

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

Dr. Shanti Bhushan

Department of Mechanical Engineering, Mississippi State University, Starkville, MS 39762, USA

Deadline for manuscript submissions

closed (5 November 2020)



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Journal of Marine Science and Engineering
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
jmse@mdpi.com

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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

Prof. Dr. Charitha Pattiaratchi

School of Engineering, The UWA Oceans Institute, The University of Western Australia, Perth, WA 6009, Australia

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