mdpi.com/journal/jmse

Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0

mdpi.com/journal/jmse

MDPI

About the Journal

Message from the Editor-in-Chief

Journal of Marine Science and Engineering (*JMSE*, ISSN: 2077-1312) focuses on research in the fields of Ocean Engineering, Coastal Engineering, Physical Oceanography, Geological Oceanography, Marine Biology, and Marine Environmental Science. It publishes reviews, regular research papers, and short communications, as well as Special Issues on particular subjects. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the maximum length of the papers.

Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi
School of Engineering, The UWA Oceans Institute, The University of Western Australia, Perth, WA 6009, Australia

Author Benefits

High Visibility:

indexed with Scopus, SCIE (Web of Science), Ei Compendex, GeoRef, Inspec, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Marine) / CiteScore - Q2 (Ocean Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.5 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).