Special Issue

Computational Fluid Dynamics for Ocean Surface Waves

Message from the Guest Editors

Advances in computational methods and computing infrastructure have made it possible to develop high-resolution models to represent ocean surface waves. Several new modelling approaches have been developed that have greatly advanced the understanding of the different large- and local-scale phenomena in the field of ocean surface waves. Computational Fluid Dynamics can resolve the different processes in wind-wave generation, momentum transfer, coupled interaction, wave breaking and extreme wave interaction. This covers many aspects in mathematics, physical science and engineering to obtain a better understanding of wave generation and extreme events in the ocean, improving the modelling of these events at different scales to obtain new insights into the important physical processes in the ocean environment. This Special Issue aims to publish the most relevant advanced methods and models for ocean wave modelling including the different topics in met-ocean research, free surface wave modelling and wave hydrodynamics. High quality papers are encouraged, directly related to various aspects, as mentioned below. Novel approaches, methods and techniques are encouraged.

Guest Editors

Assoc. Prof. Dr. Hans Bihs

Department of Civil and Environmental Engineering, Faculty of Engineering, NTNU Trondheim, Norway

Dr. Arun Kamath

Department of Civil and Environmental Engineering, Faculty of Engineering, NTNU Trondheim, Norway

Deadline for manuscript submissions

closed (31 July 2019)

Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0

mdpi.com/si/16727

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

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).