Thursday Morning, November 13, 2014

Exhibitor Technology Spotlight
Room: Hall ABC - Session EW-ThM

Exhibitor Technology Spotlight Session
Moderator: Chris Moffitt, Kratos Analytical Limited, UK

10:20am **EW-ThM8 An Entirely New Generation of Cold Cathode Gauges**, *Martin Wüest*, INFICON Ltd., Liechtenstein
The cold cathode gauge is a robust vacuum gauge used in many applications. INFICON has introduced an entirely new generation of the inverted magnetrons shedding the issues that plagued performance of the past and now allow its use even in domains that have traditionally been occupied by hot ionization gauges. An innovative and patented magnet design produces the first sensor conforming to Semi S2 specifications regarding ultra-low external magnetic stray field. Together with its small dimensions and low magnetic stray field, it can even be used within analytical devices without impact on surrounding instrumentation. First customer data received demonstrates that the gauge lasts approximately four times longer in a process environment than its predecessor. A unique interchangeable dual chamber facilitates maintenance. It takes only moments to exchange the sensor and return it to normal functional performance. Additional significant features will be discussed, as well.

10:40am **EW-ThM9 Raman Imaging Microscopy Characterization of Carbon Nano Material**, *Alex Rzhevskii, M.H. Wall*, Thermo Fisher Scientific
Over the last few years carbon nano materials have been the focus of many investigations due to their unique electronic, mechanical, and chemical, properties. These materials are being investigated as routes towards more efficient batteries, stronger lighter polymer composites, and faster electronics, to name a few. However, it is necessary to solve several challenges regarding quality uniformity and scalability before these applications are fully realized. Raman imaging microscopy offers a means to address these challenges. This presentation will highlight the Thermo Scientific DXRxi Raman imaging microscope and its application to the characterization of carbon nano materials. Specific examples will be discussed that demonstrate the enhanced speed, intuitive operation, and the simultaneous data acquisition/data analysis capabilities of this new Raman imaging microscope. See how highly detailed Raman chemical images gives comprehensive insight into the nature of carbon nano materials.

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