



## Geological, Structural, Geochemical, Hyperspectral, and Geostatistical Modeling for Mineral Exploration

Guest Editors:

**Dr. Anup Krishna Prasad**

Department of Applied Geology,  
Indian Institute of Technology,  
Indian School of Mines, Dhanbad  
826004, India

**Dr. Bhabesh Chandra Sarkar**

Department of Applied Geology,  
Indian Institute of Technology,  
Indian School of Mines, Dhanbad  
826004, India

Deadline for manuscript  
submissions:

**closed (31 January 2024)**

### Message from the Guest Editors

Dear Colleagues,

This Special Issue aims to present research that focuses on the exploration of ores in diverse geological settings, such as shear zone mineralization, sediment-hosted stratiform deposits, placer deposits, and hydrothermal settings, through the detailed investigation, characterization, and geospatial mapping and modeling of ore deposits. Submissions pertaining to mineralogy, petrography, alteration geochemistry, structural controls, geochemical and biogeochemical signatures, and genesis-related submissions are highly encouraged. Moreover, preference is given to studies that highlight field and laboratory research, spectral signatures and mineral detection, characterization and classification, and multi-spectral and hyperspectral remote sensing. Studies on the application of machine learning and artificial intelligence to the study of ore deposits are welcome, as is research into 3D/4D orebody modeling and mineral resource estimation for specific industrial metals and nonmetals, rare earth minerals (REEs), and nanomaterials.





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, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/minerals](http://mdpi.com/journal/minerals)  
[minerals@mdpi.com](mailto:minerals@mdpi.com)  
[X@Minerals\\_MDPI/](https://twitter.com/Minerals_MDPI/)