

Special Issue

Design and Optimization of Ship Hydrodynamics

Message from the Guest Editor

Since the early 1990s, ship design has been closely associated with the optimization of the hull and the onboard systems. Designers rely on advanced tools to evaluate the hydrodynamic characteristics of the hull and the propulsion system and to shape and configure them for optimum performance throughout a vessel's service life. Recent stringent regulations imposed by the IMO and other maritime bodies have prompted ship designers to focus on reducing fuel consumption—and consequently, greenhouse gas (GHG) emissions—through the integration of energy-saving devices (ESD) and the exploitation of wind and sun energy. The implementation of these systems, along with the adoption of alternative fuels with reduced or zero GHG emissions, necessitates revised hull form designs to accommodate these innovations. The ship's hydrodynamic performance—including resistance, propulsion, seakeeping and manoeuvring characteristics—is significantly affected by such modifications. High-quality papers are encouraged for publication, particularly those that focus on the design aspects described above. Submissions proposing novel or innovative methodologies are especially welcome.

Guest Editor

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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

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