SPECTROSCOPIC EXAMINATION OF ALKALI HALIDE - HCN COMPLEXES ASSEMBLED IN HELIUM DROPLETS

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Binary complexes of alkali halide salts (LiF, LiCl, NaF, NaCl) with HCN have been assembled in helium droplets and studied using high resolution infrared spectroscopy. The possible isomers obtained from ab initio calculations for each system will be discussed, which include both linear and non-linear structures depending on the identity of the alkali halide. The effects of the helium solvent on the spectra of the binary complexes will also be examined.