

Special Issue

Risk Assessment and Prediction of Marine Equipment

Message from the Guest Editor

As marine exploration, offshore energy development, and maritime transportation surge globally, marine equipment—from deep-sea drilling rigs to autonomous underwater vehicles—faces unprecedented challenges. Harsh conditions like corrosive seawater, extreme storms, and subsea geological instability escalate failure risks, leading to catastrophic economic losses, environmental spills, and threats to human life. Recent high-profile incidents, such as offshore platform collapses and subsea pipeline leaks, underscore the critical need for advanced risk assessment and prediction tools to safeguard operations and sustain ocean development. This Special Issue aims to unite global experts to talk about marine equipment risk assessment and prediction. We focus on risk identification, predictive modeling, and mitigation strategies across all marine assets: offshore structures, renewable energy devices, naval vessels, and monitoring systems. Topics span corrosion, structural fatigue, cyber threats, and climate-driven risks, and we welcome interdisciplinary approaches that bridge engineering, data science, and marine ecology.

Guest Editor

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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

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