

# PhD project on the Metallogeny of the Upper Beaver Cu-Au deposit

We are seeking a highly motivated candidate to carry a PhD project to understand the regional magmatic and tectonic evolution of the Upper Beaver Cu-Au deposit (Larder Lake, Ontario). This Cu-Au deposit in the Abitibi subprovince displays unusual mineralogical (e.g., chalcopyrite-magnetite) and structural (veins and breccias) hosted in an altered intrusive complex. The understanding the genesis of the Upper Beaver Au-Cu deposit and the controls for its localisation and formation will enable predictive targeting in the Archean terranes of the Superior Province to generate new exploration opportunities for industry. This project is in conjunction with four additional PhD and MSc projects which have commenced.

Specifically, the PhD candidate will investigate the regional magmatic and tectonic evolution of the Upper Beaver deposit area, with particular emphasis on the origin of the Upper Beaver intrusive suite origin, its magmatic evolution, and its geochronology. The study will apply a suite of advanced methods including litho geochemistry, radiogenic isotopes, melt inclusions and in situ mineral chemical and isotope composition (e.g., zircon, apatite). The PhD project will involve several field mappings campaigns. Previous experience in Archean terranes mapping, U-Pb zircon geochronology (LA-ICP-MS and/or TIMS), and magmatic petrology will be an asset. The candidates will be encouraged to conduct original research and to present it in national and international conferences.

Further, the PhD candidate will integrate a research program carried by a team of researchers from Université Laval (*Profs. G. Beaudoin, C. Dupuis, C. Guilmette, C. LaFlamme, B. Rottier*), Laurentian University (*Profs D. Kontak, B. Lafrance, R. Sherlock, R. Smith*) and Agnico-Eagle Mines (*Drs O. Coté-Mantha, O. Grondin, M. Simard*). The PhD candidate will work in close cooperation with the Agnico Eagle Mines exploration team at the Upper Beaver deposit.

Fluency in spoken and written English is mandatory and proficiency in French is beneficial, but not required. The PhD project is supported with a research scholarship of 25 000\$ per year for up to 4 years. The selected candidate will be enrolled at the University Laval (Québec) with a strong expected collaboration with Laurentian University (Sudbury). Expecting starting date of the project will be between February and April 2021.

Please submit your cv, transcript and motivation letter, BEFORE December 8 2020, to:

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