

## Special Issue

# Applications of Artificial Intelligence in Geotechnics and Engineering Geology—2nd Edition

### Message from the Guest Editors

In recent years, artificial intelligence technology has been widely used to monitor and provide early warning for geological disasters, as well as in geotechnical engineering and oil and gas exploration and development. The goal of this Special Issue is to collect high-quality papers on the applications of artificial intelligence in the fields of geotechnics, engineering geology, and resource exploration. We encourage researchers from the fields of geophysics, geotechnics, signal processing, artificial intelligence, engineering geology, applied mathematics, structural geology, and other relevant areas to participate in this research topic. Topics of interest for this Special Issue include, but are not limited to, the following:

- New AI-driven approaches in geotechnics and engineering geology;
- New AI-driven approaches for resource exploration;
- AI-driven approaches for structural analysis;
- AI-driven approaches for formation evaluation;
- AI-driven approaches for reservoir characterization;
- New data-driven approaches in geological disaster monitoring and early warning;
- Complex structure imaging and inversion.

---

### Guest Editors

Prof. Dr. Yaojun Wang

Dr. Hanpeng Cai

Dr. Qingqing Li

---

### Deadline for manuscript submissions

closed (20 August 2025)



## Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/si/227402](https://mdpi.com/si/227402)

*Applied Sciences*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[applsci@mdpi.com](mailto:applsci@mdpi.com)

[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)





# Applied Sciences

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 5.5



[mdpi.com/journal/  
applsci](https://mdpi.com/journal/applsci)



## 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.

---

### Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo  
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,  
20133 Milano, Italy

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, Embase, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering )