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Measurement of the low energy spectral contribution in coincidence with valence band (VB) energy levels of Ag(100) using VB-VB coincidence spectroscopy¹ R.W. GLADEN, P.V. JOGLEKAR, Z.H. LIM, K. SHASTRY, Univ of Texas, Arlington, S.L. HULBERT, Brookhaven National Laboratory, A.H. WEISS, Univ of Texas at Arlington — A set of coincidence measurements were obtained for the study and measurement of the electron contribution arising from the inter-valence band (VB) transitions along with the inelastically scattered VB electron contribution. These Auger-unrelated contributions arise in the Auger spectrum (Ag 4p NVV) obtained using Auger Photoelectron Coincidence Spectroscopy (APECS). The measured Auger-unrelated contribution can be eliminated from Auger spectrum to obtain the spectrum related to Auger. In our VB-VB coincidence measurement, a photon beam of energy 180eV was used to probe the Ag(100) sample. The coincidence spectrum was obtained using two Cylindrical Mirror Analyzers (CMA's). The scan CMA measured the low energy electron contribution in the energy range 0-70eV in coincidence with VB electrons measured by the fixed CMA. In this talk, we present the data obtained for VB-VB coincidence at the valence band energy of 171eV along with the coincidence measurements in the energy range of 4p core and valence band.

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Randall Gladen Univ of Texas, Arlington

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