# Special Issue

# Autonomous Ship and Harbor Maneuvering: Modeling and Control

# Message from the Guest Editors

Autonomous ships and ports are transforming maritime logistics operations. These emerging technologies drive independent advancements for ships and ports while reshaping entire processes including docking, loading, and unloading. As these unprecedented technologies emerge, research on improving safety and efficiency becomes crucial. This Special Issue focuses on novel operational methods, controller modeling, digital twins, and Al applications evolving with autonomous maritime systems.

- Autonomous Vessel Arrival and Departure;
- Autonomous Harbor Operation Method;
- Autonomous Vessel Berthing and Berth Planning;
- Autonomous Vessel Cargo Loading and Unloading;
- Harbor Autonomous Guided Vehicle and Yard Tractor Scheduling;
- Autonomous Vessel Digital Twin;
- Autonomous Harbor Digital Twin;
- Autonomous Vessel and Harbor Interaction:
- Ship and Harbor Data Standardization.

### **Guest Editors**

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### Deadline for manuscript submissions

1 December 2025



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# 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

Prof. Dr. Charitha Pattiaratchi School of Engineering, The UWA Oceans Institute, The University of Western Australia, Perth, WA 6009, Australia

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