Special Issue

Urban Underground Space Design: Structural Stability and Mechanics Analysis—2nd Edition

Message from the Guest Editors

As cities globally grapple with the challenges of population growth and limited surface area, the use of underground spaces emerges as a solution with great potential. This necessitates a reasonable assessment of structural stability and a serious geotechnical analysis in order to ensure the safe and longevity of such spaces. From a structural stability standpoint, intricate networks of tunnels, subways, and other underground structures require meticulous design in order to withstand various loads, ground movements, and possible natural hazards. Within this framework, this Special Issue proposes a series of research papers on the above areas that align with the broader goals of sustainable urban development. Topics include, but are not limited to, the following:

- Innovative approaches to urban underground space design;
- Sustainable practices in underground construction;
- Geotechnical analysis for urban underground projects;
- Case studies and best

For more information, please visit the special issue link: https://www.mdpi.com/journal/buildings/special_issues/P4FA39O798

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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.

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