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Soil Water Repellency

Guest Editors:

Prof. Pavel Dlapa

Department of Soil Science,
Faculty of Natural Sciences,
Comenius University, Mlynska
dolina B-2, Ilkovicova 6, 842 15
Bratislava, Slovakia

Dr. Tomáš Orfánus

Institute of Hydrology, Slovak
Academy of Sciences, Dubravska
cesta 9, 841 04 Bratislava,
Slovakia

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Message from the Guest Editors

Soil water repellency is a manifestation of interactions between water and hydrophobic organic compounds in the soil. These interactions can prevent water infiltration to soil capillary pores or slow infiltration in sub-critical water repellency. The resultant severity of water repellency depends on soil's physical, chemical, and biological properties, and external factors such as climate, land-use, vegetation, and wildfires. This repellency can have significant consequences, including increased susceptibility to surface runoff and erosion, increased drought stress, uneven plant germination, reduced agricultural production, and accelerated contaminant transport.

This Special Issue is open to an advanced research on the causes and consequences of soil water repellency and sub-critical water repellency, including new insights into the theory of water repellent soil infiltration and the modelling of the processes involved. Contributions describing novel methods of assessing soil water repellency at different scales and research results for the alleviation of the severity of soil water repellency are also welcome.

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Special Issue



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Dr. Jean-Luc PROBST

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse, 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.

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Water Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
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