

INTRACLUSTER REACTIONS IN Ni-CO₂ CLUSTERS

JONATHON A. MANER, MATTHEW D. McDOWELL and MICHAEL A. DUNCAN, *Department of Chemistry, University of Georgia, Athens, Georgia 30602..*

Ni-CO₂ cluster cations were produced by laser vaporization of a Ni rod in a pulsed CO₂ expansion. Clusters were mass-selected in a time-of-flight mass spectrometer and studied with infrared laser photodissociation spectroscopy using an infrared OPO laser system. The infrared spectra of larger clusters provide evidence for an intracuster reaction assisted by CO₂ solvation. These spectra are compared to determine the reaction product.