

## Special Issue

# Experiments, Design and Practice Innovations in Geotechnical Engineering and Underground Space

### Message from the Guest Editors

With the rapid development of the global economy and of industry, the acceleration of urbanization, and the deepening of underground space utilization for exploration, design, construction, and operation, more and more requirements have been put forward for the safety and reliability of geotechnical engineering and underground spaces. The Special Issue focusing on the theory and practice of and management innovations in geotechnical and underground engineering. Topics include, but are not limited to:

- The engineering behaviour of soil, rock, and underground structures;
- Rock and soil dynamics;
- The application of artificial intelligence in geotechnical engineering and underground spaces;
- Environmental geotechnics;
- Novel numerical analysis in solving major underground engineering;
- Earthquake engineering in underground spaces;
- Original theories, methods, techniques, and important applications in the whole life cycle of underground engineering;
- Predictive maintenance using AI for infrastructure;
- Advanced numerical analysis methods for internal erosion-induced geodisasters.

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### Guest Editors

Prof. Dr. Shuqian Duan

Dr. Jiayan Nie

Dr. Zhongkai Huang

Dr. Jiecheng Xiong

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### Deadline for manuscript submissions

31 July 2025



## Applied Sciences

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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
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