

## HELIUM NANODROPLET ISOLATION SPECTROSCOPY OF NO<sub>2</sub> AND VAN DER WAALS COMPLEXES

ROBERT R. FEHNEL, KEVIN K. LEHMANN, *Department of Chemistry, University of Virginia, Charlottesville VA, 22904-4319.*

We will report the infrared laser spectra of NO<sub>2</sub>, NO<sub>2</sub>-N<sub>2</sub>, NO<sub>2</sub> - H<sub>2</sub>O and NO<sub>2</sub> - O<sub>2</sub> complexes using Helium Nanodroplet Isolation (HENDI) Spectroscopy. These molecules were excited using an ARGOS cw PPLN OPO (Aculight) in the 3.2 - 3.9 μm spectral window and we excited the  $\nu_1 + \nu_3$  transition of NO<sub>2</sub>.