

Abstract Submitted
for the GEC13 Meeting of
The American Physical Society

Electron and photon excitation and ionization of tetrahydrofurfuryl alcohol¹ MICHAEL J. BRUNGER, LUCA CHIARI, DARRYL JONES, PENNY THORN, ZOE PETTIFER, GEORGE BARBOSA DA SILVA, CAMS, Flinders University, Adelaide, Australia, GUSTAVO GARCIA, Instituto de Fisica Fundamental, CSIC, Madrid, Spain, FRANCISCO BLANCO, Universidad Complutense de Madrid, Madrid, Spain, F. FERREIRA DA SILVA, P. LIMA-VIEIRA, Universidade Nova de Lisboa, Caparica, Portugal, M.-J. HUBIN-FRANSKIN, J. DELWICHE, Universite de Liege, Liege, Belgium — We present differential cross section measurements for the low-energy electron-impact excitation of the electronic states of the biologically important molecule tetrahydrofurfuryl alcohol (THFA). Electron energy loss spectra have been measured at selected incident energies between 15 eV and 50 eV and for scattering angles in the 15-90 degrees range using an electron spectrometer. The absolute scale of the inelastic DCSs is set by the elastic DCSs calculated with the Independent Atom Model with Screening Corrected Additivity Rule approach between 1 and 1000 eV. We also present results from VUV photoabsorption and He(I) photoelectron spectra for THFA. A comparison between the results obtained with these different techniques is provided.

¹This work was partly supported by the Australian Research Council.

Luca Chiari
CAMS, Flinders University, Adelaide, Australia

Date submitted: 10 May 2013

Electronic form version 1.4