

ISOMERIZATION OF CH<sub>2</sub>Cl-I TO CH<sub>2</sub>Cl-II IN CRYOGENIC MATRICES: A STUDY ON ULTRAFAST TIMESCALE

THOMAS J. PRESTON, MAITREYA DUTTA, BRIAN J. ESSELMAN, MICHAEL A. SHALOSKI, ROBERT J. MCMAHON and F. FLEMING CRIM, *The University of Wisconsin-Madison Department of Chemistry, 1101 University Avenue, Madison, WI, 53706*; AMIABLE KALUME, LISA GEORGE and SCOTT A. REID, *Department of Chemistry, Marquette University, Milwaukee, WI, 53233*.

We follow up on the previous talk on ultrafast timescale studies of the isomerization between CH<sub>2</sub>Cl-II and CH<sub>2</sub>Cl-I in cryogenic matrices. We establish a population of CH<sub>2</sub>Cl-I in cryogenic matrices and then pump the two lowest electronic absorption features of CH<sub>2</sub>Cl-I near 435 nm and 800 nm. Then we study the formation of CH<sub>2</sub>Cl-II and CH<sub>2</sub>Cl-I by probing electronic absorption features of both isomers.