Special Issue

Seismic Analysis and Design of Ocean and Underground Structures

Message from the Guest Editors

Advancements in seismic analysis and design techniques for ocean and underground structures have become imperative in the face of evolving challenges in structural engineering. This Special Issue aims to provide a platform for the dissemination of novel ideas and empirical findings in the realm of seismic analysis and design, focusing on the safety of structures situated in oceanic and subterranean environments. Relevant areas encompass a broad spectrum, including innovative analytical approaches, state-of-the-art numerical simulations, and practical design solutions. Contributions are sought in the fields of structural dynamics, geotechnical engineering, and offshore engineering. Topics will span offshore platforms, reef engineering, submarine pipelines, underground tunnels, and other subterranean structures.

- Advanced modeling and simulation techniques of ocean and underground structures;
- Structural health monitoring for ocean and underground structures;
- Innovative materials and construction methods for seismic resilience;
- Seismic risk assessment and mitigation strategies specific to marine and subsurface environments;
- Multi-hazard risk assessment for ocean structures.

Guest Editors

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Deadline for manuscript submissions

closed (30 November 2025)

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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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