



Advances and Applications in Geotechnical and Structural Engineering

Guest Editors:

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Message from the Guest Editors

This Special Issue of *Buildings* is based on the two domains mentioned in the title, “Advances and Applications in Geotechnical and Structural Engineering”, and will accept the submission of manuscripts covering different topics, from fundamental research to more applied exploratory and integrated case studies. Topics include, but are not limited to:

Deadline for manuscript
submissions:
closed (31 March 2024)

- Mechanical properties, failure mechanisms and modelling of rock, soil and structures, including various kinds of dynamic and static characteristics analysis;
- Innovative intelligence algorithms and machine learning methods for solving engineering problems in geotechnical and structural engineering, for example, BIM, ANN, etc.;
- Green and low-carbon construction and design approaches in all kinds of geotechnical and structural engineering—for example, disposal of solid wastes, 3D printing, etc.;
- Human-induced structural vibration, including analysis and design method, human-induced load modeling, crowd–structure interaction, vibration serviceability criteria;
- Geoenvironmental performance and modelling of recycled waste for construction and building materials.





Editor-in-Chief

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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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