

Tuesday Morning, October 31, 2017

Exhibitor Technology Spotlight Workshops

Room: West Hall - Session EW-TuM

Exhibitor Technology Spotlight

Moderator: Chris Moffitt, Kratos Analytical, Inc.

10:20am **EW-TuM8 Development of a Novel Single Cold Cathode Ionization Gauge with Operation from High Vacuum to Atmosphere using Advanced Manufacturing Techniques**, *Dave Kelly, G. Brucker*, MKS Instruments, Inc., Pressure and Vacuum Measurement Group

Cold cathode ionization gauges (CCIGs) have been used for decades to make high vacuum measurements on a variety of production equipment. Traditionally, wide-range CCIGs involve multiple gauge techniques for pressure measurement, making this technology cost-prohibitive and not as robust for many industrial applications. In order to expand the scope of CCIG technology to address cost-sensitive and rugged applications, we have developed an innovative wide-range CCIG. This new CCIG utilizes a one gauge technique – gaseous discharge – which is capable of measuring pressures from high vacuum to atmosphere. Advanced manufacturing techniques were employed that allowed for the testing and selection of low-cost construction materials that are well suited for industrial environments. Moreover, these manufacturing techniques allowed for a design of this new gauge to be easily serviceable during routine preventive maintenance cycles, lowering the overall cost of ownership for a given application. The result of this development yielded a manufacturable low-cost wide-range CCIG capable of accuracy that meets the needs of the industry from 1E-7 Torr to atmosphere.

10:40am **EW-TuM9 New Developments from Thermo Fisher Scientific**, *Timothy Nunney, P. Mack, C. Deeks, A. Bushell*, Thermo Fisher Scientific, UK

In this presentation we will highlight the latest developments in surface analysis and materials analysis instrumentation from Thermo Fisher Scientific.

Authors Index

Bold page numbers indicate the presenter

— B —

Brucker, G.: EW-TuM8, 1
Bushell, A.: EW-TuM9, 1

— D —

Deeks, C.: EW-TuM9, 1

— K —

Kelly, D.: EW-TuM8, **1**

— M —

Mack, P.: EW-TuM9, 1

— N —

Nunney, T.S.: EW-TuM9, **1**