

## Special Issue

# Biochemical, Physiological and Ecological Assessments in Marine Top Predators

### Message from the Guest Editors

Marine top predators play a crucial role in maintaining the structure and function of ocean ecosystems. The use of biochemical and physiological biomarkers in marine mammals, seabirds, and large predatory fishes has proven to be a powerful approach to understanding sublethal effects, stress responses, and early signs of disease.

This Special Issue aims to explore the current state of knowledge and recent advances in the assessment of health, conditions, and environmental exposure in marine top predators, encompassing biochemical, physiological, ecological, and behavioral indicators at the molecular, cellular, organismal, and population levels. We encourage the submission of articles that present innovative methods, longitudinal studies, cross-species comparisons, and case studies from different geographic regions. Historical perspectives and syntheses are also welcome, particularly those that integrate biomarker data with ecological, toxicological, or conservation frameworks.

Studies focusing on emerging contaminants, climate-driven physiological stress, immune and endocrine disruption, and novel diagnostic tools are also encouraged.

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### Guest Editors

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### Deadline for manuscript submissions

1 January 2026



## 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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