

Joy Foluso, University of California, Davis, (UC Davis), Davis, CA for her project *The Investigation of the Concentration and Isotopic ratios of CO₂ in fluids as a Proxy of Mantle Processes in Rifting at Uganda, located on the Western branch of the East African Rift System (EARS)*.



Joy Foluso is currently a Ph.D. student in the Earth and Planetary Sciences department at the University of California, Davis, working with Dr. Eliot Atekwana. Her Ph.D. research focuses on assessing how the Albertine rift located in Uganda in the Western Branch of the East African Rift System (EARS) is developing from magma-rich and magma-poor induced tectonism. She aims to assess mantle driven rifting using the isotopic composition of CO₂ in hot springs and estimate mantle CO₂ flux from rifting to the atmosphere. Funding from the GSA Lipman Student Research Grant will assist in funding for part of the

flight to Uganda, accommodation, and hiring a tour guide for the sampling event taking place in August 2022. The funding will help ensure that she is able to collect representative samples that will be useful in obtaining the chemical and isotopic signatures of magmatic CO₂ ($\delta^{13}\text{C}_{\text{DIC}}$ and $\delta^{13}\text{C}_{\text{CO}_2}$) in both the surface water reservoirs (e.g., hot springs) and soil gases.

Joy grew up in Ibadan, Nigeria, and graduated from the University of Ibadan with a B.S in Geology in 2016 and then proceeded in obtaining her M.S in Geology from the University of Oklahoma in 2021. When not in the field or in the lab performing experiments, Joy enjoys spending quality time with her fiancé, family, and friends.