Abstract Submitted
for the GEC12 Meeting of
The American Physical Society

Elastic Scattering and Vibrational Excitation of Tetrahydrofuran by Low Energy Electrons[1] DANNY ORTON, ALEXSANDER GAUF, AMOS JO, JOSHUA TANNER, MURTADHA A. KHAKOO, California State University, Fullerton, CA, USA, TODD WALLS, California High School, Whittier, CA, USA, CARL WINSTEAD, VINCENT MCKOY, California Institute of Technology, Pasadena, CA, USA — We report experimental and theoretical (Schwinger Multi-Channel method with polarization effects) differential cross-sections (DCS) for low energy elastic electron scattering from tetrahydrofuran. The data are for incident energies from 0.75 to 30eV and the experimental scattering angles range from 10° to 130°. Agreement between theory and experiment is very good across the range of this data. Comparisons with previous experiments is also very good in general. We will also report DCSs for vibrational excitation of this target for energies up to 15eV and similar scattering angles.

[1]Funded by NSF Grants RUI-PHY 0653452 and PHY 0653396.

Murtadha A. Khakoo
California State University, Fullerton, CA, USA

Date submitted: 18 Jun 2012 Electronic form version 1.4