

CALIBRATION

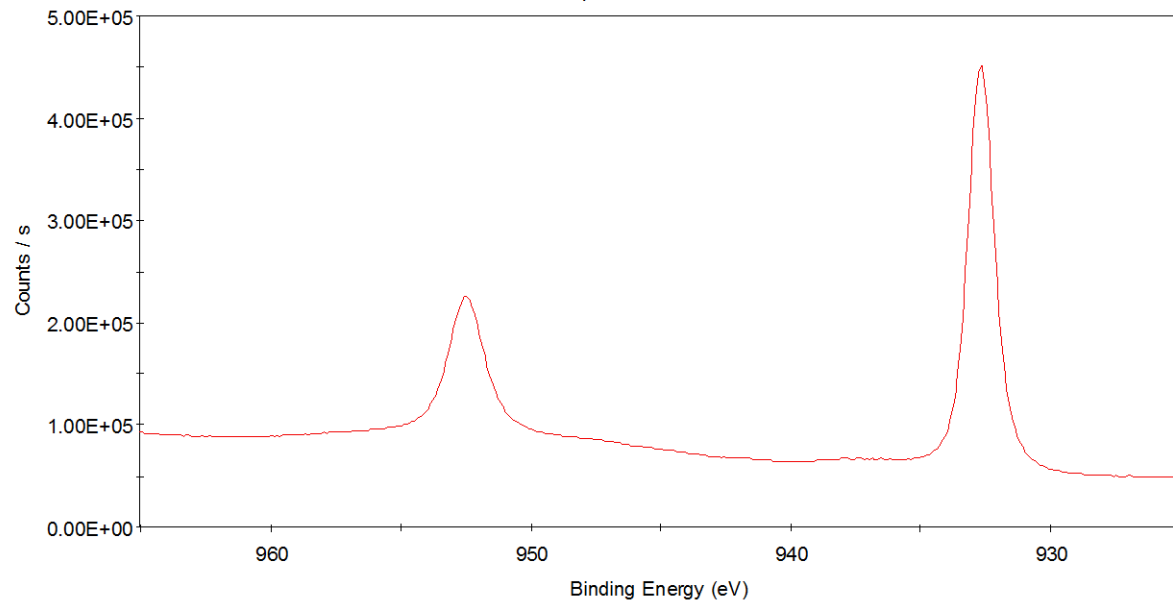
Thermo K Alpha XPS

MCF

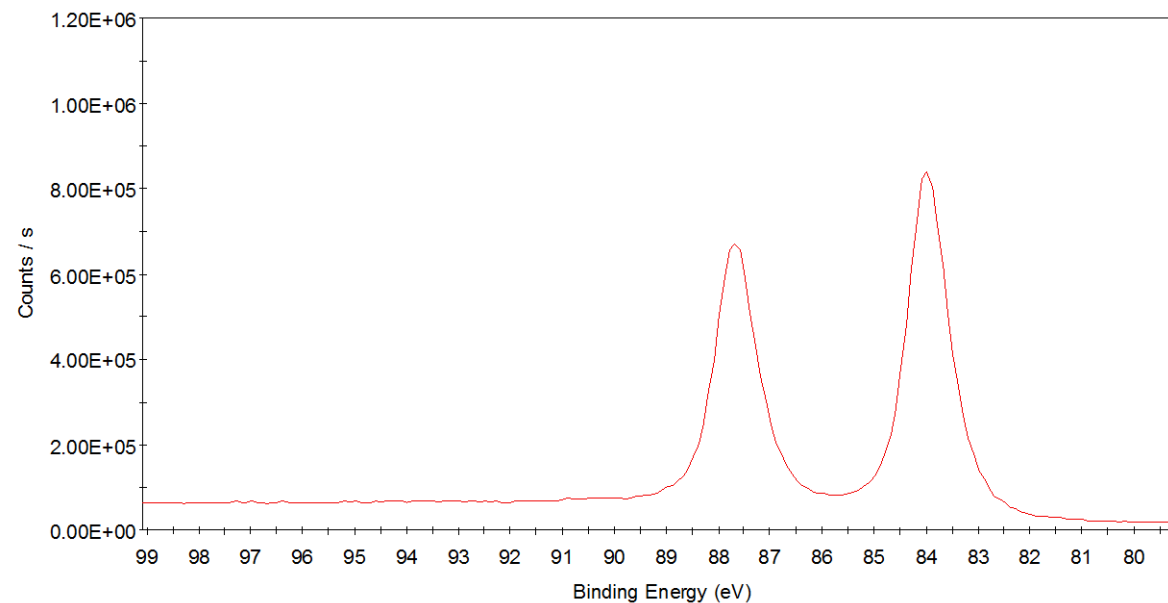
By

Rathi Monikandan

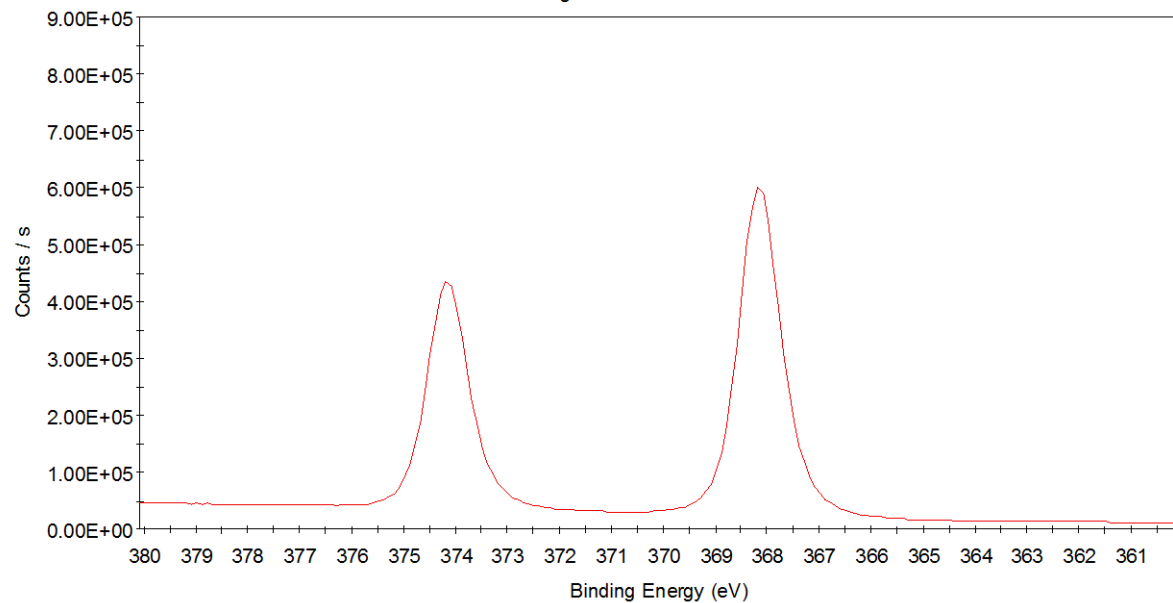
Cu2p Scan



Au4f Scan



Ag3d Scan



Nov 27 2018

Spectrometer Energy Scale Calibration Successful
 Cu, Au, Ag are internal standards. All three samples were etched
 (cleaned) to remove surface contaminants before collecting data

