BayCEER Kolloquium

Lectures in Ecology and Environmental Research



Winter 2023/24

Donnerstag/Thursday 11.01.2024 12:15 in H6, GEO



Prof Dr. Laurel Thomas Arrigo Environmental Chemistry Group, University of Neuchâtel

Iron mineral dynamics modulate organic carbon cycling in Iceland wetland soils

Icelandic soils store an estimated 2.1 Pg of soil organic carbon. This is due, in part, to the high iron mineral content of the volcanic-influenced soils and the generally cooler temperatures typical of high latitude soils. However, with climate change, warming soil temperatures are leading to shifts in hydrologic regimes and changes in soil redox conditions.

In this presentation, I will explore the coupled biogeochemical cycling of iron and carbon in mineral-rich Icelandic wetland soils, presenting examples from both field and lab-based experiments. The results reveal the nature and importance of iron mineral-organic carbon interactions in Icelandic soils and provide insight into mechanisms and vulnerabilities of iron mineral protection of organic carbon under changing climate.



Bayreuth Center of Ecology and Environmental Research

Bayceer





The lectures are an interdisciplinary platform for students, junior and senior scientists. Scan the QR code or visit our homepage for abstracts and further information: