



Alkali Activation of Clay-Based Materials

Guest Editors:

Dr. Barbara Horvat

Slovenian National Building and
Civil Engineering Institute,
Dimičeva 12, SI-1000 Ljubljana,
Slovenia

Dr. Lea Žibret

Slovenian National Building and
Civil Engineering Institute,
Dimičeva 12, SI-1000 Ljubljana,
Slovenia

Dr. Sara Tominc

Slovenian National Building and
Civil Engineering Institute,
Dimičeva 12, SI-1000 Ljubljana,
Slovenia

Deadline for manuscript
submissions:

28 March 2025

Message from the Guest Editors

For the construction industry, Alkali-activated materials (AAMs) represent a sustainable and resource-efficient alternative to conventional cement-based materials.

Just as AAMs can be used to safely store different hazardous substances, so can clay, which is an abundant material that represents waste for different types of mining industries. AAMs can be synthesized using various types of clay but have to be optimized regarding the performance of these materials in terms of strength, durability, sustainability and their impact on the environment.

Alkali activation is also a useful approach for improving the geomechanical properties of clay-rich materials in geotechnical embankments. Moreover, alkali activators can improve the mechanical properties of rammed earth construction.

Authors are invited to contribute original research articles as well as review articles focused on the synthesis and characterization of alkali-activated clays, used as a sole precursor or as an additive, calcined or raw, aiming for sustainability in the building industry sector. Papers dealing with investigating the environmental impact of such AAMs focusing on soil contamination are particularly welcome.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Leonid Dubrovinsky
Bayerisches Geoinstitut,
University Bayreuth, D-95440
Bayreuth, Germany

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), GeoRef, CaPlus / SciFinder, Inspec, Astrophysics Data System, AGRIS, and other databases.

Journal Rank: JCR - Q2 (*Geochemistry and Geophysics*) / CiteScore - Q2 (*Geology*)

Contact Us

Minerals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/minerals
minerals@mdpi.com
[X@Minerals_MDPI/](https://twitter.com/Minerals_MDPI/)