Abstract Submitted for the GEC15 Meeting of The American Physical Society

Electron impact elastic scattering and vibrational excitation of ethylene¹ MURTADHA KHAKOO, SABAHA KHAKOO, AHMAD SAKAAMINI, LEIGH HARGREAVES, Cal State Univ- Fullerton, CARL WINSTEAD, VINCE MCKOY, Caltech — Experimental and theoretical (Schwinger Multi-Channel model) differential scattering cross sections for low energy electron elastic scattering plus vibrational excitation (4 energy loss features) of ethylene are presented. The incident electron energy range is from 0.5eV to 100eV and scattering angles of 5 to 130 degrees. Comparisons with theory and past available measurements show good agreement in general.

¹Funded by a National Science Foundation Collaborative Research Grant to CSUF and Caltech

Murtadha Khakoo Cal State Univ- Fullerton

Date submitted: 10 Jun 2015 Electronic form version 1.4