Au4f 84.0053

Counts/s : 867573

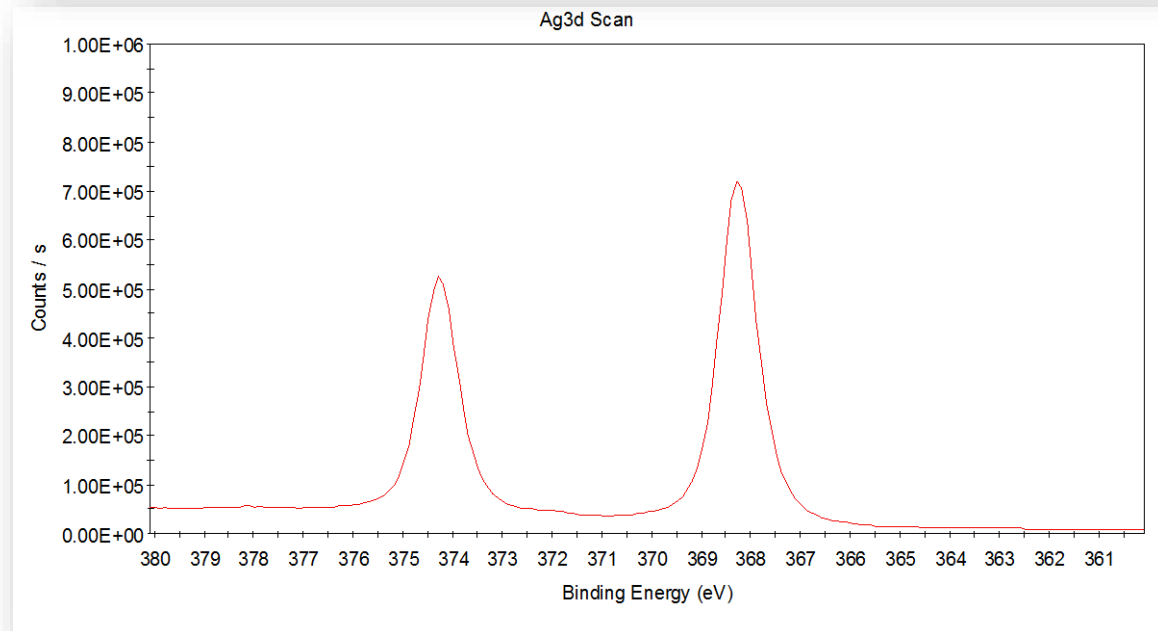
