Special Issue

New Trends in Fault Diagnosis of Marine Mechanical Systems

Message from the Guest Editors

We are pleased to invite you to contribute to this Special Issue, which focuses on the critical role of mechanical fault diagnosis in ensuring the reliability, efficiency, and safety of industrial and transportation systems. This Special Issue aims to highlight the latest advancements in methodologies, technologies, and applications that are shaping the future of fault diagnosis across a wide range of mechanical systems, including those in manufacturing, energy, automotive, and maritime sectors.Topics of interest include, but are not limited to, the following:Advanced signal processing and feature extraction for anomaly detection and fault diagnosis.
Machine learning and deep learning approaches in mechanical diagnosis.
Physics-informed and hybrid diagnostic models.
Digital twins and IoT-enabled diagnostics for mechanical systems.
Applications in maritime transportation, including ship propulsion and onboard machinery.
Condition-based and predictive maintenance strategies.
Uncertainty modeling and decision support in fault diagnosis.
Large models for prognostics and health management.

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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