

Abstract Submitted
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**Photoionization and Dissociation of Dichloroethene ($C_2H_2Cl_2$):
Towards Molecular Frame Photoelectron Angular Distributions¹** D. D.
CALL, University of Nevada, Reno, M. WELLER, G. KASTIRKE, Goethe Univer-
sity Frankfurt, R. A. STROM, Auburn University, V. DAVIS, G. PANELLI, Univer-
sity of Nevada, Reno, S. BURROWS, Auburn University, K. LARSEN, Lawrence
Berkeley National Lab, N. MELZER, Goethe University Frankfurt, T. SEVERT,
Kansas State University, O. KOSTKO, W. ISKANDER, D. SLAUGHTER, TH.
WEBER, Lawrence Berkeley National Lab, A. L. LANDERS, Auburn University, J.
B. WILLIAMS, University of Nevada, Reno — An experiment was performed using
soft X-rays at the Advanced Light Source (ALS) in the Lawrence Berkeley National
Lab on Beamline 9.0.1. Photoionization and dissociation of 1,1-Dichloroethene and
trans-1,2-Dichloroethene at the Chlorine L-edge was performed with photon energy
of 211.9 eV. Chlorine ionization threshold energies are 207.9 eV and 206.26 eV.
Data was collected to examine the correlated momenta of the molecular fragments
and the photoelectron in coincidence using the COLD-Target-Recoil-Ion Momentum
Spectroscopy (COLTRIMS) method. Preliminary results will be shown.

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Demitri Call
University of Nevada, Reno

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