THE SPECTROSCOPIC STUDY OF ESTROGEN AND ITS HYDRATED CLUSTERS IN A SUPERSONIC JET

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Structures of estrogen and its hydrated clusters have been studied by several laser spectroscopies in supersonic jet. The electronic spectrum of estrogen shows several origin bands. By observing UV-UV hole-burning and IR-UV spectra, it is concluded they are due to different conformers originating from difference of orientation of OH group(s). We also observed electronic and IR spectra of estrogen-H_2O. By aids of DFT calculations, the conformations and hydrated structures are determined.