

Mobilization of permafrost material to aquatic systems and its biogeochemical fate

Friday 08 May, 10:45-12:30

Sophie Opfergelt	Integrating mineral interactions with organic carbon in thawing permafrost to assess climate feedbacks	EGU2020-19501
Jelte de Bruin	Freeze-thaw dynamics in synthetic permafrost soil columns with variable organic carbon content	EGU2020-7532
Saule Akhmetkaliyeva	Quantifying and characterising organic carbon in newly-developed soils following glacier retreat in northern latitudes	EGU2020-20836
Lydia Stolpmann	First Pan-Arctic Assessment of Dissolved Organic Carbon Concentration in Permafrost-Region Lakes	EGU2020-8174
Melanie Martyn	The role of inland freshwaters in summer CO ₂ , CH ₄ and N ₂ O emissions from northeast Siberian Arctic tundra	EGU2020-20028
Flora Mazoyer	The role of photodegradation on the mineralization of permafrost DOM	EGU2020-1144
Marloes Groeneveld	When mobilized organic matter and glacial suspended sediment meet: effects of adsorption, photo- and biodegradation	EGU2020-17679
Kirsi Keskitalo	Degradation of permafrost carbon in the Kolyma River	EGU2020-8311
Maria Pogojeva	Study of sea water chemistry changes due to thawing permafrost	EGU2020-736
Bennet Juhls	Seasonality in Lena River biogeochemistry and dissolved organic matter	EGU2020-5253
Julien Fouche	Characterization of dissolved and particulate organic matter exported during late summer from a glacio-nival river, Zackenberg, Greenland	EGU2020-9776
Michael Bedington	Modelling the impact of changing riverine permafrost input on an Arctic coastal ecosystem	EGU2020-20689
Lutz Beckebanze	Lateral carbon export from polygonal tundra catchments on Samoylov Island, Lena River Delta	EGU2020-8991
Martine Lizotte	From pre-freshet to pre-freeze: a field survey of the fate of organic matter remobilized from the thawing permafrost to the coastal waters of the Mackenzie Delta region	EGU2020-11944
Tina Sanders	Fate and transport of nitrogen in soils, sediment and water of the Lena Delta, Northeast Siberia	EGU2020-21011
Niek Speetjens	Landscape-driven carbon export from small coastal permafrost watersheds	EGU2020-21915
Gwénaëlle Chaillou	Detecting the signature and transformations of water from coastal permafrost thaw in the Beaufort Sea	EGU2020-3094
Oleg Dudarev	Elemental and isotopic signatures of terrestrial organic matter along the Delta coastline of Lena River (Laptev Sea)	EGU2020-12326
Liem Van Nguyen	Mercury and methylmercury along a transect from the Lena river estuary across the Laptev Sea Shelf	EGU2020-13727

Elena Gershelis	Tracing terrestrial organic matter in surface sediments in Laptev Sea and East Siberian Sea: a Rock-Eval pyrolysis approach	EGU2020-13091
Michael Fritz	Burial and origin of permafrost organic carbon in the Arctic nearshore zone	EGU2020-4244
Felipe Matsubara	Degradation of terrigenous organic matter on the East Siberian Arctic Shelf assessed by lipid and lignin oxidation products	EGU2020-19668
Irina Oberemok	Characteristics of organic carbon in surface sediments of Laptev Sea shelf	EGU2020-13305
Örjan Gustafsson	Transport and fate of different components of terrestrial organic matter across the Siberian-Arctic shelves	EGU2020-17595
Birgit Wild	Vulnerability of subsea permafrost organic matter to degradation after thaw	EGU2020-17935
Denis Chernykh	First quantitative estimation of growing methane release from the East Siberian Arctic seas: from a single flare to vast seepage area	EGU2020-22402
Henry Holmstrand	Siberian-Arctic Subsea Permafrost and Methane: Spatial variability and isotope-based source apportionment	EGU2020-21660
Anna Yurchenko	Bacterial oxidation of methane within seeps in the northern Laptev Sea	EGU2020-22421