

# Tuesday Lunch, November 11, 2014

## Exhibitor Technology Spotlight

Room: Hall ABC - Session EW-TuL

## Exhibitor Technology Spotlight Session

**Moderator:** Chris Moffitt, Kratos Analytical Limited, UK

12:40pm **EW-TuL2 New Developments in Surface Analysis from Thermo Fisher Scientific**, *Tim Nunney, P. Mack, A.E. Wright, R.G. White, A. Bushell*, Thermo Fisher Scientific, UK

Thermo Scientific offers a broad range of analytical techniques for materials characterisation, including XPS, Raman spectroscopy, FTIR spectroscopy, EDS, WDS and EBSD. In this presentation we will discuss our latest developments in instrumentation and software to extend our surface analysis capabilities.

1:00pm **EW-TuL3 What's New from Physical Electronics**, *Scott Bryan, J.F. Moulder*, Physical Electronics Inc.

The latest innovations in our XPS, AES, and TOF-SIMS products will be presented.

1:20pm **EW-TuL4 Latest Developments and Applications of X-ray Photoelectron Spectroscopy**, *Chris Blomfield*, Kratos Analytical Limited, UK

X-ray Photoelectron Spectroscopy (XPS) is a mature surface analysis technique allowing quantitative surface chemical analysis on a wide range of materials. Recent developments in acquisition and data treatment methodologies have extended the capabilities of the technique. Nanoscale depth information can now routinely be obtained through angle resolved XPS and the data presented in classical depth versus concentration plots. XPS depth profiling techniques employing ion etching which have been used to investigate thin films of inorganic materials can now be extended to a range of organic materials through the introduction of giant gas cluster ion sources. XPS imaging can be used to observe the lateral distribution of different chemical species on the micron scale. New higher energy X-ray sources can increase the capability of laboratory XPS instruments with both extended photon energy range, exciting emission from deeper core levels and increased analysis depth capabilities which have previously only been available at synchrotron light sources. New generation data systems have made the operation and maintenance of XPS instruments routine with automated acquisition and processing workflows increasing the sample throughput and accuracy of measurements. The Axis Supra and ESCApe data system are the latest developments in XPS hardware and software which bring all of the above mentioned capabilities together in a new instrument and software platform, combining ease of use and high throughput with research grade performance and flexibility. The electron optics and underlying technology are an evolution of the well-established Axis spectrometers from Kratos Analytical. This presentation will illustrate the capabilities of the Axis Supra with a range of the latest applications from a diverse range of materials systems.

1:40pm **EW-TuL5 EW Bruker2 Abstract**, *Corporation Bruker*, Bruker Corporation

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