

Special Issue

Treatment of Heavy Metals in Rock Phosphate, Phosphoric Acid and Phosphogypsum

Message from the Guest Editors

Phosphate rock is the main source of phosphorus, while apatite is the main constituent of phosphate rock. Worldwide phosphate production is estimated to be over 200 million tons a year; 90% of which is used as fertilizer in agriculture. Phosphate rock sources can be magmatic or sedimentary, the latter being the main source. Sedimentary phosphate rocks are characterized by the significant presence of impurities, which may be of commercial value (U, REE, fluoride)...Regulatory requirements force industry and producers to develop treatments, processes, and techniques for heavy metals removal. This Special Issue of *Minerals* will be organized around the following themes:

- Techniques and technology for the analysis and characterization of heavy metals in phosphate rock, phosphoric acid, and fertilizers;
- Techniques and technology for heavy metals removal from phosphate rock;
- Techniques and technology for heavy metals removal from phosphoric acid and fertilizers.

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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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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).