Special Issue

Modeling and Waveform Inversion of Marine Seismic Data

Message from the Guest Editors

As marine resource exploration deepens, accurate seismic imaging and subsurface structure characterization have become critical. This Special Issue focuses on the latest advances in marine seismic wave simulation and inversion theory and related research reviews, which are critical to marine seismic exploration. This Special Issue focuses on seismic wave forward modeling and various aspects of modeling geophysical parameters of subsurface media, including the finite difference method, the spectral element method, and other numerical techniques for the high-fidelity simulation of wave propagation and inversion, including tomography, full waveform inversion (FWI), artificial intelligence, and other inversion strategies that address challenges such as noise, computational efficiency, and nonlinearity. This Special Issue hopes to receive and publish a series of the latest research results, aiming to promote cooperation and stimulate further research in the field of marine seismic exploration.

Guest Editors

Dr. Guoxin Chen
Ocean College, Zhejiang University, Zhoushan, China

Prof. Dr. Chun-Feng Li
Ocean College, Zhejiang University, Zhoushan, China

Dr. Yangting Liu
First Institute of Oceanography, Ministry of Natural Resources, Qingdao, China

Deadline for manuscript submissions

5 February 2026

Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0

mdpi.com/si/214487

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).