INFRARED SPECTROSCOPY OF RADICALS IN SUPERFLUID HELIUM DROPLETS

JEREMY M. MERRITT and ROGER E. MILLER, *Department of Chemistry, The University of North Carolina at Chapel Hill, Chapel Hill, NC 27599*.

Recent progress in the formation and spectroscopic identification of ”radical” van der Waals complexes formed in superfluid helium droplets will be presented. Evidence for chemical reactions inside the droplets will be shown in the form of atomic bromine recombination. Important implications into the future of using HENDI (HElium NanoDroplet Isolation) spectroscopy to study chemical reactions in situ will also be discussed.