

## Special Issue

# Machine Learning and Optimization for Marine Structure

### Message from the Guest Editors

With the introduction of advanced machine learning techniques, efficient metaheuristic optimization algorithms and high-performance computing, the paradigm shifts from physics-based to big data-driven models. In the light of these developments, we are announcing a Special Issue entitled “Machine Learning and Optimization for Marine Structure”. The special issue welcomes original and impactful works presenting theoretical, empirical, and numerical studies of engineering applications regarding machine learning and optimization for ships, oil & gas platforms, and offshore renewable energy devices. The review papers, providing a critical view on the latest developments regarding methods, modeling, and analysis, are also encouraged. The topics relevant to the Special Issue include, but are not limited to, are given as follows:

- Fatigue & Fracture
- Ultimate strength
- Corrosion degradation
- Supervised & Unsupervised Machine learning
- Reinforcement learning
- Deep learning
- Damage detection
- Structural health monitoring
- Reliability-based optimization
- Risk-based design, inspection, and maintenance

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### Guest Editors

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### Deadline for manuscript submissions

closed (30 April 2023)



## Journal of Marine Science and Engineering

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Impact Factor 2.8  
CiteScore 5.0



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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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### Author Benefits

#### High Visibility:

indexed with Scopus, SCIE (Web of Science), Ei Compendex, GeoRef, Inspec, AGRIS, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Marine) / CiteScore - Q2 (Ocean Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.5 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).