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Geological Modeling and Geomechanical Characterization of Rock Masses for Civil and Mining Engineering Practice

Guest Editors:

Dr. Sabrina Bonetto
Earth Sciences Department, University of Torino, Via Valperga Caluso 35, 10125 Torino, Italy

Dr. Pietro Mosca
Institute of Geosciences and Earth Resources, National Research Council of Italy, 10125 Torino, Italy

Dr. Chiara Caselle
Earth Sciences Department, University of Torino, Via Valperga Caluso 35, 10125 Torino, Italy

Deadline for manuscript submissions:
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Message from the Guest Editors

Dear Colleagues,

Technical planning of civil and mining engineering projects requires accurate 3D geological modeling of the considered area and robust data on mechanical properties of occurring rock masses.

The characterization of mechanical response of rock masses represents one of the most challenging issues for both geologists and engineers. The main difficulties are usually related to the compositional heterogeneities and to the anisotropic behavior that is often the consequence of the occurrence of mechanical discontinues (e.g., foliations, fractures, faults, stratigraphical layering). The process of scaling laboratory and field measures, from rock sample to the entire rock mass, is not straightforward and needs to be carefully evaluated.

This Special Issue welcomes original research, reviews, and case studies concerning any aspects related to the building of geological and geostructural models, the characterization of mechanical properties of rocks and rock masses, and their influence in civil and mining engineering projects, including geological and geostructural field studies, field investigations, laboratory tests, and remote sensing analyses.

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Editor-in-Chief

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

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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Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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