

## HIGH RESOLUTION FTIR SPECTROSCOPY OF THE $\nu_4$ BAND OF BENZENE 1,3,5-*d*3

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We have recorded the  $\nu_4$  band (Herzberg numbering) of benzene 1,3,5-*d*3 using high resolution ( $0.0015\text{ cm}^{-1}$ ) Fourier transform infrared spectroscopy. The spectrum was taken with the benzene sample in a temperature stabilized cell ( $4^\circ\text{C}$ ), 20 cm in length. The interferometer used a mylar beamsplitter and the spectrum was recorded with a liquid helium-cooled silicon bolometer. For the band we have fit the following preliminary spectroscopic constants:  $\nu_0 = 531.06401(1)\text{ cm}^{-1}$ ,  $B' = 0.171542(2)\text{ cm}^{-1}$ ,  $(C' - B') - (C'' - B'') = 3.48(2) \times 10^{-4}\text{ cm}^{-1}$ ,  $B'' = 0.171842(3)\text{ cm}^{-1}$ . Band centers of the observed sequences of hot bands will be reported.