

Prof. Leah G. Dodson, PhD



Bio:

Leah Dodson is an Assistant Professor in the Department of Chemistry & Biochemistry at the University of Maryland. She started her independent career at Maryland in 2019, where her group studies the reactivity, spectroscopy, and dynamics of exotic chemical systems at low temperatures (down to 10 K) inspired by discoveries in astrochemistry, as well as atmospheric and energy sciences. Her research is supported by external funding from the National Science Foundation (CSDM-A), the American Chemical Society's Petroleum Research Fund (DNI), the National Aeronautics and Space Administration (via a MUREP award to nearby Prince George's Community College), a U.S.-Israel Binational Science Foundation Start-Up award (in collaboration with Prof. Yuval Shagam), and a Department of Energy Early Career award.

Dodson received her BS in Chemistry (2010) at Case Western Reserve University where she worked with Carlos Crespo-Hernández to study the photodegradation of pharmaceutical pollutants in natural water sources. Her undergraduate research at Case was supported by two summer undergraduate research fellowships (SOURCE). She then moved to the California Institute of Technology where she obtained her PhD in Chemistry (2016) with Mitchio Okumura studying the spectroscopy and kinetics of reactive species in atmospheric and combustion systems. Her doctoral work capitalized on collaborations with multiple government labs, and she took several trips to the Advanced Light Source in Berkeley, CA to work with David L. Osborn and his team from Sandia National Laboratories studying photoionization spectroscopy and reaction kinetics via multiplexed synchrotron-based approaches. Her graduate work was supported by two research fellowships from the EPA (STAR) and Sandia (Campus Executive). After completing her degree, she moved to Colorado where she was a NIST NRC Postdoctoral Fellow working with J. Mathias Weber to develop cryogenic ion spectroscopy techniques at JILA. A distinguished speaker, Dodson was awarded the Miller Prize, an award given in honor of noted molecular spectroscopist Prof. Terry A. Miller to a recent PhD who gave the best presentation at that year's International Symposium on Molecular Spectroscopy. Originally from Pennsylvania, she enjoys being back on the East Coast where the tree leaves change color in the Fall, though she misses the vineyards of California and the hikes with real elevation changes in Colorado.