Special Issue

Modeling of Ship Hydrodynamics

Message from the Guest Editor

Ship propulsion, seakeeping, and maneuvering involve complex flow physics which in turn involves flow separation and reattachment, wave breaking, turbulent boundary, and free-shear layers, to name a few. Computation fluid dynamics methods and models need to be validated to assess their predictive capability, and/or new methods and models need to be developed to improve efficiency of the solvers. In addition, considering the advances in high-performance computing, high-fidelity methods and models need to be developed and applied to understand the complex flow physics. This Special Issue invites original research papers in the field of ship hydrodynamics, including application of existing methods and models for complex geometries and flow conditions; uncertainty quantification of CFD predictions; validation of efficient grid generation methods, accurate turbulence, interface or wave-breaking models; and flow physics analysis using high-fidelity simulations.

Guest Editor

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Deadline for manuscript submissions

closed (5 November 2020)

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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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