

## Special Issue

# Applications of Mössbauer Spectroscopy in Meteoritical and Planetary Science—In Memory of Dr. Göstar Klingelhöfer

### Message from the Guest Editor

Mössbauer (nuclear  $\gamma$ -resonance) spectroscopy is a powerful technique that is actively used in various fields from physics and chemistry to biology and medicine. R. Mössbauer, who observed nuclear  $\gamma$ -resonance in 1957, got a Nobel Prize in physics in 1960 for this discovery.  $^{57}\text{Fe}$  is most widely used nuclei in Mössbauer spectroscopy. Therefore, a large variety of compounds containing iron can be studied by Mössbauer spectroscopy. It is well known that planetary minerals contain a number of iron-bearing compounds. Therefore, the matter from various meteorites, asteroids and planets can be studied using Mössbauer spectroscopy as additional powerful technique. This Special Issue will consider the bases of Mössbauer spectroscopy and reviews on various results of more than 50 years of experience of Mössbauer spectroscopy of meteorites and recent investigation of Mars' surface using two rovers. **This Special Issue will be dedicated to the memory of Dr. Göstar Klingelhöfer, who was a pioneer of Mars investigation using Mössbauer spectroscopy and untimely passed away last January.**

### Guest Editor

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### Deadline for manuscript submissions

closed (24 April 2020)



## 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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