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Research on Rock Mechanics under Freeze-Thaw Action

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Message from the Guest Editors

Dear Colleagues,

The freeze–thaw action of rocks and soils is caused by the water–ice phase transition in pores and cracks. Repeated freeze–thaw cycles damage the physic-mechanical properties of rocks and soils via microscopic pore structure change, macroscopic strength loss and so on. Such mechanisms have induced many engineering geology disasters in cold regions. The degree of freeze–thaw damage is related to coupled multifields at low temperatures. However, the interaction of multifields of rock and soils during the freeze–thaw process is highly complex and not fully understood. In addition, the evaluation of the frost resistance of rocks and soils needs further study.

[...]

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Special Issue



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Message from the Editor-in-Chief

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