

Special Issue

Hydrodynamic Analysis on Ship Performance

Message from the Guest Editors

In the last decade, with the rapid development and successful application of computational fluid dynamics (CFD), experimental fluid dynamics (CFD), and machine learning (ML) techniques in ship hydrodynamics, incredible—even breakthrough—progresses have been achieved in the prediction and assessment of ship hydrodynamic performances in calm water and in waves. This Special Issue intends to publish the latest progresses and achievements in research regarding the hydrodynamic analysis of ship performances through the use of methods, and their combinations, based on CFD, EFD, and ML techniques. We invite papers concerning topics including, but not limited to, the following:

- Resistance and propulsion in calm water and in waves;
- Motion and derived responses in waves;
- Maneuvering in calm water and in waves;
- Intact stability and damaged stability in waves;
- Ship hydrodynamics in restricted waters;
- Scale effects and full-scale ship hydrodynamics;
- Performance prediction and analysis with combined CFD/EFD, CFD/AI, etc.

Guest Editors

Prof. Dr. Zaojian Zou

Department of Naval Architecture and Ocean Engineering, School of Ocean and Civil Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

Dr. Lu Zou

School of Ocean and Civil Engineering, Shanghai Jiao Tong University, Shanghai, China

Deadline for manuscript submissions

closed (5 December 2022)



Journal of Marine Science and Engineering

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.0



mdpi.com/si/120666

*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](https://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](https://mdpi.com/journal/jmse)



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

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 15.6 days after
submission; acceptance to publication is undertaken in 1.9
days (median values for papers published in this journal in
the first half of 2025).