Special Issue

Advances in Marine Computational Fluid Dynamics

Message from the Guest Editors

Marine computational fluid dynamics (CFD) is a pivotal tool in the design and analysis of ships, underwater vehicles, offshore structures, and marine energy devices. This Special Issue invites researchers, engineers, and scholars to contribute original research articles, review papers, and case studies that push the boundaries of marine CFD. Topics of interest include, but are not limited to, the following:

- Advanced simulation techniques for turbulent flows, wave dynamics, fluid–structure interactions, and ship hydrodynamics;
- CFD applications in the conceptualization, design, and optimization of hull shapes, propellers, marine renewable energy devices, and other marine structures;
- Environmental impact assessments using CFD include wave and wind impacts on marine infrastructure, oil spill modeling, marine ecosystem protection, and underwater noise pollution;
- Integration of CFD with other emerging technologies, such as artificial intelligence, data assimilation, machine learning, and digital twins, will revolutionize marine engineering solutions;
- Case studies on the successful applications of CFD in maritime industry projects.

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Deadline for manuscript submissions

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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.

Editor-in-Chief

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