Special Issue

Mine Automation and New Technologies, 2nd Edition

Message from the Guest Editor

The digitalisation of the mining industry is poised to significantly enhance operational efficiency and redefine the roles of personnel both within and beyond the mining sector. Automation plays a pivotal role in minimising or eliminating workers' exposure to hazardous environments in both surface and underground mines. It also holds the potential to improve safety, reduce carbon emissions, and promote long-term sustainability in mining operations. Simultaneously, the rapid pace of global economic development and the depletion of conventional mineral resources have driven interest in unconventional and alternative mining methods. These include space mining, deep-sea mining, brine extraction, urban/technospheric mining, and in situ leaching—areas that are gaining traction in both industry and academia worldwide. This Special Issue invites state-of-the-art contributions in the fields of mine automation and alternative mining methods, with a focus on the following topics:

- Artificial Intelligence
- Communication Systems
- Automation
- Sensor Technology
- Simulation Technologies
- Mine Electrification
- Future and Alternative Mining Methods

Guest Editor

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