Special Issue

Rock Discontinuities at Different Scales: New Advances from Lab Tests to Field Applications

Message from the Guest Editors

Rock discontinuities (joints, fractures, bedding plane, faults) are ubiquitous and usually with different scales in the rock mass as results of geological tectonism or excavation unloading. Those discontinuities provide not only preferential pathways for groundwater flow and heat exchange, but also weak planes to favor the shear failure of different rock engineerings such as rock slopes, tunnels and dam foundations. A number of geological disasters such as landslides, fault slip rockbursts, induced earthquakes and water inrush are associated with the shear failure of rock discontinuities. Therefore the study on the geometrical, physical and mechanical properties of rock discontinuities with various scales is of great importance for safe construction of rock engineering and subsurface energy recovery. This Special Issue aims to provide an opportunity to researchers in the relevant research fields to conduct a broad scientific and technological discussion on advances in rock discontinuities from lab to the field spanning different scales. The research methodology includes experimental, analytical, numerical, and field studies. Review and research articles are both welcome.

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Editor-in-Chief

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