Athabasca University

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Graduate and Undergraduate Student Research Opportunities:
Hydrology in the Boreal forest

Start Date: May 2024 for field work (Fall 2024 Graduate program start).

Overview: Multiple upcoming fully funded opportunities are available for Graduate students (both PhD and MSc) and Undergraduate students to work on one of several research projects broadly related to hydrology in the Boreal forest. These include working within natural wetlands and/or wetlands altered by linear disturbances (e.g., mineral roads, seismic lines) around Fort McMurray, AB. The successful candidates will work with Dr. Scott Ketcheson (at the University of Calgary or University of Waterloo); interested applicants can read more about his research here: https://www.auhydrology.com.

The following opportunities are available, with the specific scope of each flexible depending on the skills and interest of the candidate:

PhD: In situ infrastructure and wetland hydrology. This PhD student opportunity involves using eddy covariance and other hydrological techniques to evaluate the influence of a mineral road on several different wetland types, at a partially constructed in situ lease north of Fort McMurray. Experience with eddy covariance techniques is strongly preferred.

MSc: Hydrology of headwater catchments. This research project would involve studying wetlands and streamflow within the Stony Mountain Headwater Catchment Observatory.

BSc: Field research assistants. One position is for a NSERC USRA, so applicants should be undergraduate students currently enrolled in a Canadian University, preferably in an Environmental Sciences program, and must meet the eligibility requirements of the NSERC USRA program (cumulative average of at least B-).

Skills and Interests: Ideal candidates will be either enrolled in or a recent graduate of an Environmental Sciences program, with an interest in environmental sciences, water and the outdoors. Experience conducting fieldwork and relevant coursework in Hydrology are preferable. Applicants must have a strong academic background. Details around the specific project will be discussed with interested individuals based on skillset, fit and individual preference.

Interested individuals are encouraged to reach out to Dr. Scott Ketcheson at sketcheson@athabascau.ca to discuss specific opportunities.

Athabasca University and the research team are committed and seek to support equity in employment and research opportunities. We strongly encourage applications from Indigenous people, people of colour, people with disabilities, 2SLGBTQ+ people, women, and other historically marginalized groups. Applicants are welcome, but not required, to self-identify.