

Special Issue

Adaptation of Marine Animals to Extreme Environments

Message from the Guest Editor

Marine animals have evolved in extreme environments such as polar regions, the deep sea, and hydrothermal vents by modifying their morphology, physiology, and behavior based on their genetic makeup. Though they are extraordinarily interesting and should be extensively explored, e.g., searching for creatures on Mars, our efforts to do just that have been hampered by the limited accessibility inherent in such locations. Even marine animals in the “boundary” zone (e.g., temperate, oxygen minimum) show a surprising acclimation ability to extreme weather events or unexpected changes to the environment. We can learn pivotal lessons from how these animals adapt to extreme environments and can even apply their mechanisms, functions, or biomaterials to future technology advancements. This Special Issue is open to scientists and engineers in any field who study the adaptation of marine animals to extreme environments and want to bring new insights and stimulate interactions between experts from diverse disciplines.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Journal of Marine Science and Engineering (JMSE, ISSN: 2077-1312) focuses on research in the fields of Ocean Engineering, Coastal Engineering, Physical Oceanography, Geological Oceanography, Marine Biology, and Marine Environmental Science. It publishes reviews, regular research papers, and short communications, as well as Special Issues on particular subjects. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the maximum length of the papers.

Editor-in-Chief

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