

THE CP-FTMW SPECTROSCOPY AND ASSIGNMENT OF THE MONO- AND DIHYDRATE COMPLEXES OF PERFLUOROPROPIONIC ACID

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While searching for the chirped pulse spectra of allyl phenyl ether, the authors used current rotational spectroscopic fitting tools to assign multiple sets of spectra of unknown origin. Previous chirped pulse experiments searching for hydrate complexes of perfluoropropionic acid had not been successful but, through theoretical agreement, it was determined that at least one of the sets of unknown spectra observed belonged to the perfluoropropionic acid-water complex. Further determination showed that the dihydrate had also been observed. The determination process and spectral assignment will be discussed. Structural determinations of the complexes will also be discussed.

