Special Issue

Geotechnical and Underground Engineering Problems Caused by Water Action

Message from the Guest Editors

Geotechnical engineering is an important branch of Earth science, and the generation of geotechnical engineering problems is closely related to the action of water. Taking the large number of landslides that occur in the Three Gorges Reservoir area as an example, we can see that the combined effect of seasonal rainfall and periodic fluctuations in reservoir water levels represents the main cause of landslides. In addition, deep rock bursts, tunnel surges, sand liquefaction, ground subsidence, submarine landslides, and reservoir surges are all directly causally related to the action of water.[...] The following topics of this issue will be covered:

- Intelligent rock and soil seepage related to water;
- Damage to geotechnical engineering materials related to water;
- Mechanics and deformation of soil and rock masses related to water;
- Natural disasters related to water (landslides, mudslides, etc.);
- Underground engineering related to water (foundation settlement, tunnel water inrush, etc.).

Keywords: water–soil coupling; tunnel water inflow; rock seepage; wading slope; hydraulic coupling

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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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