Special Issue

Hydrodynamic Design of Ships

Message from the Guest Editor

During the last two decades, the idea of designing a ship with satisfactory hydrodynamic performance in calm water and in waves evolved to the implementation of formal optimization strategies on existing (parent) hull forms to improve both the resistance and propulsion characteristics as well as its dynamic responses in actual seaways. Aiming to reduce operating expenses, the main target is to minimize the fuel consumption in all sailing conditions. Recently, the focus on environmental protection and the reduction of the emission of Green House Gases (GHG) as well as CO2 formed a strong push towards the optimization of the operation of ships which is feasible mainly via the optimization of their hydrodynamic performance and the improvement of the performance of their main engines. The hull form optimization is based on a variety of hydrodynamic algorithms to evaluate the resistance, propulsion, and the seakeeping characteristics of the ship using potential or viscous flow calculations and it is finally evaluated by model tests.

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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.

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