Special Issue

Thermal and Environmental Control Technologies in Marine Engineering

Message from the Guest Editors

The performance and ecological impact of marine systems depend not only on the design of heating, ventilation, and cooling technologies but also on innovations in energy efficiency, emission control, and waste heat recovery. The aim of modern marine engineering is to optimize thermal regulation systems, reduce greenhouse gas emissions, and develop sustainable solutions that comply with stringent environmental regulations. This includes advancements in ship HVAC systems, hybrid/electric vessel thermal management, underwater vehicle cooling, and pollution mitigation strategies. This Special Issue will focus on cutting-edge technologies and methodologies for improving thermal and environmental control in marine applications. Topics will cover not only novel engineering designs and computational modeling but also experimental validation through laboratory tests, field studies, and real-world case studies, such as:

- marine thermal management
- waste heat recovery in maritime applications
- emission control technologies
- energy-efficient marine engineering
- sustainable shipping solutions
- environmental compliance in shipping
- carbon footprint reduction in maritime transport

Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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