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Photodetachment of the Terbium Anion SRIVIDYA S. DUVVURI, RICK G. KRAUS, ERIK D. EMMONS, JEFFREY S. THOMPSON, University of Nevada - Reno, VERN T. DAVIS, Defence Threat Reduction Agency, AARON M. COVINGTON, University of Nevada - Reno — Laser Photodetachment Electron Spectroscopy (LPES) has been used to study the terbium anion. Photoelectron kinetic energy spectra were measured at photon energies ranging from 457.9-514.5 nm using a crossed laser-ion beams apparatus. In addition, photoelectron angular distributions were measured as a function of the angle between the laser polarization vector and the linear momentum vector of the collected photoelectrons. Photoelectron kinetic energy spectra from the photodetachment of Na⁻ and C⁻ were used to calibrate the energy scale for the Tb⁻ photoelectron energy spectra. Preliminary results from the analysis of these data will be presented.

Srividya S. Duvvuri University of Nevada, Reno

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