Special Issue

Risk Management Technologies for Deep Excavations in Water-Rich Areas, 2nd Edition

Message from the Guest Editors

Due to the adverse effect of high hydraulic head pressure, deep excavations in water-rich areas inevitably involve a relatively high risk of instabilities, such as water burst, mud gushing, and sand inrush, which might result in large-scale failures that endanger human lives, personal property, and economic balance. Risk management for deep excavations in water-rich areas is a systematic process of identifying potential hazards and mitigating them in order to maintain a specified degree of safety throughout the duration of the project. In engineering practice, the most commonly adopted countermeasure against water infiltration induced by great water head difference is carrying out dewatering during excavation. However, improper dewatering can yield unbalanced ground stress, which gives rise to overlarge ground movements, lateral wall deformations, and the collapse or failure of adjacent buildings and infrastructures. The objective of this Special Issue is to provide a platform for researchers to report new advances in risk management technologies for deep excavations in water-rich areas and their many applications. Both original research and review articles are welcome.

Guest Editors

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Deadline for manuscript submissions

closed (20 May 2024)

Water

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0

mdpi.com/si/190207

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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

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