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Special Issue Reprint

Recent Advances in Rock Mass Engineering

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This Reprint, "Recent Advances in Rock Mass Engineering", compiles high-quality research from the *Applied Sciences* Special Issue, highlighting recent progress and emerging trends in the field. Driven by advances in rock mechanics, our understanding of complex rock mass behavior under diverse conditions is rapidly evolving. The Reprint captures the state-of-the-art research being performed through laboratory experimentation, numerical modeling, theoretical analysis, and field investigation, all of which are essential for elucidating mechanical responses and failure mechanisms. It emphasizes innovative rock mass characterization, advanced constitutive and failure models, and sophisticated numerical and data-driven techniques for practical geotechnical challenges.

The contributions focus on the stability, safety, and performance optimization of rock-based systems, such as tunnels, excavations, slopes, and deep structures. Topics include mechanical properties and anisotropy, fracture and damage evolution, and support and reinforcement strategies. By assembling original research and comprehensive studies, this Reprint offers a coherent overview of contemporary methodologies and scientific insights, serving as a valuable reference for researchers, engineers, and practitioners in geotechnical, mining and underground engineering.

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