

PHOTOIONIZATION INDUCED WATER MIGRATION OF 4-AMINOBENZONITRILE-(H₂O)₁ CLUSTER

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4-Aminobenzonitrile-water cluster has two competitive hydration isomers at the S₀ state. One is NH isomer in which water binds to the NH group and the other is CN isomer in which water binds to the CN group. We applied IR dip spectroscopy to investigate how the interaction changes in the D₀ state. The IR spectra showed the same feature that was assigned to the NH isomer though the two isomers were selectively ionized. This observation means water molecule bonded to the CN group migrates to the NH group induced by the photoionization.