

Special Issue

Multiscale, Multiphysics Modelling of Coastal Ocean Processes: Paradigms and Approaches

Message from the Guest Editors

This Special Issue focuses on papers about necessities, difficulties, and approaches of multiscale and multiphysics modelling, and it includes contributions on assessment of existing models, analysis on their limitations, new methods, model validation, and case studies. It will also focus on collecting and sharing seminal datasets that support model calibration and testing. We welcome high-quality papers from but not limited to the following areas:

- Computational methods
- Physical oceanography
- Marine sciences
- Hydrology
- Environmental science
- Coastal engineering
- Ocean observations

Contributions to this issue will serve as bases and benchmarks, identify future efforts, and lead to better capabilities to simulate multiscale and multiphysics flow problems and to new paradigms for treating various scientific and engineering problems. **Keywords:** Multiscale and multiphysics; Coastal ocean processes; Model assessment and limitation; Model coupling; Mesh resolution; Data analysis; Testbeds

Guest Editors

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Deadline for manuscript submissions

closed (30 April 2020)



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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

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Author Benefits

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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).