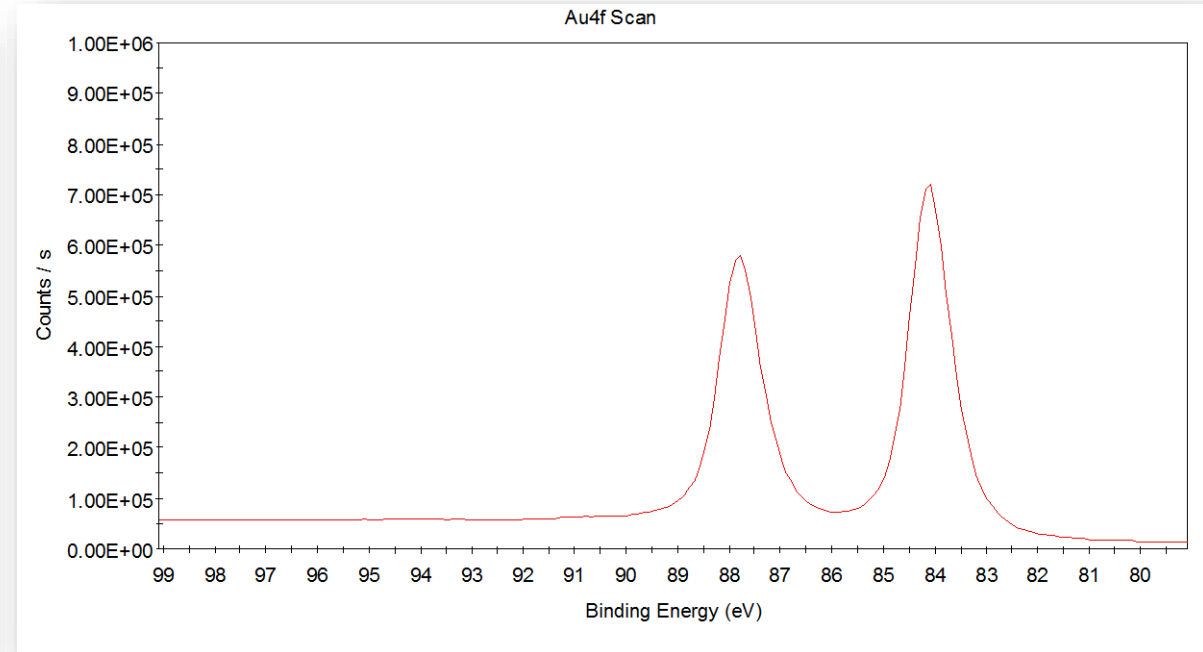
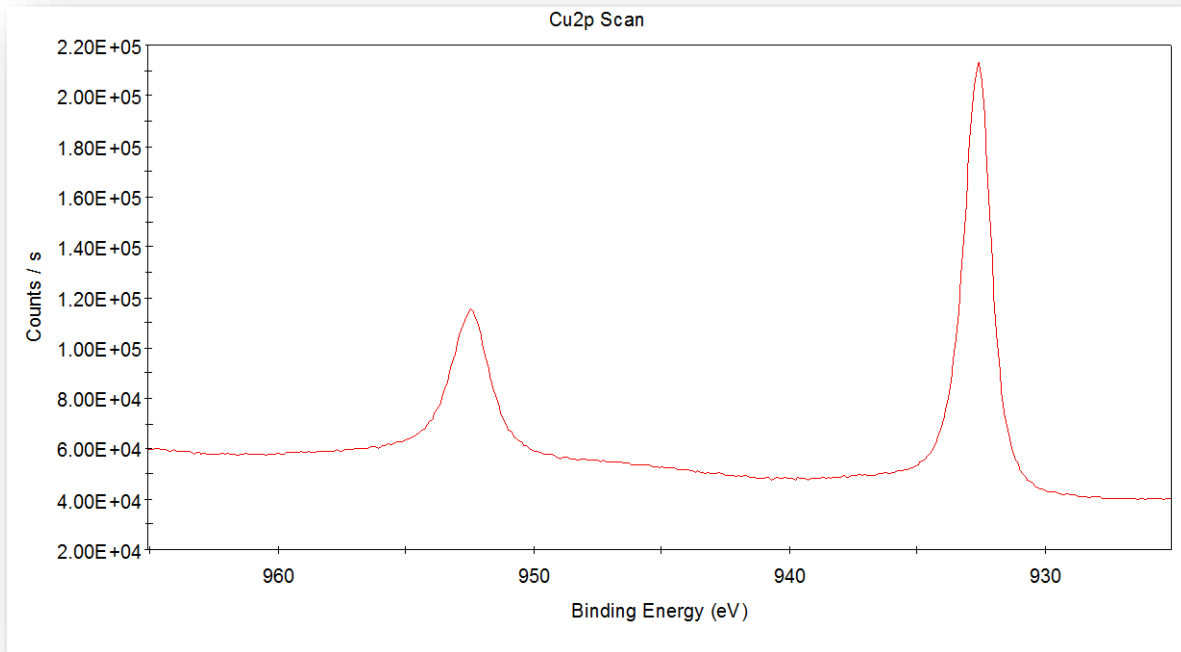
FWHM : 0.9

