Special Issue

Mobile Laser Scanning Systems for Underground Applications

Message from the Guest Editors

This Special Issue aims to explore how the use of mobile LiDAR systems is transforming underground applications. The Special Issue is particularly relevant to researchers and professionals in the following areas: - Civil engineering; - Remote sensing and geospatial sciences; - Mining industry. Articles may address, but are not limited to, the following topics:

- Underground applications: Static terrestrial laser scanning (TLS) vs. mobile laser scanning (MLS).
- Handheld LiDAR systems: Developments in data processing.
- Lidar-based 3D SLAM algorithms in underground environments.
- Integration of artificial intelligence in the characterization of underground environments.
- Underground space monitoring and 3D /2D mapping using TLS/MLS.
- Digital Twins using TLS/MLS: New tools to extract and update 3D spatial objects in underground environments.
- The applicability of multi-sensor technologies in underground mines.
- Quantitative evaluations of LiDAR-based SLAM systems for underground geo-monitoring.
- Development of smart solutions using LiDAR-based SLAM systems.
- Actual and future challenges with acquiring accurate point clouds in underground environments.

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Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

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