



## **Faculty Researcher – Natural Resources (Hyperspectral Imaging for Geological Materials)**

Location: St. John's

Job Opening ID: 11106

Full-Time, Temporary

Commencing: March 31, 2020 until August 31, 2023

Deadline to Apply: January 12, 2020

### **PUBLIC POSTING**

#### **Job Information**

**As a result of funding to support College of the North Atlantic's (CNA) acquisition of a world-class hyperspectral imaging instrument, the College is initiating applied research programs with industry partners on the use of Hyperspectral Imaging technology to support the natural resources sector in the province of Newfoundland and Labrador and throughout Canada. The Hyperspectral Scanning Unit (HSU) will undertake the analysis of geological materials for the natural resources sector (e.g., drill core), and also utilize the vast amounts of material from various historical deposits which are available for study from the province of Newfoundland and Labrador's drill core storage facilities.**

**DUTIES:** The Faculty Researcher, working under the supervision of the Associate Vice-President – Applied Research and Innovation (or designate), will lead and conduct strategic Applied Research and Development (R&D) projects within the natural resources sector utilizing advanced hyperspectral imaging technology. Particular emphasis will be on close-range measurements (proximal sensing) for the analysis of geological materials (samples, drill core, mine wall). The Faculty Researcher will be responsible for the design and on-going execution of applied R&D projects, including problem identification; development of project plans, methodologies and schedules; proposal writing; workflow monitoring and control; project closeout and the required liaison with relevant stakeholders. The researcher will also provide guidance to students and staff who may be hired to support research projects. Travel within the country will be required.

**QUALIFICATIONS:** The Faculty Researcher will have a strong background in both geology and hyperspectral imaging, ideally acquired through completion of at least a Master's Degree in Earth Sciences, Geology, Imaging Spectroscopy or a related field. Further qualifications include: a strong background in mineral resources with proven expertise in hyperspectral analysis of geological materials; knowledge of mineralogy, mineral chemistry, and spectral response of various minerals; and experience in a research setting. A high degree of proficiency in the development and/or use of software for hyperspectral data analysis, and familiarity with the use of hardware for hyperspectral data acquisition are also required. Specifically, the successful candidate must have a demonstrated knowledge of hyperspectral imaging systems and proficiency using techniques, algorithms, and spectroscopic analysis

methods required for hyperspectral image processing related to obtaining mineralogy, mineral chemistry, or other physio-chemical parameters in geological materials. An equivalent combination of experience and training may be considered.

Well-developed oral and written communication, team-building, and project management skills, combined with the ability to establish and maintain effective work relationships, are essential. It is also vital that candidates have a clear understanding of the unique role Canadian colleges play in support of Canada's innovation ecosystem.

**SALARY:** Commensurate with qualifications and experience in accordance with the College of the North Atlantic Faculty Collective Agreement.

College of the North Atlantic is an Equal Opportunity Employer.

The successful candidate will be required to provide a recent Certificate of Conduct.

Please apply online complete with resume at [www.cna.nl.ca](http://www.cna.nl.ca). Names of three professional references including a current supervisory reference as well as original transcripts will be required as part of the interview process.

Candidates must clearly demonstrate in their resume that they meet all of the required qualifications. Failure to do so may result in a candidate being screened out of the competition.

For questions regarding this job opening, please contact Iris Phillips, Human Resources Consultant at [iris.phillips@cna.nl.ca](mailto:iris.phillips@cna.nl.ca) or by phone at (709) 466-0254.