



Multiphysics Modeling for Fracture and Fragmentation of Geomaterials

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Message from the Guest Editors

Dear Colleagues,

This Special Issue "Multiphysics Modeling of Fracture and Fragmentation of Geomaterials" aims to attract new contributions in this field. Our topics include, but are not limited to:

- Model development and application of finite-discrete element method (FDEM) for multiphysics modeling of fracture and fragmentation of geomaterials;
- Novel numerical methods and algorithms for multiphysics modeling of fracture and fragmentation of geomaterials, such as discrete element method (DEM), discontinuous deformation (DDA), numerical manifold method (NMM), phase field method, PeriDynamics (PD), material point method (MPM), and smoothed particle hydrodynamics (SPH);
- Modeling soil, rock, and concrete blasting; Modeling soil shrinkage cracking, concrete or rock fracture and fragmentation;
- Modeling tunnel water inrush, modeling geotechnical engineering in the cold region; Modeling landslides or slope failure;
- THMC coupling processes in nuclear waste disposal, underground energy or CO₂ storage and energy development (geothermal energy, oil, gas, etc.)





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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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