Special Issue

Propeller and Hydrofoil Hydrodynamics: Computational Modelling and Validation through Experimental Datasets

Message from the Guest Editors

In recent years Computational Fluid Dynamics (CFD) has emerged as an effective tool for the analysis of the flow field around marine propulsors. The continuous improvement of computational tools for propeller and hydrofoil flows has been boosted by the simultaneous development of advanced experimental techniques providing detailed datasets suitable for benchmark validation studies. Basic comparisons addressing global performance are combined with comprehensive studies on flow features including vortex dynamics and flow detachment but also cavitation, acoustic emission, blade and foil stress and vibration analysis. Paper submission is encouraged for publication in this Special Issue on topics related to all aspects of computation and validation by experiments of propeller and hydrofoil flows. The objective is to collect feedback on validation studies based on experimental data and to stimulate discussion on existing gaps and limitations and identify requirements for new datasets.

Guest Editors

Dr. Fabio Di Felice

Dr. Francisco Alves Pereira

Dr. Francesco Salvatore

Deadline for manuscript submissions

closed (10 June 2021)



Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.0



mdpi.com/si/53004

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

mdpi.com/journal/ jmse





Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.0





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

Author Benefits

High Visibility:

indexed with Scopus, SCIE (Web of Science), Ei Compendex, GeoRef, Inspec, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Marine) / CiteScore - Q2 (Ocean Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.6 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).

