## Advances in Civil Engineering



### Special Issue on

## **Unmanned Aerial Vehicle Applications in Geoinformatics 2023**

# CALL FOR PAPERS

Unmanned aerial vehicles (UAVs) have been used across a variety of different fields in civil engineering, such as geomatics engineering, transportation engineering, water resources engineering, and structural engineering. Through the basic techniques of photogrammetry and remote sensing and the utilization of different types of sensors mounted on these vehicles, UAVs are proving to be a versatile and economical option for data acquisition.

Examples of the applications of UAVs include topographic and cadastral mapping, as well as irrigation mapping and monitoring, structural health monitoring, traffic monitoring, infrastructure mapping and monitoring, and construction site inspections. They are proving to be an important technological asset for civil engineering. With advancements in sensor technology, as well as developments in data processing techniques such as artificial intelligence, computer vision, and pattern recognition, research into the application of UAVs in civil engineering is advancing at an ever-increasing pace.

This Special Issue will provide a platform to bring these advancements to a broader scientific audience. We welcome both review articles and original research in the fields of UAV system development, UAV surveys, discussion and analysis of UAV accuracy, and solutions supporting specific civil engineering applications, including point clouds, surface models, vector products or orthoimages.

Potential topics include but are not limited to the following:

- ▶ UAV photogrammetry and remote sensing
- ▶ UAV mapping accuracy
- ▶ UAV in structural health monitoring
- ▶ UAV and cadastral mapping
- ▶ UAVs for air quality mapping and monitoring
- ▶ UAVs for water quality mapping and monitoring
- ▶ UAVs in water resource management and monitoring
- ▶ UAVs for monitoring traffic
- ▶ UAVs for infrastructure mapping and monitoring
- ▶ UAVs for monitoring of road pavements
- ▶ UAVs in construction
- ▶ UAV and building information modelling (BIM) and indoor mapping

Authors can submit their manuscripts through the Manuscript Tracking System at https://review.wiley.com/submit?specialIssue=660479.

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

### **Lead Editor**

Kamal Jain, Indian Institute of Technology Roorkee, India kjainfce@iitr.ac.in

### **Guest Editors**

Eija Honkavaara, National Land Survey of Finland, Helsinki, Finland eija.honkavaara@nls.fi

Anuj Tiwari, University of Illinois at Chicago, Chicago, USA anujt@uic.edu

Surendra Kumar Sharma, Indian Institute of Remote Sensing, Dehra Dn, India surendra@iirs.gov.in

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