

# MSc Candidate Position Mining Impacts on Peatlands

We are currently seeking an MSc student to take on a research project at the Forest Research Institute of the Université du Québec en Abitibi-Témiscamingue (UQAT) on the environmental record of mining in peatlands.

Northern Peatlands are among the most carbon-rich ecosystems on earth and important carbon sinks in the global carbon cycle. Many critical mineral deposits are located within or near peatlands in Canada. Mining activities therefore pose a potential threat to these ecosystems. Peat deposits provide natural records of how the peatland and its surroundings have changed over time as peatlands continuously accumulate organic matter under waterlogged anoxic conditions, leading to the incomplete decomposition of plant material. In this project, the student will use these records to study how mining activities, particularly dust from mining sites, affect peatlands. For example, inputs of mine dusts can potentially promote but may also inhibit peat growth as mine dusts contain both nutrients and contaminants.

The student will work under the co-supervision of Prof. Carsten Meyer-Jacob (UQAT) and Dr. Eleanor Berryman (CanmetMINING, Natural Resources Canada, Ottawa) and will gain experience in both the university and federal government research facilities. This project involves both field and lab work and aims to characterize the isotopic, geochemical, and mineralogical signatures of mine dust and its impact in mine-adjacent peatlands.

This is a fully funded 2-year position with an anticipated start date in the Fall of 2024. Further details on the MSc program at UQAT (Maîtrise en écologie et aménagement des écosystèmes forestiers) are available at <a href="https://www.uqat.ca/etudes/irf/maitrise-en-ecologie/">https://www.uqat.ca/etudes/irf/maitrise-en-ecologie/</a>.

Start Date: Fall 2024

Financial Support: Scholarship of 21,000\$ per year for 2 years

#### Requirements:

- Bachelor degree or equivalent in Biology, Earth or Environmental Sciences, or related fields

- Field and lab work experience (or interest)
- Ability to communicate in written and spoken English
- Motivation to learn and passion for understanding environmental change and solving environmental issues
- Ability to work independently and in teams



**Application:** For enquiries or to apply, please send an email with the subject line "MSc Project: Mining Impacts on Peatlands" to Carsten Meyer-Jacob (<u>Carsten.meyer-jacob@uqat.ca</u>) and Eleanor Berryman (<u>Eleanor.berryman@nrcan-rncan.gc.ca</u>). Applications should include a statement of interest, a CV, and a copy of transcripts (unofficial transcripts are acceptable).



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### Study in the heart of Quebec's great outdoors

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We'll tailor the visit to your needs and interests!

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