Cu2p 932.654

(at Pass Energy 50 eV, step size 0.1 eV - Au4f)

Ag3d 368.132

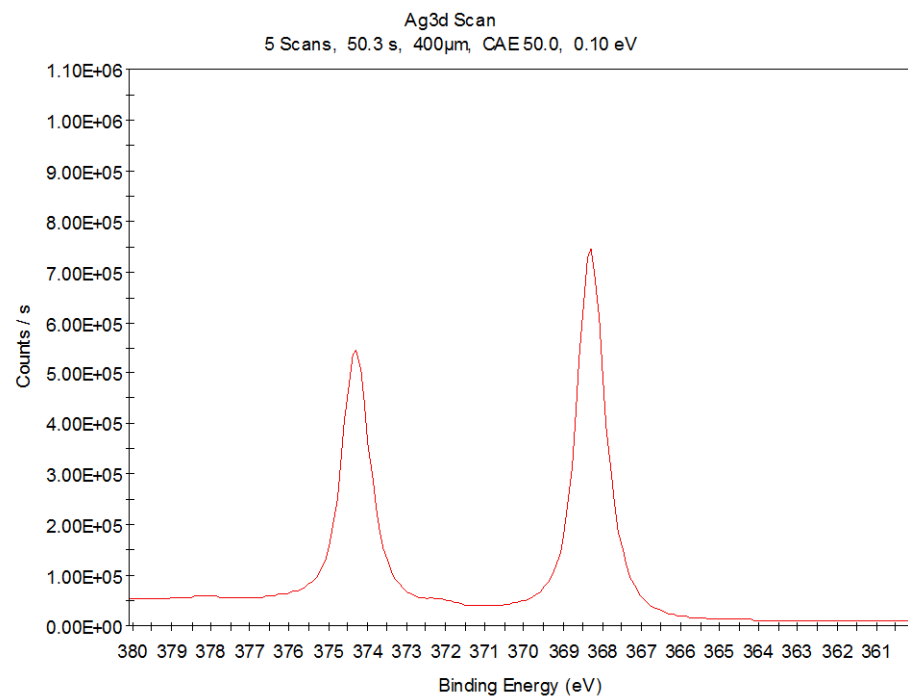
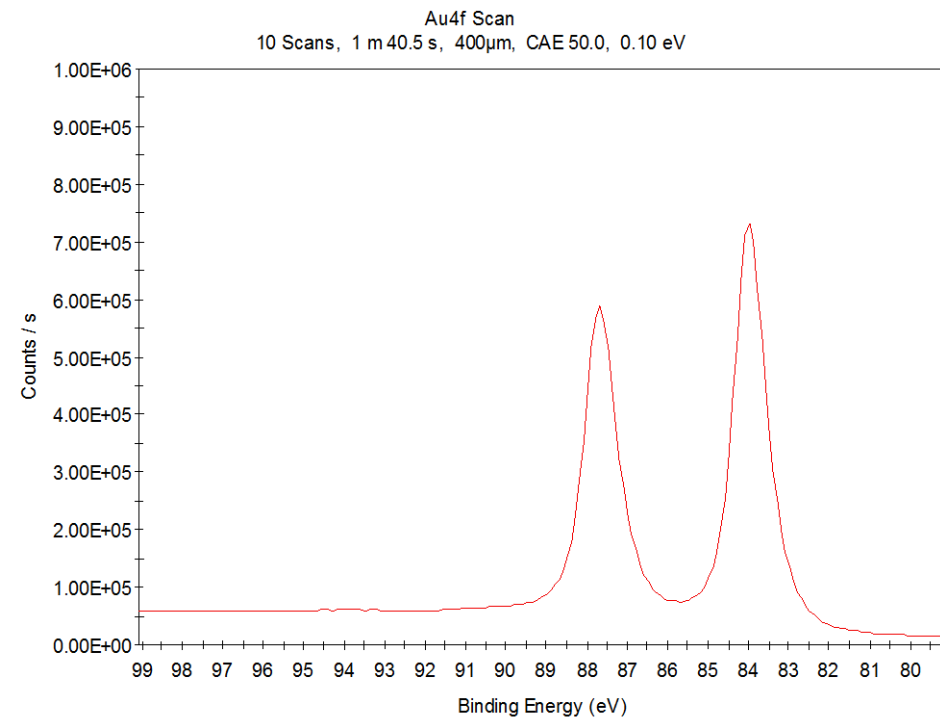
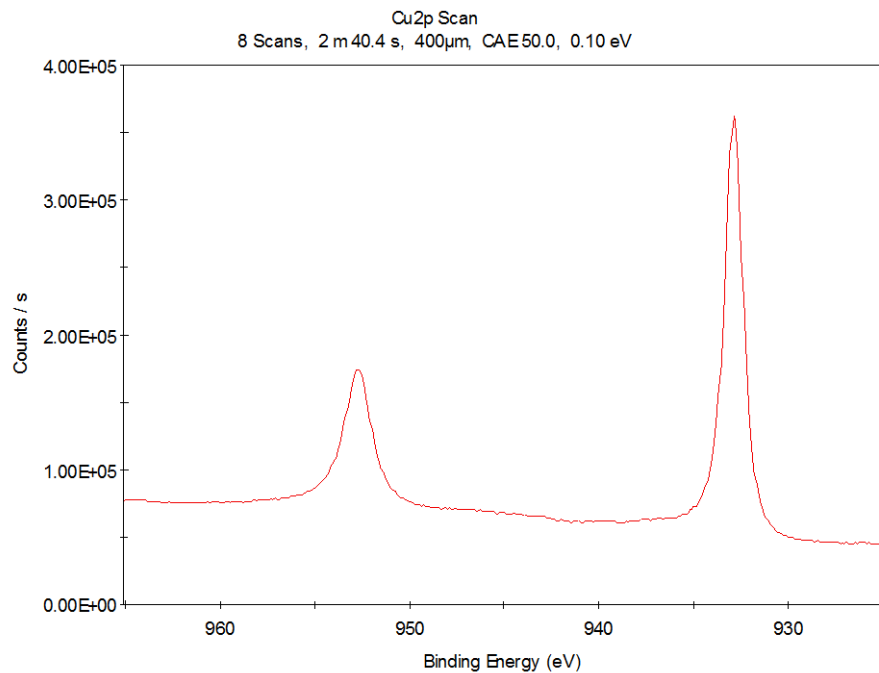
CuLVV 569.756



