

POST DOCTORAL RESEARCH FELLOW

Net Ecosystem Carbon balance of a boreal peatland in northern Quebec using a set of continuous high definition measurements

The GEOTOP at the Université du Québec à Montréal (UQAM) is seeking a talented Postdoctoral Research Scientist with a PhD trained in biogeochemistry, micrometeorology, ecology or any other related field to research peatland carbon cycling dynamics.

The selected candidate will collect and analyze eddy covariance and automated soil flux chamber measurements conducted in a boreal peatland in eastern Québec (50.52N; 63.21W). Outcome expected from this research is to estimate the three-year net ecosystem carbon budget and evaluate the relative importance of abiotic and biotic controls on the temporal and spatial variability in carbon dioxide and methane fluxes. Two years of data have already been collected. The selected candidate will work in close collaboration with a PhD student investigating the lateral export dissolved organic carbon (DOC) from the peatland and a MSc student examining the peatland hydrological budget. Long-term carbon accumulation and C stock have already been produced from a previous MSc project.

The postdoctoral project is part of a larger research program that aims at calculating the watershed-scale carbon budget with the goal to quantify the carbon cycle impact of from hydropower facility development.

The candidate will join a vibrant research group that includes undergraduate, MSc and PhD students as well as other postdoctoral researchers and international collaborators directly involved in the research project and program.

Minimum Degree Required:

- PhD or equivalent doctoral degree

Key competencies:

- Excellent analytic skills
- Self-motivated with strong interest in studying micrometeorology, biogeochemistry and ecology of peatlands
- Effective communication and writing skills and record of publication in peer-reviewed journal (s)
- Ability to work independently and collaboratively

Preferred qualification:

- Fieldwork experience, preferably in peatlands
- Experience in carbon fluxes measurements
- Experience with quantitative data analysis, preferably with the eddy covariance technique

The position is available for 18 months, starting as soon as possible. Competitive salary offered.

Interested candidates are invited to submit a full CV, names and contact of three referees along with a cover letter that explain their past research experience and proficiency in relation to the research project.

For more information, please contact professor Michelle Garneau (garneau.michelle@uqam.ca).