THE ROTATION SPECTRA OF METHYL MANGANESE PENTACARBONYL COMPLEX. [a]

CHAKREE TANJAROON, AND STEPHEN KUKOLICH , *Department of Chemistry, University of Arizona, Tucson, AZ 85721*.

Methyl manganese pentacarbonyl is an important organometallics complex used for modeling migration/insertion reactions. We have obtained the microwave spectrum of methyl manganese pentacarbonyl complex over a range of 5-10 GHz using a Fourier-transformed microwave spectrometer. The observed hyperfine splittings is well resolved for the transitions in 7 GHz range. We are analyzing quadrupole and rotational constants to obtain information on the electronic structure and molecular structure.

[a] Supported by THE NATIONAL SCIENCE FOUNDATION