



*water*

an Open Access Journal by MDPI



## Seasonal Effects of Rainwater Infiltration on Volumetric Water Content and Water Quality in Mine Wastes

Guest Editors:

**Prof. David John Williams**

Geotechnical Engineering Centre,  
School of Civil Engineering, The  
University of Queensland,  
Brisbane, Australia

**Dr. Chenming Zhang**

School of Civil Engineering,  
Faculty of Engineering,  
Architecture and Information  
Technology, The University of  
Queensland, Brisbane, Australia

Deadline for manuscript  
submissions:

**closed (30 April 2022)**

### Message from the Guest Editors

During the operation of a mine, and particularly post-closure, stored mine wastes are susceptible to the climatic setting of the mine site. Seasonal rainfall infiltration and evapotranspiration from revegetated mine waste storages, plus access to oxygen, dictate the water content of the mine wastes, their reactivity, and the quality of any seepage and runoff from the storages.

Coarse-grained mine wastes typically start out relatively dry and have access to oxygen in dumps. Over time, the coarse wastes wet-up due to rainfall infiltration, at a rate dependent on the amount and intensity of rainfall, the particle size distribution of the wastes, and the height of the dump. The seepage will carry with it any oxidation products and contaminants.

[This Special Issue](#) welcomes scientific contributions that will enhance the knowledge in research and applications about seasonal effects of rainwater infiltration on volumetric water content and water quality in mine wastes.



[mdpi.com/si/63513](https://mdpi.com/si/63513)

# Special Issue



*water*



an Open Access Journal by MDPI

## Editor-in-Chief

### Dr. Jean-Luc PROBST

Laboratory of Functional Ecology  
and Environment, Centre  
National de la Recherche  
Scientifique (CNRS), University of  
Toulouse, Campus ENSAT,  
Auzeville Tolosane, France

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Water Resources*) / CiteScore - Q1 (*Water Science and Technology*)

## Contact Us

---

Water Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/water](http://mdpi.com/journal/water)  
[water@mdpi.com](mailto:water@mdpi.com)  
[X@Water\\_MDPI](https://twitter.com/Water_MDPI)