

## ROVIBRATIONAL SPECTROSCOPY OF CO<sub>2</sub>-CS<sub>2</sub>

C. DUTTON, R. EIKEY, R. A. BEAUDET , *Department of Chemistry, University of Southern California, Los Angeles, CA 90089-0482.*

The absorption spectrum of the weakly bound cluster CO<sub>2</sub>-CS<sub>2</sub> has been observed by probing the  $\nu_3$  asymmetric stretch of CO<sub>2</sub> near 2350 cm<sup>-1</sup>. Clusters were formed by supersonic expansion of a mixture of CS<sub>2</sub>:CO<sub>2</sub> in a 2:1 ratio, minimizing higher order clusters, in He as the carrier gas. Etalon, reference and signal spectra were recorded simultaneously using a transient digitizer and a 386 PC. Spectral analysis indicates the dimer has a slipped parallel configuration. The structure will be discussed and compared to ab initio results as well as to other CO<sub>2</sub> complexes.