

Special Issue

Recent Advances in Particle/Grid-Based Methods and Applications in Marine and Ocean Engineering 2nd Edition

Message from the Guest Editors

The continuous search for more effective and efficient numerical methods for use in various complicated flows has been one of the most active research areas in marine and ocean engineering. The aim is to provide a platform for the presentation and discussion of the most recent developments in the particle-/grid-based methods and their applications for ship and offshore structures in various conditions. Numerical methods: Smoothed Particle Hydrodynamics method; Moving Particle Semi-implicit method; Discrete Vortex Method; Discrete Element Method Particle in Cell; Lattice Boltzmann method; Boundary Element Method; Finite difference, finite volume, and finite element methods; Hybrid particle-grid methods; Machine Learning (ML) algorithms/methods Applications: Sloshing; Slamming; Green water; Hydroelasticity; Ship-ice-water interaction; Deep sea mining; Wave Energy Converter; Energy Harvesting Device; Fixed and floating offshore structures; Fluid dynamics

Guest Editors

Dr. Zhe Sun

School of Naval Architecture and Ocean Engineering, Dalian University of Technology, Dalian, China

Dr. Kamal Djidjeli

Faculty of Engineering and Physical Sciences, Boldrewood Innovation Centre, Southampton University, Southampton SO16 7QF, UK

Deadline for manuscript submissions

closed (10 March 2024)



Journal of Marine Science and Engineering

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.0



mdpi.com/si/161217

*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).