

Special Issue

Wave Energy Converters: Numerical Simulation and Calculation

Message from the Guest Editor

The global pursuit of sustainable energy has intensified focus on the vast, untapped potential of ocean wave energy. Wave Energy Converters (WECs) represent a pivotal technology in this domain, designed to harness the immense power of ocean waves and convert it into usable electricity. However, the pathway to efficient, reliable, and cost-competitive WEC systems is fraught with engineering challenges. These stem from the harsh, dynamic marine environment and the complex fluid–structure interactions inherent in energy extraction. Consequently, advanced numerical simulation and calculation have become indispensable tools in the WEC development cycle. This Special Issue is dedicated to presenting cutting-edge research and innovative methodologies in the computational modeling, simulation, and performance analysis of WEC devices. It aims to showcase studies that enhance design optimization, increase energy capture efficiency, improve survivability, and reduce the levelized cost of energy. We welcome contributions featuring novel theoretical frameworks, validated numerical models, or innovative experimental results that advance the field of wave energy conversion.

Guest Editor

Dr. Dimitrios N. Konispoliatis

School of Naval Architecture and Marine Engineering, National Technical University of Athens, Heron Polytechniou Avenue 9, 15773 Athens, Greece

Deadline for manuscript submissions

31 July 2026



Journal of Marine Science and Engineering

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.0



mdpi.com/si/267678

*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](https://www.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](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).