

## 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

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### Deadline for manuscript submissions

20 August 2025



## Journal of Marine Science and Engineering

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## 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.

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### Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi  
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