

Special Issue

Safety Evaluation and Protection in Deep-Sea Resource Exploitation

Message from the Guest Editors

The ocean plays a crucial role in human resource development and economic growth, holding abundant mineral resources like oil, natural gas, polymetallic nodules, cobalt-rich ferromanganese crusts, polymetallic sulfides, and rare earth elements. Additionally, the ocean offers extensive reserves of renewable energy sources, making it an essential strategic space for sustainable future development. Marine structures designed for deep-sea resource exploitation must withstand highly complex environmental conditions and various unpredictable loads, which vary across time and space. In harsh conditions, factors such as environmental corrosion, marine biofouling, foundation softening, material aging, component defects, mechanical wear, and fatigue will lead to the deterioration of structural components and overall performance, which affects the safety and durability of the structure in service. Thus, performing safety evaluations and implementing protective measures are essential for the safe and sustainable development of marine resources, carrying both theoretical importance and engineering significance.

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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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