

**Sabina Bergelt**, University of Waterloo, Waterloo, Ontario, Canada for their project: *Characterizing battery grade graphite in metacarbonate and metasilicate host rocks in the Grenville.*

Sabina is a first year Master's student at the University of Waterloo in Canada, and is advised by Dr. Chris Yakymchuk. It was at the University of Waterloo where she also obtained her undergraduate degree in Earth Science that she developed a passion for geology and field work, and a deep appreciation for research with practical applications for industry. Her undergraduate research focused on graphite, specifically its use in batteries, and is continuing with this research into her graduate career. This project combines optical petrology, scanning electron microscopy, and Raman microscopy to determine the structure and composition of flake graphite in different host rocks. This research aims to help further the understanding of graphite deposits for use in green technology.

Along with studying graphite, Sabina is also working on a project involving structural geology and gold. This project looks at late transverse faults and their spatial, geochemical, and fluid-related dynamics with earlier regional deformation to understand their impact on gold mobilization and mineralization. When not in the lab or in the field, Sabina enjoys live music, hiking, and going to local movie theatres.

With the help of the Lipman Student Research Grant, Sabina will be able to fund laboratory costs for Raman microscopy work, an integral part of the project, that will provide insights into the crystalline structure of the graphite and its purity. Sabina is honoured and deeply grateful to the Howard and Jean Lipman Foundation as well as the Geologic Society of America for helping to fund this research.

