RESONANCE ENHANCED MULTI-PHOTON IONIZATION AND UV-UV HOLE-BURNING SPECTROSCOPIC STUDIES OF JET-COOLED ACETANILIDE DERIVATIVES

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Conformational investigations and photochemistry of jet-cooled methacetine (MA) and phenacetine (PA) using one color resonant two-photon ionization (REMPI), UV-UV hole-burning and IR-dip spectroscopy are presented. MA and PA are derivatives of acetanilide, substituted by methoxyl, ethoxyl group in the para position of acetanilide, respectively. Moreover, we have investigated conformational information of the acetanilide derivatives (AAP, MA and PA)-water. In this work, we will present and discuss the solvent effects of the hydroxyl group of acetanilide derivatives in the excited state.