

## 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

closed (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](https://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](mailto:jmse@mdpi.com)

[mdpi.com/journal/](https://mdpi.com/journal/)

[jmse](https://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

*Journal of Marine Science and Engineering (JMSE*, ISSN: 2077-1312) focuses on research in the fields of Ocean Engineering, Coastal Engineering, Physical Oceanography, Geological Oceanography, Marine Biology, and Marine Environmental Science. It publishes reviews, regular research papers, and short communications, as well as Special Issues on particular subjects. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the maximum length of the papers.

---

### 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 16.5 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).