Special Issue

Theoretical Research and Design of Subsea Pipelines

Message from the Guest Editor

The rapid expansion of offshore energy exploration and transportation has necessitated significant advancements in the theoretical research and design of subsea pipeline systems. We welcome the submission of original research articles, reviews, and technical studies that address a broad range of topics, including, but not limited to, the following:

- Advanced materials for subsea pipelines, including corrosion-resistant alloys and composite structures;
- Hydrodynamic interactions and fluid-structure coupling in deepwater pipeline systems;
- Innovative pipeline installation techniques and operational strategies;
- Stress, fatigue, and fracture mechanics in subsea pipeline applications;
- Computational fluid dynamics (CFD) and finite element analysis (FEA) for pipeline optimization;
- Integrity management and risk assessment of subsea pipelines;
- Flow assurance challenges, including wax deposition, hydrate formation, and slug flow control;
- Advanced inspection technologies, including autonomous underwater vehicles (AUVs) and remote sensing techniques;
- Pipe-soil interaction and seabed stability in subsea pipeline systems.

Guest Editor

Dr. Ahmed M. Reda

- 1. School of Civil and Mechanical Engineering, Curtin University, Perth 6102. WA. Australia
- 2. School of Engineering, University of Western Australia, Perth, WA, Australia

Deadline for manuscript submissions

closed (5 August 2025)



Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0



mdpi.com/si/232659

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





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).

