Abstract Submitted for the GEC19 Meeting of The American Physical Society

Low Energy Elastic Electron Scattering from Benzonitrile - C₆H₅CN¹ M ZAWADZKI, Gdansk University of Technology, Gdansk, Poland, G TATREAU, B DIAZ, B HLOUSEK, M. A. KHAKOO, California State University, Fullerton — Experimental differential cross sections for electron scattering from gaseous C₆H₅CN are presented. The measurements were taken with a high resolution electron spectrometer and used the relative flow method with a moveable (aperture) target gas delivery source [1]. Helium gas was used as standard, with established cross sections from [2,3]. The moveable source enabled accurate determinations of background scattering [1] and the measurements were taken at incident electron energies of 1 eV to 30 eV for scattering angles of 10° to 130°. Comparisons to existing cross sections will be made. [1] M. A. Khakoo et al., J. Phys.B. 40, 3601 (2007). [2] R. K. Nesbet, Phys. Rev. A 20, 58 (1979). [3] D. F. Register et al. Phys. Rev. A 21, 1134 (1980).

¹Funded by an NSF-RUI AMO Grant 1606905

M Khakoo California State University, Fullerton

Date submitted: 25 May 2019 Electronic form version 1.4