

Abstract Submitted
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Electron Collisions with Formic Acid and Tetrahydrofuran V. VIZCAINO, J.P. SULLIVAN, S.J. BUCKMAN, CAMS, Australian National University, C. COLYER, CAMS, Flinders University, Australia — We have measured absolute elastic electron scattering cross sections for the biologically relevant molecules CHOOH (formic acid) and C₄H₈O (tetrahydrofuran - THF). The formate group is an important constituent of a number of amino acids and THF forms part of the DNA backbone. The experiments cover the energy range from 1 to 50 eV and include both angular and energy dependent measurements. We make comparisons with a number of theoretical approaches, including the Kohn variational, and R-matrix techniques and a calculation based on a density functional technique.

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