Special Issue

The Carbon and Nitrogen Cycle in Peatlands

Message from the Guest Editor

Peatlands have the highest carbon (C) storage capacity per unit area of all terrestrial ecosystems and accumulated 20–30% of the world's estimated global soil carbon pool, sequestering and holding large quantities of anthropogenically released CO2 and presenting a huge C sink for atmosphere CO2. Low temperatures, short growing season, and partly water-saturation limit decomposition of organic matters result in an accumulation of organic matter in soils. However, how will these ecosystems respond to a warming climate? The vast stores of organic carbon in these ecosystems make this a question of global significance. C cycling in these ecosystems is tightly linked to the cycling of nutrients. Because peatlands are nitrogen (N)-limited ecosystems, the process of organic matter decomposition and nutrient availability strongly constrain ecosystem C gain through primary production. [...] For further reading, please follow the link to the Special Issue Website at: https://www.mdpi.com/journal/water/special_issues/CarbonNitrogenCycle_Peatlands

Guest Editor

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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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