Special Issue

Use of Clay Minerals in Adsorption and Photocatalysis Technologies

Message from the Guest Editors

Designing efficient nanomaterials for environmental remediation and the treatment of polluted water has been a major focus of research. Clay minerals are valuable in adsorption and photocatalysis due to their unique properties, including their ion exchange capacity, high surface area, sorption capacity, and surface reactivity. Furthermore, clay minerals can interact with various organic and inorganic compounds, altering their structure, functional groups, and surface charge at different pH levels. These interactions can improve the removal of various pollutants, including heavy metals, dyes, pharmaceuticals, and pesticides... We welcome studies on recent developments in clay and clay mineral-based materials and invite manuscripts covering a wide range of topics, including, but not limited to, the following:

- New nanocomposites or hybrids derived from clays and clay minerals;
- Clay/clay mineral-based materials used in environmental remediation;
- The use of clays, clay minerals, and their derivatives in adsorption applications;
- The use of clays, clay minerals, and their derivatives in photocatalytic applications.

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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.

Editor-in-Chief

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Journal Rank:

JCR - Q2 (Mining and Mineral Processing) / CiteScore - Q1 (Geology)

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.2 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

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