Student Bursaries: Lisa Hart

Imperial College London and the Natural History Museum, London

The SGA bi-annual conference was held in Quebec City on 20-23 August 2017. With the help of a bursary I was able to take part in the SGA 2017 post-conference field trip visiting precious- and base-metal deposits of the southern Abitibi greenstone belt, Superior Province, Canada. The excursion was led by several experts in the geology and metallogeny of the region, including Patrik Mercier-Langevin (GSC-Qc), Jean Goutier (MÉRN), Benoit Dubé (GSC-Qc), K. Howard Poulsen (Consultant), Michel Houlé (GSC-Qc), Stephane de Souza (UQAM) and Pierre Pilote (MÉRN). Lectures were given by each field trip leader each evening to set the scene for the following day’s activities, and to give the geological background behind each location. Over the week-long trip we visited world class examples of well preserved and exposed komatiite flows at Pyke Hill and at Spinifex Ridge. We also investigated the Cadillac-Larder Lake fault transect, and discussed its potential importance in the occurrence of gold mineralisation across the southern Abitibi gold camp. In addition to this, we visited typical VHMS deposits of the region, for example Potter Cu-Zn-Co-Ag Mine where we initially looked at the host lapilli stone volcaniclastic unit as it crops out at surface, followed by intercepts of drill core where the same unit is mineralised at depth. One of the trip highlights was going underground at the Laronde Au Mine, where we descended 2.9 km below the surface to see the high grade VHMS lens in situ. On the last day of the trip we visited the open pit at the low-grade, high tonnage Canadian Malarctic Au Mine. Throughout the week, I collected a representative set of samples that cover the full range of alteration and metamorphic assemblages associated with mineralisation in the district; I plan to compare these samples to the typical porphyry alteration styles that I have studies in detail during my PhD project. Overall this was an excellent trip, it was extremely well organised and I learnt an incredible amount in only a week. It was a great experience and I am grateful to have been able to attend.

Canadian Malarctic Mine
Historical Potter Mine