

Special Issue

Building Foundation Analysis: Soil–Structure Interaction

Message from the Guest Editors

This Special Issue aims to provide readers with insights into the latest research findings, engineering practices, and technological innovations in the field of soil–structure interaction.

- Fundamental principles and theories of soil mechanics.
- Design and analysis methods for building foundations.
- Models and numerical simulations of soil–structure interaction.
- Influence of different soil types on building behaviour.
- Analysis of soil bearing capacity, settlement, and deformation.
- Dynamic response and seismic engineering of soil–structure systems.
- Design, analysis, and construction techniques for pile foundations.
- Application of soil improvement techniques in soil–structure interaction.
- Effects of soil lateral forces on buildings and mitigation methods

For more information, please visit the following links:

https://www.mdpi.com/journal/buildings/special_issues/5N9343N849

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About the Journal

Message from the Editor-in-Chief

Current urban environments are home to multi-modal transit systems, extensive energy grids, a building stock, and integrated services. Sprawling neighborhoods are composed of buildings that accommodate living and working quarters. However, it is expected that the cities and communities of the future will face complex and enormous challenges, including maintenance, interconnectivity, resilience, energy efficiency, and sustainability issues, to name but a few. A smart city uses advanced technologies and a digital infrastructure to improve the outcomes in every aspect of a city's operations. A smart building optimizes the experience of occupants, staff, and management by using a modern and connected environment. Innovations in technology that can bring dramatic improvements to design, planning, and policy are critical in developing the cities and buildings of the future.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).