PHI VersaProbe II Application Notes

Application Note	Feature / Benefit	Enabling Technology	Application
20 kV C_{60} Depth Profiling of Polystyrene	Thin film organic depth profiling with minimal chemical damage	20 kV C_{60} ion gun Zalar Rotation Optional cold stage with Zalar rotation	Polymers
C_{60} Polymer Additive Migration	Thin film organic depth profiling with retrospective chemical analysis	C_{60} ion gun MultiPak LLS fitting for retrospective chemical analysis	Polymers
Chemical State Imaging with PHI XPS Microprobes	High speed retrospective chemical state imaging	Raster scanned images with spectra at each pixel 128 channel detector MultiPak LLS fitting for retrospective chemical state imaging Dual beam charge neutralization	Materials Semiconductor
Cleaning Polymer Surfaces with the PHI 06-C60 Sputter Ion Gun	Surface cleaning and thin film analysis or organic materials with minimal chemical damage observed	C_{60} ion gun Dual beam charge neutralization	Polymers
Determining Solder Ball Surface Chemistry	Micro area chemical depth profiling	Scanning micro focused x-ray beam X-ray beam induced secondary electron imaging for area selection Floating column Ar^+ ion gun Dual beam charge neutralization	Semiconductor Packaging
GCIB Paper JVSTA April 2010	Successful Type 1 polymer depth profiling with minimal chemical damage (polyimide)	Ar_{2500}^+ GCIB Dual beam charge neutralization	Polymers
GCIB Paper SIA July 2012	Successful Type 1 polymer depth profiling with minimal chemical damage (polyimide)	Ar_{2500}^+ GCIB Dual beam charge neutralization	Polymers
Organic Depth Profiling with the PHI 06-C60 Sputter Ion Gun	Sputter cleaning and thin film analysis of organic materials	C_{60} ion gun Dual beam charge neutralization	Polymers
XPS Profiling of Organic PV Films	Successful Type 1 polymer depth profiling with minimal chemical damage	Ar_{2500}^+ GCIB Dual beam charge neutralization	Photovoltaics Organic thin film analysis