

Jinqi Wu, Harvard University, Cambridge, Massachusetts, for his project *Ti Isotope Constraints on Alkaline-to-Peralkaline Differentiation in the Oslo Rift (Oyangen Caldera)*.

Jinqi Wu is a Ph.D. student in the Department of Earth and Planetary Sciences at Harvard University. His research interests lie broadly in isotope geochemistry and cosmochemistry, with a particular focus on using non-traditional stable isotopes to understand magmatic differentiation and the chemical evolution of Earth and planetary materials. His current work centers on developing high-precision titanium isotope measurements and exploring how Ti isotopes record geological processes. He approaches these questions by pairing laboratory measurements with petrologic observations and quantitative models.

His Lipman Research Grant project investigates Ti-isotope behavior during alkaline-to-peralkaline magmatic differentiation in the Oyangen Caldera of the Oslo Rift. Peralkaline magmas are an important but poorly studied endmember in Ti-isotope geochemistry. The project will apply high-precision Ti isotope analyses to a basalt-to-trachyte/syenite suite and combine the results with major- and trace-element geochemistry, Sr-Nd isotopes, Fe-Ti oxide constraints, and petrologic modeling. The goal is to understand how oxide crystallization, redox conditions, fractional crystallization, and crustal interaction influence Ti-isotope fractionation as these magmas evolve. Support from the Lipman Student Research Grant will be used to establish a robust measurement workflow and complete analyses of the Oyangen suite.

More broadly, Jinqi is interested in developing isotope tools that can be applied across terrestrial and planetary materials, from magmatic processes within Earth to questions concerning planetary differentiation and the early evolution of the Solar System. He hopes to pursue research that combines careful analytical development with fundamental questions in geochemistry and cosmochemistry.

