

# Special Issue

## Ship Motions and Wave Loads— 2nd Edition

### Message from the Guest Editors

The prediction of ship motions and loads induced by waves is a central problem of hydrodynamics and fundamental for structural design. To date, a wide variety of numerical and experimental methods have been developed to deal with these problems. In early studies, the potential flow theories were developed to estimate motions of ships in waves. Recently, the computational fluid dynamics (CFD) technique has been rapidly developed as a novel tool to address these problems. Tank model tests and sea trials have also been conducted to experimentally investigate the seakeeping and wave loads of ships. However, due to the complexity of interactions between water waves and arbitrary shape moving bodies in the presence of free surface and forward speed, the problems of wave-induced ship motions and loads are far from being satisfactorily addressed, especially for problems involving high forward speeds. This Special Issue aims to gather the latest developments in the prediction of ship seakeeping. The use of novel numerical and experimental tools, including potential flow theory, CFD tools, and model/full-scale measurements that address the relevant problems, is especially welcome.

### Guest Editors

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### Deadline for manuscript submissions

closed (25 July 2024)



# Journal of Marine Science and Engineering

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## About the Journal

### 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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### Editor-in-Chief

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