Special Issue

Complex Processes in Geomaterials and Cementitious Materials Used as Subsurface Engineered Barriers

Message from the Guest Editors

Subsurface operations rely heavily upon engineered barriers, especially subsurface seals. These seals and barriers must be designed to function with the natural rock formations, and geotechnical engineered components must complement the rock in order to form a coherent and predictable system of isolating stored/disposed energy waste products and/or resources. In order to provide the modelling tools that are critical to the design and implementation of subsurface operations, the relevant physical and chemical processes in the subsurface system must be understood and represented at the appropriate level of fidelity. Characterization via experiments and modelling plays a crucial role in understanding the complex processes in barriers and at interfaces. This Special Issue will be organized into the following three sections: (1) Clay minerals as backfill/buffer in engineered barriers (2) Cementitious materials as liners, seals, and plugs (3) Processes at rock/engineered material interfaces

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Deadline for manuscript submissions

closed (20 May 2025)

Minerals

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Impact Factor 2.2
CiteScore 4.4

mdpi.com/si/172428

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About the Journal

Message from the Editor-in-Chief

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.

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