

DAMOP09-2009-000158

Abstract for an Invited Paper
for the DAMOP09 Meeting of
the American Physical Society

Positron Scattering from Bio-Molecules

MICHAEL BRUNGER¹, ARC Centre for Antimatter-Matter Studies, SoCPES, Flinders University, GPO Box 2100, Adelaide SA 5001, Australia

We report on recent results from measurements of total cross sections for positron scattering from important bio-molecules including water (H_2O), carbon dioxide (CO_2), tetrahydrofuran ($\text{C}_4\text{H}_8\text{O}$), 3-hydroxy-tetrahydrofuran ($\text{C}_4\text{H}_8\text{O}_2$) and formic acid (HCOOH). Where possible, comparison of these results to corresponding theoretical calculations is made. The effects of species conformation and dimerisation will also be considered as a part of this presentation.

¹Collaborators: K. L. Nixon and A. Zecca