

## Special Issue

# Soil Hydraulic Properties Characterization for Improving Water Availability

### Message from the Guest Editors

Due to the ongoing threat of climate change, water availability is becoming seriously threatened in arid and semi-arid regions, and improved understanding of the vadose zone hydrology and its implications on numerous soil functions will become a challenging issue in the coming years.

In this Special Issue, we focus on experimental and theoretical challenges and state-of-the-art methods to characterize, measure, and model soil hydraulic properties. To fulfill the scope of Applied Sciences, studies should aim to demonstrate how soil hydraulic properties are affected by soil management and external inputs (fertilization, pollutants, low quality irrigation water, etc.) and how they affect the hydrological processes (runoff, erosion, groundwater recharge, etc.), with a specific focus on water availability in the scenario of climate change. **Keywords:** soil hydraulic properties; inverse modeling; PTF; soil physical quality; plant water availability; water use efficiency; vadose zone hydrology; urban soils; water saving

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### Guest Editors

Prof. Dr. Massimo Iovino

Dr. Vincenzo Alagna

Dr. Dario Autovino

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### Deadline for manuscript submissions

closed (20 May 2025)



## Applied Sciences

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### Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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### Editor-in-Chief

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