

Taran Bradley, University of Georgia, Athens, Georgia, USA for their project: *Estimating Li clay distribution using remote sensing in the Cappadocia Volcanic Province of Türkiye.*

Taran is currently a PhD Student in the Department of Geology at the University of Georgia, working under Dr. Paul Schroeder. His research focuses on the use of satellite multispectral data and machine learning to map 1) alteration mineral assemblages in the Uzon Caldera of Far East Russia and 2) Li-bearing clay mineral assemblages in the Cappadocia Volcanic Province (CVP) of Türkiye. Both projects combine in-situ Infrared spectroscopic and X-Ray Diffraction ground truthing data to validate these mineral maps. The Uzon Caldera project attempts to determine the accuracy of remotely mapping local surficial alteration and its applicability in both terrestrial and Martian environments. The CVP project aims to provide a methodology that can be used globally in countries where Li is considered a critical mineral and there is limited access to multispectral or hyperspectral remote sensing data.



Taran received both his M.S. (2020) and B.S. (2017) in Geology at South Dakota School of Mines and Technology. His previous research focused on using infrared spectroscopy to estimate white mica chemistry in metamorphic terranes in Northwestern Türkiye and the Black Hills of South Dakota, respectively.