INFRARED SPECTROSCOPY AND MOLECULAR DYNAMICS IN OC-HI

R. GARNICA, Z. WANG, A. I. MCINTOSH, R. R. LUCCHESE and J. W. BEVAN, *Department of Chemistry, Texas A&M University, College Station, Texas 77843*.

The rovibrational analysis of the ν_1, HI stretching vibration in OC-HI has been completed giving the following molecular constants: $\nu_0 = 2228.3195(2)\ cm^{-1}$, B' = 890.73(3) MHz and Dj' = 2.48(3) kHz. Hot bands and combination bands associated with both the previously assigned ν_2, OC stretching vibration and the ν_1 vibration have also been analyzed. These results will also be presented and interpeted in terms of the molecular and associated tunneling dynamics of this complex.