



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

Guest Editors:

**Prof. Dr. Hansong Tang**

**Mr. C. Reid Nichols**

**Prof. Dr. Donald T. Resio**

**Dr. Don Wright**

Deadline for manuscript  
submissions:

**closed (30 April 2020)**

### **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





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Tony Clare**

School of Natural and  
Environmental Sciences,  
Newcastle University, Newcastle  
upon Tyne NE1 7RU, UK

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed with Scopus, SCIE (Web of Science), GeoRef, Inspec, AGRIS, and other databases.

**Journal Rank:** JCR - Q1 (*Engineering, Marine*) / CiteScore - Q2 (*Ocean Engineering*)

## Contact Us

---

*Journal of Marine Science and  
Engineering* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/jmse  
jmse@mdpi.com  
X@JMSE\_MDPI