



## Nuclear Forensic Applications in Geoscience and Radiochemistry

Guest Editor:

**Dr. Antonio Simonetti**

Department of Civil &  
Environmental Engineering &  
Earth Sciences, University of  
Notre Dame, Notre Dame, IN  
46556, USA

Deadline for manuscript  
submissions:

**closed (31 December 2019)**

### Message from the Guest Editor

This Special Issue invites contributions that focus on reporting forensic investigations of nuclear materials covering the early part of the nuclear fuel cycle, from natural uranium-rich ores/minerals (e.g., uraninite) to uranium oxide concentrates (UOCs) and nuclear fuel pellets using a wide variety of established and novel analytical methods and approaches. This includes the examination of morphological features of nuclear materials that develop due to changing environmental conditions and/or aging, identifying chemical and/or isotopic signatures related to U metal processing, multi-component statistical analysis of existing or new chemical/isotopic databases, establishing reference materials for micro-analyses conducted at high-spatial resolution, and corroborating and/or developing new baseline forensic signatures in raw ores from varying uranium deposit types.

For further reading, please visit the Special Issue website:

[https://www.mdpi.com/journal/minerals/special\\_issues/Forensic-Geoscience](https://www.mdpi.com/journal/minerals/special_issues/Forensic-Geoscience)

Dr. Antonio Simonetti

*Guest Editor*



[mdpi.com/si/24356](https://www.mdpi.com/si/24356)

# Special Issue



## 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 (*Mining & Mineral Processing*) / 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/)