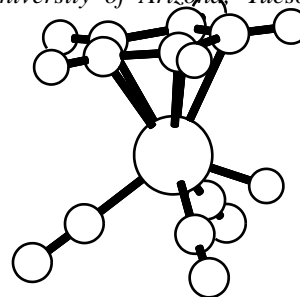


# THE STRUCTURE OF CYCLOPENTADIENYL TUNGSTEN TRICARBONYL HYDRIDE COMPLEX <sup>a</sup>

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We report the structural parameters for the cyclopentadienyl tungsten tricarbonyl hydride complex. Tungsten and molybdenum carbonyl mono-hydride complexes have recently been explored as possible agents for hydrogenation catalysts. We have now obtained spectra for five unique <sup>13</sup>C and a D-isotopomers using a pulsed-beam FT spectrometer system. This is the first measurement of the structure for a tungsten mono-hydride complex. The present structural data obtained from the Kraitchman and structure fits analyses are in good agreement with results obtained from DFT calculations.



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