

MULTIPHOTON IONIZATION SPECTROSCOPY OF NO MOLECULE EMBEDDED IN LIQUID HELIUM DROPLET

ELENA POLYAKOVA, DANIIL STOLYAROV and CURT WITTIG, *Department of Chemistry, University of Southern California, Los Angeles, California 90089.*

The Multiphoton Ionization spectrum of NO molecule trapped inside of the helium droplet was recorded for the first time in the UV-visible range. This spectrum shows severe broadening due the strong interaction of NO with helium superfluid environment. The Time of Flight spectra show the formation of NO^+ (He_N) clusters with $N = 0\dots 40$.