Special Issue

Radionuclides and Radiation Exposure in Minerals Extraction, Processing and Applications

Message from the Guest Editors

The presence of naturally occurring radionuclides in mineral deposits is a phenomenon reported worldwide and stems from the geological dynamics of the earth crust. The increasing demand for metals that can be employed in the electronics, aero spatial, automotive, and nuclear industries has expanded mining and milling operations across all continents. The exploitation of mineral deposits, including radioactive ores, and the processing of these ores via their mining, transport, storage and industrial transformation often create a large volume of waste and have a significant environmental impact. These include occupational radiation exposures above the radiation safety levels. This Special Issue of Minerals aims to collect enlightening reports that address the radioactivity and radiation exposure present in regions and industries that deal with NORMs, as well as the ecotoxicological impact of mining and the cycling and fate of radionuclides and toxic metals in the environment. Furthermore, it aims to enhance our knowledge of radiation exposure scenarios and mitigation measures, as well as the potential reuse of mining and milling wastes.

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Deadline for manuscript submissions

31 October 2025

Minerals

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 4.4

mdpi.com/si/214548

Minerals
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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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