

## Special Issue

# Developments in Zero-Carbon Fuels for Smart, Safe, and Reliable Waterborne Applications

### Message from the Guest Editors

This Special Issue will delve into the critical challenges of sustainability and safety in maritime transport as the industry shifts towards zero-carbon fuels, such as hydrogen, ammonia, and alcohol-based options. While these fuels hold substantial promise in reducing emissions and combating climate change, they also present unique safety and operational challenges that must be carefully managed in order to ensure a smooth and secure transition. This Special Issue will showcase leading research addressing technical, operational, and regulatory complexities related to zero-emission fuels. Possible topics include innovations in the fuel supply chain, alternative propulsion technologies, combustion processes, safe, and reliable operation practices, as well as energy, exergy, and technical analyses. By examining these aspects, this Special Issue will equip the maritime sector with essential knowledge, ensuring that zero-carbon fuels are implemented in ways that are not only environmentally sustainable but also safe, practical, and reliable.

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### Guest Editors

Prof. Dr. Gerasimos Theotokatos

Prof. Dr. Evangelos Boulougouris

Mr. Panagiotis Karvounis

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### Deadline for manuscript submissions

20 April 2025



## 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

Prof. Dr. Charitha Pattiaratchi

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

#### Journal Rank:

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