

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 Eleanor Berryman, Ph. D. (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 https://www.uqat.ca/etudes/irf/maitrise-en-ecologie/.

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).



UQAT: HIGHER LEARNING ON A HUMAN SCALE

Study in the heart of Quebec's great outdoors

Set in a region where wilderness, lakes, and forest stimulate creativity and foster talent, UQAT is different by nature.

With 22,000 lakes and endless miles of boreal forest, Abitibi-Témiscamingue is a dynamic place full of creative people, new ideas, and bold projects. See what our students have to say!

Renowned professors with time for you

The professors at UQAT are recognized experts in their fields and typify quality teaching. With a ratio of one professor or lecturer to every twelve students, UQAT offers a personalized educational environment where you will fit right in. Knowing you can always count on your professors to be available—now that's a real advantage.

A world of high-calibre research

Research activities at UQAT are producing remarkable results in a range of scientific fields. According to the 2020 independent firm RE\$EARCH Infosource Inc., UQAT is ranked among the top 3 Canadian universities in terms of research intensity per professor, among universities mainly active in the undergraduate category (full-service universities, excluding universities with medical schools).

With \$16.2 million in research per year and state-of-theart laboratories, UQAT is an exceptional environment for graduate students. Many of our students have achieved excellence in their chosen fields and many of our professors have been recognized for the quality of their research and their innovative spirit. Find out more

STUDENT FOR A DAY

One visit is enough to know that UQAT is a first-class institution. The Student for a Day program is the best way to learn more about UQAT, visit the campus that interests you, and meet professors and students.

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

Find out more

