Special Issue

Marine Fuel Cell Technology: Latest Advances and Prospects

Message from the Guest Editors

Marine fuel cell technology has emerged as a promising solution to reduce greenhouse gas emissions and improve energy efficiency in the maritime industry, which is facing increasing pressure to transition towards cleaner and more sustainable operations. Recent research has focused on the development of highefficiency fuel cells, advanced catalysts, and optimized system designs, as well as the integration of fuel cells with other renewable energy sources and energy storage systems to achieve more efficient and sustainable marine operations. This Special Issue will provide a comprehensive overview of the latest advances and prospects in marine fuel cell technology, covering fundamental research, technological developments, and practical applications, to facilitate the understanding and development of this emerging field.Kevwords:

- design and optimization of maritime fuel cell system
- impact of the marine environment on marine fuel cells
- fuel cell materials and catalysts
- fuel cell system integration and testing
- life cycle assessment
- energy management
- PEMFC
- SOFC

Guest Editors

Prof. Dr. Daan Cui

Institute of Marine Engineering and Thermal Science, Marine Engineering College, Dalian Maritime University, Dalian 116026, China

Prof. Dr. Yulong Ji

Marine Engineering College, Dalian Maritime University, Dalian 116026, China

Deadline for manuscript submissions

10 April 2026



Journal of Marine Science and Engineering

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.0



mdpi.com/si/225763

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).

