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Today, the maritime industry is undergoing significant transformations in terms of sustainability, safety, and operational efficiency. Technological advancements and scientific research aim to reduce the environmental impact of maritime activities and enhance operational security. In this context, the presented studies in this Issue comprehensively address current challenges and possible solutions in the industry.

For example in this issue, studies on breakwater designs, both experimental and numerical, aim to make port and coastal structures more efficient. Research on permeable caisson breakwaters provides crucial findings on wave permeability and structural efficiency. Hydrodynamic analyses play a critical role in reducing wave loads and increasing port safety.

Similarly, the advantages and disadvantages of electric tugboats represent a significant step towards reducing the carbon footprint in the maritime industry. While electric tugboats offer benefits such as lower greenhouse gas emissions and reduced operating costs, they also bring challenges such as high initial investment costs and infrastructure requirements. This situation necessitates strategic planning by policymakers and industry representatives.

Additionally, studies on fuel and oil separator failures contain critical findings aimed at improving the operational efficiency of marine vessels. Analyses using the Fuzzy DEMATEL method highlight the negative impacts of maintenance deficiencies and mechanical failures on ship machinery, emphasizing the importance of preventive maintenance strategies.

Risk assessment studies on ship bunkering operations provide key insights into enhancing safety in the maritime industry. Analyses conducted using the rule-based fuzzy FFMEA method reveal that incorrect valve operations and inadequate control mechanisms are among the most critical risks. These findings can serve as a basis for significant regulatory measures for both regulatory bodies and industry stakeholders.

The maritime industry is progressing towards a safer, more efficient, and sustainable future with the data obtained from such scientific studies. Supporting technological innovations and strengthening strategic planning will increase the industry's global competitiveness. Therefore, enhancing academic research and industry collaborations will ensure that the maritime industry achieves its sustainable development goals.

I am pleased to introduce JEMS issue 13 (1) consisting of the above important topics to our valued readers. I express my gratitude to the section editors, the editorial board, the writers who meticulously adhered to our publication guidelines to produce pieces of the highest caliber, and the reviewers whose perceptive research was approved for inclusion in this issue.



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