Abstract Submitted for the DAMOP19 Meeting of The American Physical Society

Metastable Fragment Production in Electron-Methanol Collisions. J WILLIAM MCCONKEY, JEFFREY DECH, WLADEK KEDZIER-SKI, University of Windsor — A unique detector which is selectively sensitive to low energy metastable atoms and molecules, is used to study the production of ground configuration O(1S) atoms and CO(a 3) molecules following collisions of low energy (0-300 eV) electrons with methanol molecules. Time-of-flight detection has allowed identification of likely dissociation channels. Excitation probability measurements will be presented as a function of incident electron energy and near-threshold data will be used to help identify possible excitation channels.

¹Support of NSERC and CFI, Canada, is gratefully acknowledged.

J William McConkey University of Windsor

Date submitted: 01 Feb 2019 Electronic form version 1.4