

## Special Issue on Systems and Sensors in Geoscience Applications

# CALL FOR PAPERS

Geoscience encompasses, amongst others, the disciplines of geology, geophysics, and geotechnology, and increasingly relies on computer simulations to better understand the Earth's history and future evolution. Through fieldwork, observation from space, modeling, and theoretical studies, geoscience applications provide essential information to understand the problems faced in Earth sciences and relevant aspects of environmental engineering.

A multitude of systems and sensors such as visible imaging, synthetic aperture radar (SAR), global navigation satellite system (GNSS), and laser scanning (LiDAR) are continually developing to deliver acquisition of a broad range of data types describing the Earth surface. These, in turn, support numerous emerging applications. Major advances in geoscience applications have facilitated the development of sensors with higher accuracy and efficiency and better computing performance, which are leading to new theories and technical methods. That said, yet more capable sensors and more advanced theoretical and technical methods are necessary to solve emerging difficult and multidiscipline challenges. Overall, these upcoming developments in geoscience should lead to more systematic investigations using advanced geospatial technologies.

This special issue is aimed at bringing together researchers from across the community, to contribute studies investigating geoscience applications using Earth observation sensors and systems. New means of data acquisition, data integration strategies, and processing with innovative methods and modeling will improve our understanding of landscape elements and their interaction with the climate and environment. Submitted articles should focus on the design of sensors, tools, technical and theoretical methods, and computer simulations for obtaining and processing datasets for knowledge discovery in geoscience and civil engineering. The editors particularly encourage state-of-the-art investigations that solve real-world problems.

Whilst submissions are invited from all researchers, we especially welcome full length articles related to work presented at the Global Civil Engineering Conference 2017 (GCEC2017), held in Kuala Lumpur, Malaysia, from July 25 to 28, 2017 (with about 400 participants). This conference is aimed at exchanging relevant experiences and the latest scientific research and findings from around the globe as well as promoting civil engineering research, development, and application amongst various relevant entities and professionals.

The special issue is intended to improve our understanding of the current research and achievements in the broad field of systems and sensors in geoscience applications and looks to publish both original research and focused review articles.

Potential topics include but are not limited to the following:

- ▶ Expert systems and sensors in structural engineering
- ▶ Remote sensing applications
- ▶ Geospatial engineering systems, tools, and applications
- ▶ Environmental engineering and modeling
- ▶ Sensors and tools in disaster modeling and management
- ▶ Image processing and computer vision applications
- ▶ Urban remote sensing applications
- ▶ Earth observation and applications
- ▶ Civil engineering surveying
- ▶ Geotechnical analysis and design
- ▶ Slope engineering
- ▶ Numerical modeling in geotechnics
- ▶ Real-time 3D simulation

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/js/ssga/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

### Special Issue Editor in Chief

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