

OBSERVATION OF THE $\tilde{A}^1 A''$ STATE OF ISOCYANOGEN

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The $\tilde{A}^1 A''$ state of isocyanogen is observed using photofragment fluorescence excitation spectroscopy (PHOFEX). The spectra are highly congested, but progressions likely due to the Franck-Condon active C-N-C excited state bend are evident. Linewidth measurements indicate that the excited state lifetime is < 10 ps. These measurements are consistent with previous *ab initio* calculations, which predicted a bent excited state and a short lifetime due to predissociation. Although we do not believe the origin band is observed, we place an upper limit of 42523 cm^{-1} on the excited state energy.