# Special Issue

# Experimental and Theoretical Advancement in Modeling Fluid-Rock Interactions in Geological Reservoirs

## Message from the Guest Editors

Fluid injection and extraction in high pressure conditions is encountered in many geological applications, such as geologic carbon sequestration, hydrocarbon recovery, and enhanced geothermal energy extraction. It can modify rock mechanical properties and behaviors, leading to stress redistribution, fracture generation, or reactivation, and inducing mechanical or hydraulic hazards in undergound engineering systems. Fluid–rock interactions, such as mineral dissolution/precipitation, can also alter reservoir petrophysical properties, notably porosity, permeability, wettability, and capillary pressure, which can significantly influence fluid and solid transport in geological systems. To be effective in the design and successful implementation of the above-mentioned subsurface processes, the interactions between fluids and the heterogeneous geological materials must be incorporated in the numerical schemes developed for modeling these processes.

## Guest Editors

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## Deadline for manuscript submissions

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*Minerals* welcomes submissions that report basic and applied research in mineralogy. Research areas of traditional interest are mineral deposits, mining, mineral processing and environmental mineralogy. The journal footprint also includes novel uses of elemental and isotopic analyses of minerals for petrology, geochronology and thermochronology, thermobarometry, ore genesis and sedimentary provenance. Contributions are encouraged in emerging research areas such as applications of quantitative mineralogy to the oil and gas, manufacturing, forensic science, climate change, geohazard and health sectors.

## Editor-in-Chief

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