

Abstract Submitted  
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**Excitation of atmospheric species by electron impact.**<sup>1</sup> CHARLES P. MALONE, PAUL V. JOHNSON, Jet Propulsion Laboratory, J. WILLIAM MC-CONKEY, University of Windsor and Jet Propulsion Laboratory, MURTADHA A. KHAKOO, California State University Fullerton, JOSEPH M. AJELLO, ISIK KANIK, Jet Propulsion Laboratory — Electron collisions with neutral atomic and molecular targets, such as O, H<sub>2</sub>, and N<sub>2</sub>, have been investigated. Resulting fluorescence was probed using various monochromator-detector combinations. Line and band intensities were investigated as a function of wavelength and incident electron energy. In addition, electron energy-loss spectroscopy (EELS) was utilized such that differential cross sections (DCSs) and integral cross sections (ICSs) were obtained. The emission cross sections, DCSs, and ICSs, for these atmospheric species will be presented.

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