

Special Issue

Marine CFD: From Resistance Prediction to Environmental Innovation

Message from the Guest Editor

This Special Issue focuses on numerical methods advancing cleaner marine technologies, encompassing both marine vessels and ocean renewable energy systems. Modern computational techniques, from potential flow theories to high-fidelity CFD, have become essential tools for developing environmentally sustainable marine solutions. The scope of this Special Issue includes the following:

- Numerical methods in ship design and optimization;
- Seakeeping and manoeuvring prediction;
- Marine renewable energy devices;
- Potential flow and panel methods;
- Computational fluid dynamics;
- Fluid–structure interaction;
- Hybrid numerical approaches;
- Energy efficiency analysis;
- Environmental impact assessment;
- Performance prediction methods;
- Experimental validation studies.

We welcome original research papers demonstrating innovative numerical approaches that contribute to environmental sustainability in marine applications. Both fundamental research and industry-focused case studies are encouraged.

Guest Editor

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Deadline for manuscript submissions

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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

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Author Benefits

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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).