



Quantitative Fractured Rock Hydrology

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Message from the Guest Editors

Dear Colleagues,

For the prediction of subsurface fluid flows, the growing availability of computational resources is driving the use of more and more sophisticated numerical models, also documented in a rich set of scientific articles. However, there are few concerted attempts to organize this material under one cover. For this Special Issue, we are looking for contributions where the essential features of these models are reported, to furnish a useful summary for practitioners and research engineers. In these models, the rock mass is generally envisioned as a network of percolative fractures (the discrete fracture network), delimiting pervious or impervious matrix blocks. Problems mostly concern the stochastic generation of the fracture networks and the underpinning statistical theories, the single/multiphase fluid flow and hydromechanical dispersion in single fractures, the hydro-thermo-mechanical–chemical (HTMC) coupling affecting fluid flows, and the solution of the partial differential equations ruling fluid flows and transports in fractured rocks. You are warmly invited to submit your contribution if you share this vision and are interested in these crucial issues.





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Editor-in-Chief

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Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherent set of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientifically based political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

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