

Jie (Amber) Yu, University of Alberta, Edmonton, AB, Canada for her project: *Archean biogeochemical N cycle and nutrient availability recorded by 3.5Ga Dresser Formation basalts.*



Amber is a third-year PhD candidate at the University of Alberta, supervised by Dr. Long Li. Her research broadly focuses on reconstructing paleoenvironment using nitrogen isotopes. Her thesis focuses on applying nitrogen isotope signatures preserved in altered seafloor basalts to understand the deep marine nitrogen cycle on Early Earth.

One of her current projects investigates the Archean (bio)geochemical nitrogen cycle and nutrient availability recorded in the 3.5 Ga Dresser Formation basalts of the Pilbara Craton, Australia. She is conducting an integrated study of petrology, major and trace elements, Sr-Nd-Pb and N-O isotopes on the Dresser basalts.

The financial support provided by the MGPV Division of the GSA will allow for isotope analyses to this project.

Amber received a BSc Honors in Geology from the University of Alberta. At her fourth year, she completed a senior thesis on the stable isotope and nitrogen characteristics of Cr-pyropite included diamonds from Gahcho Kué Mine under the supervision of Dr. Thomas Stachel. Following graduation, she worked at the Guangzhou Institute of Geochemistry, Chinese Academy of Sciences (China), where she conducted research on clay minerals with Dr. Hongping He.

Outside of research, she enjoys doing arts and cooking. She is also actively involved in science outreach and service, including volunteering with Women in Scholarship, Engineering, Science, & Technology (WISEST).