# Special Issue

# Advancements in Hybrid Power Systems for Marine Applications

# Message from the Guest Editors

The maritime industry is currently undergoing a significant transformation, marked by the transition towards propulsion systems that are both energyefficient and environmentally friendly. This shift is prominently reflected in the adoption of hybrid and allelectric propulsion systems, using renewable energy sources such as photovoltaics, fuel cells, hydrogen, and other emerging technologies. The evolution of advanced electrical distribution topologies further enhances these systems' efficiency and reliability. This highlights the critical role of power management systems in optimizing the performance of hybrid power systems. Efficient power management is paramount to ensuring the reliability, sustainability, and overall effectiveness of hybrid and all-electric propulsion systems, especially as vessels navigate diverse operational conditions. This Special Issue aims to present and share the latest advancements in the theory, design, modeling, application, route planning, and energy optimization of hybrid electric maritime vessels.

### **Guest Editors**

Dr. Peilin Xie

AAU Energy, Aalborg University, 9220 Aalborg, Denmark

Dr. Sen Tan

Energy Department, Aalborg University, 9220 Aalborg, Denmark

Dr. Rosemary Norman

School of Engineering, Newcastle University, Newcastle NE17RU, UK

## Deadline for manuscript submissions

1 February 2026



# Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8 CiteScore 5.0



## mdpi.com/si/232818

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).

