

## ISOMERIZATION AND CHEMICAL REACTION DYNAMICS OF HCN-GA IN HELIUM NANODROPLETS

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Two linear isomers of the HCN-(Gallium atom) radical - molecule complex have been stabilized in liquid helium droplets and the ensuing chemical and isomerization dynamics probed upon vibrational excitation. From IR-IR double resonance experiments we observe that vibrational excitation of Ga-HCN results in isomerization to the HCN-Ga isomer, while excitation of HCN-Ga results in a chemical insertion reaction.