



UNIVERSITÉ
LAVAL

Faculté des sciences et de génie
Département de géologie et de génie géologique

Metal Earth Postdoctoral Fellow Position

The first francophone university in North America, Université Laval is amongst the top-ranked comprehensive universities in Canada. Recognised for its leadership and high achievements in education and research, it offers a convivial and diverse environment in the heart of Quebec City, a UNESCO World Heritage City. The university community counts amongst its ranks over 45,000 students and offers an engaging work environment which was recently ranked by Forbes magazine as one of Canada's best employers.

With CAD \$104 million in funding provided by the Canada First Research Excellence Fund and through strategic partnerships led by Laurentian University, with 4 Canadian universities, 6 government geological surveys and 3 international research centres, Metal Earth is the largest ever mineral exploration research project undertaken in Canada.

We seek applicants for a PDF position:

Dating and sources of auriferous fluids along the Destor-Porcupine Fault Zone.

The Metal Earth team has determined the age of gold mineralization and source of sulfur in the Val-d'Or vein field. It has also undertaken detailed research on fluid flow patterns along the Cadillac-Larder Lake Fault Zone (CLLFZ), from Val-d'Or to Kirkland Lake. The Destor-Porcupine Fault Zone (DPFZ) is associated with the largest gold deposits of the Abitibi but the timing of auriferous fluid flow and source of sulfur in the gold deposits remains undetermined. In comparison with the CLLFZ, the fluid flow patterns in relation to the gold endowment are not documented.

Objectives: 1) date gold events by U-Pb monazite and xenotime that are coeval with the gold assemblage; 2) assess the source of sulfur in sulfides coeval with gold using in situ multiple sulfur isotopes; 3) document using H-O isotopes the fluid flow patterns along the DPFZ in relation to gold endowment.

The PDF will contribute to supervision of graduate students, within a team integrated with other researchers of the Metal Earth program. The research will include field and laboratory work. The PDF candidates must hold a PhD since a maximum of 3 years at the start of the position. Experience in Archean terrane geology, and strong fundamental and laboratory expertise are required in areas specific for each PDF position. The 2-year positions will start as soon as possible.

Salary will be determined according to the collective agreement in place at the time of hire. Salary range is from \$40 000 to \$55 000 per year plus benefits.



Candidates should prepare a complete candidacy package which includes: (1) a long-form CV that includes publications and research achievements, (2) academic transcripts, (3) letter of motivation, (4) names and contact details of three references. The full application package, should be sent electronically as a PDF document to

explomin@ggl.ulaval.ca

Applications will be accepted until February 29, 2024.

Université Laval, through its commitment to the promotion of diversity, invites all qualified applicants to submit their candidacy. In particular, we invite women, members of visible minorities, members of ethnic or indigenous groups and differently-abled people to submit their candidacy. Priority will be given to those who are Canadian citizens or who are permanent residents of Canada.