

Special Issue

Biodiversity, Adaptation Strategies, and Opportunities in Extreme Marine Environments

Message from the Guest Editors

Extreme marine environments represent unique ecosystems on earth, characterized by extremely variable and hostile physicochemical parameters that are stressful for most organisms (e.g., very low/high temperatures, extreme photoperiods, and variations in salinity, pH, and pressure). There is a huge biological and genetic diversity in extreme environments, regarding both macro- and microorganisms, which have been less studied compared to organisms living in more accessible sites. In order to cope in such challenging habitats, extremophile marine organisms have evolved unique protective mechanisms, including both molecular/structural adaptations and metabolic pathways producing an array of compounds—derived from primary and secondary metabolism—which can have multiple roles and exert several bioactivities with possible biotechnological applications.

The aim of this Special Issue is to collect papers directly related to various aspects of marine extreme environments, their biodiversity, and perspectives and challenges for novel products with possible industrial applications.

Guest Editors

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Deadline for manuscript submissions

closed (30 April 2023)



Journal of Marine Science and Engineering

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.0



mdpi.com/si/65695

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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.

Editor-in-Chief

Prof. Dr. Charitha Pattiaratchi
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