



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

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)

Message from the Guest Editors

Dear Colleagues,

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





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Tony Clare

School of Natural and
Environmental Sciences,
Newcastle University, Newcastle
upon Tyne NE1 7RU, UK

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed with Scopus, SCIE (Web of Science), GeoRef, Inspec, AGRIS, and other databases.

Journal Rank: JCR - Q1 (*Engineering, Marine*) / CiteScore - Q2 (*Ocean Engineering*)

Contact Us

*Journal of Marine Science and
Engineering* Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/jmse
jmse@mdpi.com
[X@JMSE_MDPI](#)