

ROOM-TEMPERATURE CHIRPED-PULSE FOURIER TRANSFORM MICROWAVE (CP-FTMW) SPECTRUM OF 2-METHYLFURAN

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The microwave spectrum of 2-methylfuran has been measured at temperatures between 0 °C and 50 °C from 8.7–18.3 GHz with waveguide chirped-pulse Fourier transform microwave spectroscopy (CP-FTMW). Using the enhanced sensitivity of this technique relative to that of prior measurements from Stark-modulated instruments, we have been able to extend the assignments of the lowest energy A- and E-states from Norris and Krisher^a to include transitions up to $J = 60$ and $K_a = 35$. We will also report on our progress towards assigning higher-lying states and compare the fit results to those from *ab initio* calculations.

^aNorris, W. and Krisher, L., *J. Chem. Phys.* **51**, 403 (1969).