

## Special Issue

# Modern, Statistical Methods and Signal Processing Tools of Analyzing the Evolution of the Morphology of Coastal Zone

### Message from the Guest Editor

This issue will cover the following key groups of problems, influenced by climate change impacts: shoreline/seabed change, wave climates and hydrodynamic regimes, inundations by marine and estuarine floods, sea level rise. The studies will contain, but are not restricted to, wave parameters, coastal and estuarine currents, sediment transport, shoreline/seabed evolution trends, combined storm surge and sea level rise impacts, hurricanes (pathways, intensity, duration), etc. Papers covering a wide spectrum of spatial scales from small in situ experiments to very large scales of entire marine basins. Methods of processing of large data sets are preferred; they should include, but are not restricted to, different variants of principal component analysis (ordinary and complex PCA, extended EOF), ordinary and multi-channel singular spectrum analysis, canonical correlation analysis, principal interaction/oscillation patterns, and continuous and discrete wavelet transforms. Furthermore, traditional statistical tools, such as FFT, fit the scope of the issue. Of interest are also techniques of the assimilation of satellite data and the use of digital terrain models in coastal studies.

### Guest Editor

Prof. Dr. Grzegorz Różyński

Institute of Hydro-Engineering, Polish Academy of Sciences, Gdansk, Poland

### Deadline for manuscript submissions

closed (10 December 2021)



## Journal of Marine Science and Engineering

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.0



[mdpi.com/si/87289](https://mdpi.com/si/87289)

*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

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

Oceans Graduate School and 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).