Abstract Submitted
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Low Energy Elastic Electron Scattering from Gaseous Tetrahydrofuran[1] ALEXSANDER GAUF, AMOS JO, Cal State University Physics, Fullerton, CA 92834, TODD WALLS, California High School, Whittier, CA 92834, LEIGH HARGREAVES, MURTADHA A. KHAKOO, Cal State University Physics, Fullerton, CA 92834 — Normalized absolute experimental electron scattering differential cross-sections (DCS) for electron energies of 1.5eV to 50eV from tetrahydrofuran will be presented. The experimental method employs the relative flow method using helium as the calibration gas, but a moveable source arrangement to accurately determine the experimental background. The results extend experimentally available DCS at lower energies and are found to be in very good agreement with earlier measurements in general. However, our results, using a thin aperture gas source, are not constrained by molecular diameter requirements [1] and serve as a useful systematic check of earlier results (see [2] and the references therein).

[1] M. A. Khakoo et al., J. Phys. B. 40, 3601(2007).
[2] M. Allan, J. Phys. B.40, 3531 (2007).

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