### Special Issue

# Ship Hydrodynamics and Wave Resistance in Ship Design

#### Message from the Guest Editor

Ship hydrodynamics and the management of wave resistance are pivotal aspects of modern ship design, influencing vessel performance, fuel efficiency, and environmental sustainability. and the editorial team invite researchers and experts in the field to submit original manuscripts addressing the following topics: Hydrodynamic analysis and modeling techniques for ship design

Wave resistance reduction strategies and optimization methods

Numerical simulations and computational fluid dynamics (CFD) in ship hydrodynamics Ship propulsion systems and their impact on hydrodynamic performance

Application of machine learning and AI in ship design We encourage submissions that demonstrate interdisciplinary approaches, combining principles from naval architecture, fluid dynamics, materials science, computational modeling, data driven modeling and machine learning. Manuscripts should present novel research findings, methodologies, or technological innovations that contribute to enhancing our understanding of ship hydrodynamics and wave resistance in ship design.

#### **Guest Editor**

Dr. Jyoti Prakash Panda

Computational Mechanics & Scientific Artificial Intelligence Laboratory, Department of Aerospace and Mechanical Engineering, University of Notre Dame, Notre Dame, IN, USA

#### Deadline for manuscript submissions

closed (25 September 2024)



## Journal of Marine Science and Engineering

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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

Prof. Dr. Charitha Pattiaratchi School of Engineering, The UWA Oceans Institute, The University of Western Australia, Perth, WA 6009, Australia

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