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Microbial Composition and Function in Soil and Groundwater Systems

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Message from the Guest Editors

Dear Colleagues,

Research on microorganisms has allowed us to understand their critical roles in soil and groundwater systems. Diverse microbial communities are present in soil at approximately 10^8 to 10^9 cells per gram, while they are less diverse in groundwater systems due to the nutrient-depleted conditions. Most activities and functions of microbial communities in soil and groundwater are the results of their astounding metabolic versatility. These activities and functions link the biosphere, lithosphere, hydrosphere, and atmosphere in the Earth's critical zone. The abilities of microbial communities to destroy or detoxify organic and inorganic contaminants are significant to environmental protection and human health. This Special Issue will present advances in the metabolism, distribution, and underlying drivers of microbial communities and their functions in both pristine and contaminated soil and groundwater systems, with the aim of improving our understanding of global nutrient biogeochemical cycles, contaminant bioremediation, biotechnology development, and the exploration of biological resources.

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Special Issue



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Message from the Editor-in-Chief

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