

## Special Issue

# Numerical Model, Design, and Performance of Ocean Wave Energy Converters

### Message from the Guest Editors

This Special Issue of the *Journal of Marine Science and Engineering* aims to bring together cutting-edge research on numerical modeling, design optimization, and performance evaluation of ocean wave energy converters. We invite contributions that address key challenges in WEC development, including, but not limited to, the following:

- Numerical methods for modeling wave–structure interactions;
- Computational fluid dynamics (CFD) applications in WEC analysis;
- Optimization techniques for WEC design and control;
- Validation of numerical models through experimental and field data;
- Performance assessment and efficiency improvement of WECs;
- Structural integrity and survivability in extreme ocean conditions;
- Integration of WECs into marine energy systems.

This Special Issue seeks to advance the state-of-the-art in numerical simulations and design methodologies to enhance the efficiency, durability, and feasibility of wave energy converters. By gathering contributions from leading researchers in this field, we aim to provide insights that will support the development of next-generation WEC technologies. We look forward to your submissions.

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### Guest Editors

Dr. Guilherme Moura Paredes

Development and Research in Environment, Applied Management and Space, Universidade Lusófona do Porto, Rua Augusto Rosa, n° 24, 4000-098 Porto, Portugal

Dr. Claes Eskilsson

Department of the Built Environment, Aalborg University, Thomas Manns Vej 23, DK-9220 Aalborg, Denmark

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### Deadline for manuscript submissions

5 June 2026



## Journal of Marine Science and Engineering

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Impact Factor 2.8  
CiteScore 5.0



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*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)

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## 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.

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### Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi

School of Engineering, The UWA Oceans Institute, The University of Western Australia, Perth, WA 6009, Australia

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#### 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).