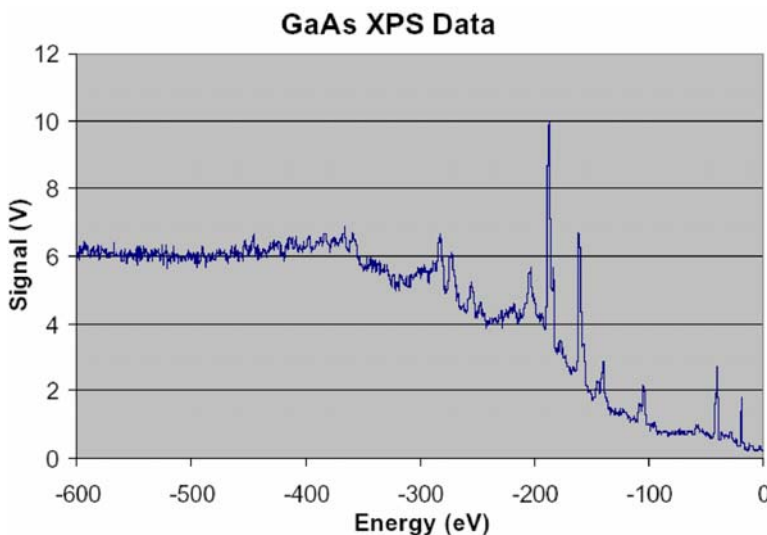


Auger/X-Ray Photoemission Spectroscopy (AES/XPS)



The kSA 400 Auger/XPS Photoemission Spectroscopy plug-in option gives you an inexpensive and easy way to acquire Auger Electron Spectroscopy (AES) and X-ray Photoemission Spectroscopy (XPS) data via the kSA 400 system. AES and XPS are both powerful techniques for surface analysis, relying on material-specific photoelectron energy signatures from either electron (AES) or X-ray (XPS) induced photoelectron emission.



The Auger/XPS kSA 400 Plug-In provides complete computer control of the energy of the analyzer, stepping through a user-specified range of energies at a user-specified resolution (via a 12-bit D/A channel). The user may also specify the sample number at each energy, scan rate, number of scans, and map the output voltage. During data acquisition, which may be externally triggered, the photoelectron signal is analyzed (via either a 12-bit or 16-bit analog input channel) at each energy. Data is displayed in real-time during acquisition and all data is stored to an ASCII file upon completion.

Auger/XPS Spectroscopy Input Parameters

Number of Spectra

The number of spectra specified averaged together at each energy, resulting in a single, average spectra at the end of the run

Start/Stop Energy

Starting/stopping energy for each spectra acquired

Resolution

Energy resolution of the acquisition, i.e., energy spacing between data points

Samples/Point

Number of samples per energy point, for reducing any electron-counting-signal noise

Advanced Acquisition Options

Delay Time

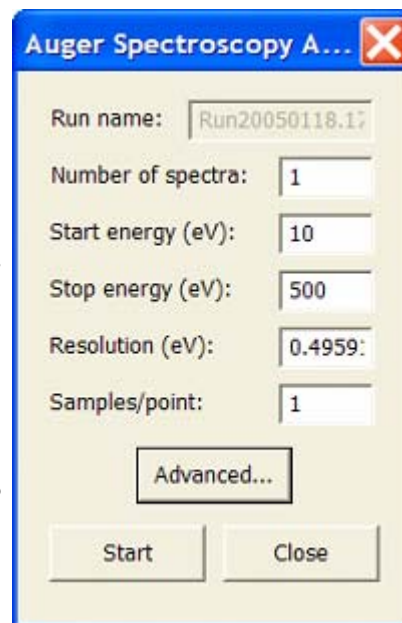
Specify a delay between acquisitions to allow Auger/XPS electronics to stabilize at each energy value before reading the input signal

Delay on Reset

Set a delay between spectra acquisitions when obtaining multiple spectra to allow the Auger/XPS power supply to stabilize after ramping from stop energy to start energy

Gain/Offset

Calibrate the system so the Auger power supply corresponds with the electron gun power supply; set the gain and offset of the Input/Output boards for Auger, LEED I/V, video digitizer and electron gun output control



k-Space Associates, Inc. • 3623 W. Liberty Rd. • Ann Arbor, MI 48103 USA
Tel: (734) 668-4644 • Fax: (734) 668-4663 • requestinfo@k-space.com
www.k-space.com