

MICROWAVE SPECTROSCOPIC STUDY OF THE CO-H₂S COMPLEX

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The infrared spectra of the van der Waals complex between CO and H₂S were recently studied by Xia and McKellar.^a Following this investigation, we have measured rotational spectra of several isotopomers of CO-H₂S using a cavity Fourier transform microwave spectrometer. Nuclear hyperfine structures due to the quadrupolar ³³S and ¹⁷O nuclei were observed and analyzed. The resulting rotational and hyperfine constants were used to derive structural and dynamical information about the complex.

^aC. Xia and A. R. W. McKellar, private communication