

Job opportunity: Scientist in Permafrost research (UCLouvain, Belgium)

Required education: Either (i) a Master degree in sciences, bio-engineering or any related field, or (ii) a Ph.D. degree in geoscience, geochemistry or a related discipline.

The [Earth and Life Institute](#) invites applications for a **2-year research position in the LIFTHAW project**. The goal of *LIFTHAW* is to provide a comprehensive assessment of the nutrient mobility response in permafrost regions subject to thawing.

In the Arctic, permafrost thaw in response to warming air temperatures has a profound impact on tundra ecosystems. Changes in vegetation composition, density and distribution have large implications on the Arctic warming and permafrost stability by influencing the albedo, the snow accumulation and the litter decomposition rate. A full grasp of the underlying mechanisms controlling vegetation shift, and the associated effects on Arctic warming, requires assessing the changes in plant nutrient sources upon permafrost thaw. *Progress in the field of mass spectrometry will be used to unravel sources and processes controlling mineral nutrient mobility in thawing permafrost.* A field monitoring in the Arctic will be led at Eight Mile Lake, a site part of a Long-Term Ecological Research program in Healy, Alaska, USA. The expected outcomes are the identification and quantification of the main drivers of mineral nutrient lift upon permafrost thaw: (i) the deep nutrient release by permafrost thaw; and (ii) the rise in water table level contribution to nutrient lift in shallower soil layers. This frontier research crosses disciplinary boundaries between cryospheric sciences and isotope geochemistry. Outreach activities planned include a night at the museum on permafrost in collaboration with an artist and a participation to “printemps des sciences” at UCLouvain.

We welcome applications from early career scientists having either (i) a Master degree in sciences, bio-engineering or any related field, or (ii) a Ph.D. degree in geoscience, geochemistry or a related discipline. We look for a highly motivated researcher with interest in water and soil geochemistry, soil-plant transfer, isotope geochemistry and polar research. Experience with field work, with work in clean lab conditions, and with isotope geochemistry (column chemistry and MC-ICP-MS measurements) is an asset. Successful applicants should be willing to work as part of a diverse and multidisciplinary team, and have written and oral communication skills in English. Job responsibilities include field sampling, autonomous project management, research communication in peer-reviewed publications, integration in a research team, and master student co-supervision. The successful candidate will work under the supervision of [Sophie Opfergelt](#). The target **starting date is as soon as possible and no later than May 1st 2023.**

Interested?

The application should be sent in one single PDF including a motivation letter, a curriculum vitae, contact information for two referees, and if available, publications representative of previous work. **Review of applications will begin on March 15th, 2023** and continue until the position is filled. Applications are accepted by email to sophie.opfergelt@uclouvain.be.