

## **Permafrost Mapper**

We currently have an opportunity to join Wilfrid Laurier University as a Permafrost Mapper. The position will take on a role of coordinating permafrost/terrain mapping and permafrost data compilation to support ongoing research projects in the NWT.

The Permafrost Mapper will be part of a highly productive team of university and government researchers focused on monitoring changing landscapes and permafrost conditions in the Northwest Territories (NWT). The primary activities will involve coordinating the development of community and Territory-wide mapping products describing the distribution of permafrost landforms and features indicative of thaw or sensitive terrain. The incumbent will work with research partners from the NWT and abroad to coordinate an NWT wide thermokarst mapping project, compile existing environmental and geological datasets relevant to geohazards mapping, provide field validation of mapping as well as assist with data analysis and interpretation.

The position will be based at Laurier's Yellowknife office and work closely with the NWT Geological Survey and NWT Centre for Geomatics. The incumbent will also participate in field-level assessments at various northern locations. This position will be required to travel and participate in fieldwork that may include limited time in remote locations.

### **Accountabilities:**

#### *Mapping, information management and analysis:*

- Works with research partners to develop and implement terrain mapping methodologies;
- Organizes, structures and summarizes geospatial datasets to support mapping initiatives using various GIS tools;
- Organizes, structures, and summarizes geotechnical data and associated metadata, in the form of spreadsheets, databases, and reports using appropriate software;
- Efficient in use of spatial analysis programs such as Arc GIS as required;
- Organizes, analyses and summarizes geospatial and geotechnical data
- Efficient use of Excel and Word;

#### *Fieldwork:*

- Conducts fieldwork to validate remote sensing data;
- Works in field conditions with collaborating partners, including community members and partnering institutions;
- High degree of consideration for self and team safety in remote northern field environments.

#### *Administrative:*

A self-directed individual with the desire to work in the Canadian North (Yellowknife) and interact with multiple project partners including academics, northern governments and indigenous communities as necessary;

- Helps in shaping and designing project goals;
- Strong interpersonal skills for interactions with research and northern partners;
- Assists in preparing reports, presentations, manuscripts for peer review, proposals;
- Collaborates with other technicians, students, principal investigators and partner organizations.

*Qualifications:*

- MSc in geographical/GIS/geophysical sciences with background in permafrost, landscape ecology or remote sensing in northern environments;
- At least two (2) years' experience in mapping and data management; experience in permafrost science is an asset;
- Demonstrated experience in management of large datasets, development of associated metadata and database development and management;
- Self-motivated and independent worker;
- Proven ability to work in a team environment with Principal Investigators, undergraduate and graduate students, as well as other scientists, partner organizations and community members;
- Positively interact and work with members of communities and partner organizations;
- Strong analytical and computer skills;
- Interest in and ability to conduct fieldwork in remote northern environments;
- Experience in writing lab reports and research papers, and making presentations;
- A valid G driver's license is required and willingness to travel and work in northern locations;

**To apply:**

Please send an up-to-date CV, a covering letter describing your relevant experience and interest in the position, and a list of references to Dr. Jennifer Baltzer ([jbaltzer@wlu.ca](mailto:jbaltzer@wlu.ca)) or Dr. Steve Kokelj ([Steve\\_Kokelj@gov.nt.ca](mailto:Steve_Kokelj@gov.nt.ca)). Review of applications will begin on December 8, 2018 and continue until the position is filled.