

## Special Issue

# Hydrodynamics and Water Quality in Coastal Systems: Numerical Modelling and Observations

### Message from the Guest Editors

Coastal systems are important transition zones connecting ocean and land, from where they make contact with a large number of particulate and dissolved materials (e.g., sediments, nutrients, and organic matter). These systems support productive ecosystems and high biological diversity, providing valuable ecosystem services, including salinity intrusion, nutrient recycling, natural conditions for aquaculture, nursery, and the removal of pollutants. However, coastal systems are among the areas most threatened by anthropogenic pressures, since they host large and growing populations, and also suffer from the substantial deterioration of marine water quality. Thus, an understanding of hydrodynamic behaviors, varied water properties, and water quality is necessary to develop suitable management practices.

This Special Issue seeks to collate a set of publications that enable an advanced understanding of hydrodynamics and water quality in coastal systems, taking advantage of numerical modeling and observations. We thus invite researchers to submit research articles, reviews, and case studies.

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### Guest Editors

Dr. Ana Picado

Department of Physics, CESAM, University of Aveiro, Aveiro, Portugal

Dr. Nuno Vaz

Physics Department, CESAM, University of Aveiro, 3810-193 Aveiro, Portugal

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### Deadline for manuscript submissions

closed (20 August 2025)



## Journal of Marine Science and Engineering

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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.

### 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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