



Mallory E. DeCoster received a B.S. in Chemistry from the University of Denver (Denver, CO) in 2011, and an M.S. in Remote Sensing Intelligence from the Naval Postgraduate School (Monterey, CA) in 2012. After her masters, she worked in the intelligence community within the department of defense in the development and application of remote sensing tools to the warfighter. She received her Ph.D. in Mechanical and Aerospace Engineering at the University of Virginia (Charlottesville, VA) in May 2021. Her experimental research focused on nanoscale thermal transport processes in functional materials such as thermoelectric semiconductors, solution-processed polymers, and metal-organic frameworks. As a senior scientist at the Johns Hopkins University Applied Physics Lab, she specializes in spectroscopy, remote sensing, optical thermometry, high-temperature material modeling, and hypervelocity impact modeling. After focusing on nanoscale phenomena for half a decade, she has turned her focus to the planetary scale with interests spanning on-orbit and lunar manufacturing processes to planetary scale hypervelocity impacts, where she serves as a co-investigator on the NASA Double Asteroid Redirection Test (DART) mission.