

THE SEARCH FOR CHARGE TRANSFER STATES: BENZONITRILE AND RELATED MOLECULES

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The high resolution electronic spectra of benzonitrile and related molecules have been recorded, including several higher vibronic bands in the $S_1 \leftarrow S_0$ system. Analyses of the spectra provide information about the geometries of the different molecular assemblies in both their ground and first excited states. There is no evidence for a charge transfer state up to $+703 \text{ cm}^{-1}$ above the S_1 origin transition. Related molecular assemblies will also be discussed.

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