May 22 2019

Spectrometer Energy Scale Calibration Successful (March 2019)
 Full PM by Thermo Service Engineer (Thom) with new gate valve
 replaced. P_ Analysis at (5 E-09 to 1E-09mBar)

Au4f	84.07	Counts/s : 721719	FWHM : 1
Cu2p	932.58	(at Pass Energy 50 eV, step size 0.1 eV - Au4f)	
Ag3d	368.22		
Cu Auger	568.059		

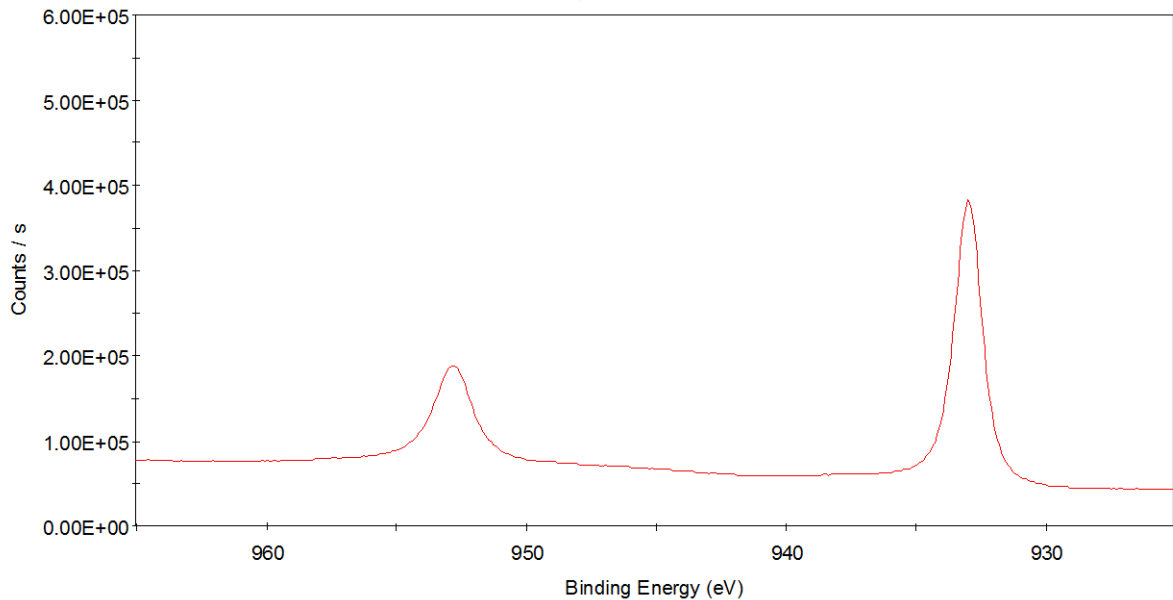


Jan 23 2020

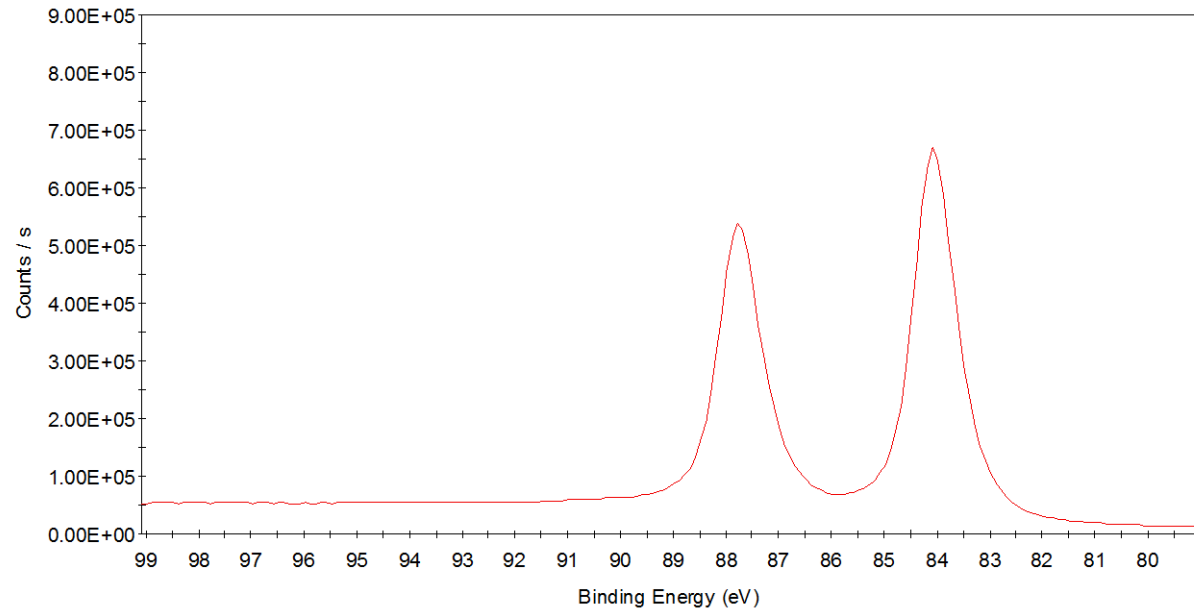
Spectrometer Energy Scale Calibration Successful (Jan 2020) Full PM by Thermo Service Engineer (Thom) with new filaments, TSP's, anode etc. P_ Analysis at (1.5 E-08 mBar) Only short bake

