



Department of
Geology



In partnership with Clean Air Metals Ltd the Geology Department at Lakehead University is looking to recruit a Postdoctoral Fellow and two MSc students to investigate the mineralized intrusions of the Thunder Bay North (TBN) igneous complex, part of the 1.1 Ga Midcontinent Rift, and compare them to barren and weakly mineralized intrusions.

Over the next three years the project will investigate the intrusive units of the Thunder Bay North property by: 1) Characterizing the petrology, geochemistry and geochronology of the various intrusive units found within the property, 2) Characterizing the geochemistry and petrography of the sulfide mineralization of the Escape Lake and Current Lake intrusions and 3) Integrating new mineralogical and geochemical data to build a holistic model for the property and establish vectors towards mineralization within and around the intrusions that will aid in exploration for addition Ni-Cu-PGE and massive sulfide resources.

The research team is led by Dr. Pete Hollings in collaboration with Dr. Derek Wilton from Memorial University, and Dawn Evans-Lamswood and Allan MacTavish from Clean Air Metals. We are looking for enthusiastic, passionate and talented researchers to join our team to unravel the complex petrogenesis of the Midcontinent Rift.

Please contact Dr. Hollings at peter.hollings@lakeheadu.ca if you are interested in joining our research team.

***For more information contact: Dr. Peter Hollings, Department of Geology, Lakehead University,
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Email: peter.hollings@lakeheadu.ca

Web page: <http://geology.lakeheadu.ca>

Postdoctoral Fellow position

This is a three-year position and will involve characterization of the sulfide phases at the Current Lake intrusion which has been the subject of extensive drilling with over 600 holes, as well as outlying intrusions. The PDF will integrate the geochemical and mineral chemistry data developed in this project with existing data held by Clean Air Metals Inc. to investigate the nature of the dynamic system of the Thunder Bay North igneous complex in order to identify possible feeder zones and the nature of the magmatic flow within the conduits. The PDF will also help oversee the MSc student research projects and will create a positive, equitable and inclusive environment.

The successful candidate will have completed a PhD in a related field and will have a strong background in igneous petrology and Ni-Cu-PGE mineralization. The successful candidate will receive a stipend of up to CAN\$40,000 per year for three years.

MSc opportunities

MSc #1 will target the poorly understood Lone Island, O25 Zone and Greenwich Lake intrusions with the goal of relating them to the main mineralized intrusions on the property and the MCR in general. The project will involve sampling of drill core and surface exposure of the intrusive units and then characterizing those samples through a combination of petrography, whole rock geochemistry, U-Pb geochronology and radiogenic isotopes.

MSc #2 will characterise the geochemistry and petrography of the sulfide mineralization of the Escape Lake intrusion through a combination of detailed petrography and SEM-MLA to characterise textural relationships within the samples, mineral chemistry through a combination of EPMA and LA-ICPMS analysis and in-situ S isotopes of sulfide phases.

Both students will be expected to work closely with the industry partners at Clean Air Metals Ltd. Suitable candidates for the MSc opportunities will have a strong background in igneous petrology and should have completed an Honours degree in Geology. The successful candidates will receive a stipend of up to CAN\$20,000 per year for two years as well as a Graduate Assistantship valued at approximately \$11,000 per year. Candidates may also be eligible to apply for other competitive grants and scholarships. These projects can start immediately.

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The Geology Department at Lakehead University is a small but dynamic department with six faculty and a strong focus on hard rock geology. The Department offers Undergraduate and Masters degrees in geology and environmental science. Courses offered by the department place a strong emphasis on 'hands-on' geology reflecting our location within the Canadian Shield.

Lakehead is a comprehensive university with a reputation for innovative programs and cutting-edge research. With campuses located in Thunder Bay and Orillia, Lakehead has approximately 10,000 students and 2,160 faculty and staff. With an emphasis on collaborative learning and independent critical thinking and a multidisciplinary teaching approach, Lakehead offers a variety of degree and diploma programs at the undergraduate, graduate, and doctoral levels through its ten faculties, including Business Administration, Education, Engineering, Health and Behavioural Sciences, Natural Resources Management, Science and Environmental Studies, Social Sciences and Humanities, Graduate Studies, the Northern Ontario School of Medicine (West Campus) and the Bora Laskin Faculty of Law. For further information, please visit: www.lakeheadu.ca.

Lakehead University is committed to creating a diverse and inclusive environment and welcomes applications from all qualified individuals including women, racialized persons, Indigenous people, persons with disabilities and other equity-seeking groups. Lakehead University has made a commitment to equity, diversity and inclusion in its 2019-2024 Equity, Diversity, and Inclusion Action Plan [Click [here](#) to download an accessible copy of the Equity, Diversity and Inclusion Action Plan 2019-2024]. This plan includes the goal of recruiting and retaining a diverse student body and workforce that reflects the communities Lakehead University serves.

Lakehead University actively encourages applications from individuals representing equity seeking groups, including women, members of racialized/visible minorities, Indigenous peoples, persons with disabilities, persons of any sexual orientation, gender identity or gender expression -to apply. All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority.

Applicants who require accommodations for the interview process should contact Dr. Hollings (peter.hollings@lakeheadu.ca)

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