



## Application of UAV and GIS for Geosciences

Guest Editor:

**Prof. Dr. Konstantinos G.  
Nikolakopoulos**

Applied Geology & Geophysics,  
Department of Geology,  
University of Patras, ZC 26504  
Patras, Greece

Deadline for manuscript  
submissions:

**closed (15 December 2021)**

### Message from the Guest Editor

Until a few years ago, Unmanned Aerial Vehicles (UAVs) were introduced to the wide public either as an extremely expensive military project or as a very cheap toy for kids. The use of UAVs for research purposes has recently become possible and affordable due to technological developments such as autopilot systems, lightweight action cameras, miniature GNSS sensors, advances in carbon fiber airframes and the simultaneous development of new processing methodologies based on computer vision like the structure from motion photogrammetry. Carrying different kinds of sensors, like RGB, multispectral or thermal cameras, hyperspectral or Lidar sensors, or even ground penetrating radar and echo sounders, UAVs provide valuable information at extremely high spatial resolution and accuracy. The complexity of the above mentioned information can be well stored, described and processed within the frame of a Geographic Information System (GIS), which is defined as a set of tools for the input, storage, management, analysis and cartographic representation of geographic information. This Special Issue aims to highlight the combination of UAV data and GIS techniques for Geosciences.





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, Grosspeteranlage 5  
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/)