Au4f	83.9	Counts/s : 725597	FWHM : 1
Cu2p	932.39	(at Pass Energy 50 eV, step size 0.1 eV - Au4f)	
Ag3d	368.26		
Cu Auger	563.1		

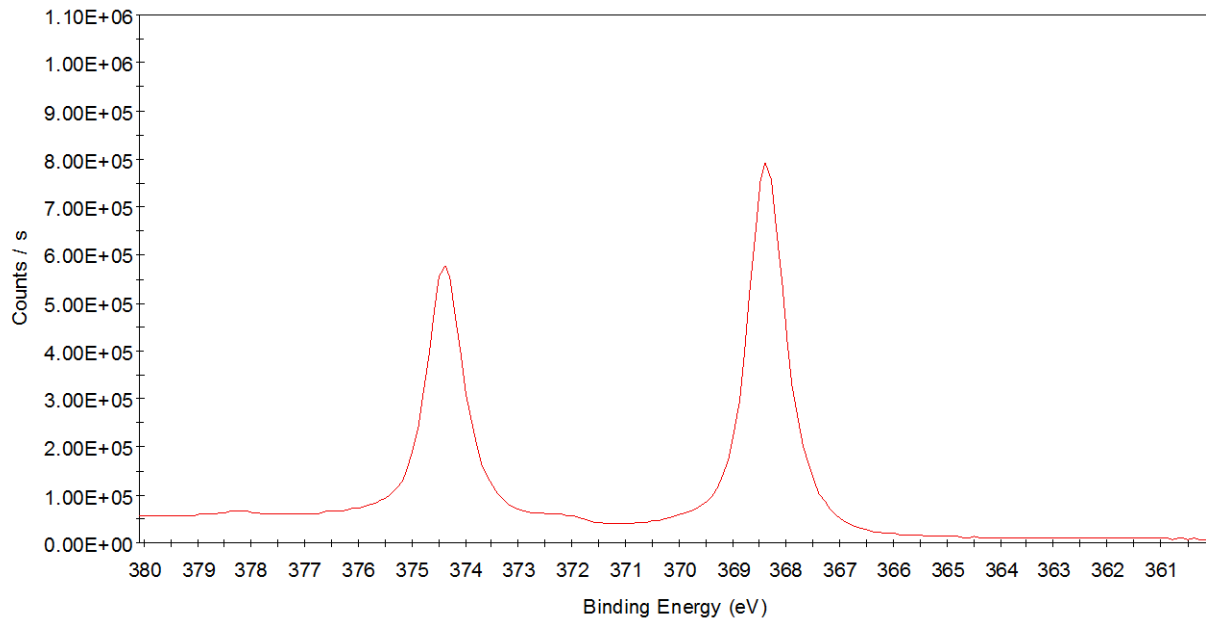
Cu2p Scan



Au4f Scan



Ag3d Scan



Jun 15 2020

Spectrometer Energy Scale Calibration Successful ! Calibration after 3 months of Covid lab shutdown. P_Analysis great at (1.3 E-09 to 7.3 E-10 mBar). All guns working well !

Au4f	83.97	Counts/s : 683477	FWHM : 0.98
Cu2p	932.62	(at Pass Energy 50 eV, step size 0.1 eV - Au4f)	
Ag3d	368.20		
Cu Auger	568.65		