Mine Automation and New Technologies

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Message from the Guest Editors

Dear Colleagues,

Digitalisation and higher levels of automation will significantly affect mining efficiency and change the role of people working within the mining industry and elsewhere. Mine automation has the potential to improve safety, reduce carbon emissions, and ensure mine sustainability. During the last decade, significant advancements in adapting state-of-the-art communication systems, robots, sensor technology, and remotely controlled systems to the mining industry have been made. On the other hand, due to the world's rapid economic development and depletion of conventional mineral resources, an emerging trend towards unconventional/alternative mining methods, such as space mining, deep-sea mining, brine mining, urban mining, in situ leaching, and deep underground mining, has appeared in the mining industry and academic environment globally.

This Special Issue welcomes state-of-the-art contributions to mine automation and alternative mining methods within the scope of the following topics:

1. Artificial intelligence;
2. Communication systems;
3. Automation;
4. Sensor technology;
5. Simulation technologies;
6. Mine Electrification;
7. Future/alternative mining methods.

Special Issue