LONG RANGE PROTON-MIGRATION IN VUV PHOTOIONIZATION OF ACETONE CLUSTERS

KEN-ICHI HANAUE, YOSHIYUKI MATSUDA, KEISUKE OHTA, NAOHIKO MIKAMI and ASUKA FUJII, *Department of Chemistry, Graduate School of Science, Tohoku University, Sendai 980-8578,Japan.*

Infrared spectroscopic investigations of neutral and cationic clusters of acetone reveals proton-migraion for keto-enol tautomerization in their ionization processes. In the reaction, the methyl proton of acetone is transferred to its carbonyl oxygen through the intracluster long range proton-migraion.