NEW ENGLAND 1110

By Tim Cooke

The New England Region once again had the good fortune to be able to utilize the beautiful Agilent Technologies Training Center in Andover, Massachusetts for our fall regional meeting on October 17, 2012.

To begin the morning, the unpredictable Boston area traffic necessitated a shuffling of our schedule. Consummate team player that he is, Keith Hadley of Ametek Test and Calibration Instruments was willing to step up to the plate first. Keith is currently the Regional Sales Manager, North America for the Calibration Products Division of Ametek. Keith is familiar to many of us from his many years in the industry and his previous NSCLI presentations.

Keith presented a number of the unique applications for dry block calibrators. He explained how the systems have evolved over the years to meet industry demands for improved performance. One of the challenges in dry block calibration is simultaneous calibration of multiple sensors without adversely affecting the temperature homogeneity in the well.

Dr. Jun Bautista is another familiar face to most NCSLI New England Region members. Jun is presently the Director, Corporate Metrology for Genzyme Corporation, the world's fourth largest biotech corporation. Jun's first topic of discussion was Nanometrology. This is a subfield of metrology, concerned specifically with measurements at the nanoscale level. The role of Nanometrology is growing with the increased demand for production of nanomaterials and devices. Extending beyond the world of biology and chemistry, these nanosystems can also be electronic, photonic, magnetic, and mechanical.

With the high degree of accuracy and reliability required in nanomanufacturing, along comes the need for increased automation. Jun shared with us his ongoing efforts at Genzyme Metrology in the support of a "smart plant." Software driven instrumentation is in place providing verification, adjustment, and control. These are used to increase consistency, reduce errors, and improve the accuracy and product quality of the smart plant. Taking it a step further, as a "digital facility," Genzyme Metrology is implementing a networked scale system that will allow for the verification and in-situ adjustment of analytical balances within a network.

After a very thought-provoking and informative morning, it was time for lunch. Once again, this was provided compliments of Cal-Tek Co., Inc. and Agilent Technologies.

Randy Taylor kicked off our afternoon. Randy has been in the electronics industry for 35 years, and with EdgeTech for 14 years. With two facilities right here in New England, EdgeTech traces its history back to 1965, when it began operating as a part of EG&G using the ideas and inventions of Dr. Harold E. Edgerton (Doc).

Randy went on to explain the concept of chilled Topic Portable Optical Chilled Mirror (OCM) measurement techniques. This tied in to a very unique solution they provide. EdgeTech has developed a microprocessor based, programmable humidity calibration system that has the unique benefit of being extremely portable. It does not need a compressed air or a water connection to operate.

Darren Collins rounded out our program for the day. Darren is the Regional Sales Manager for E+E Elektronik Corporation (and a new NCSLI member). He has nearly 15 years of experience with sensors in industrial applications.

Darren's presentation was on loop calibration for RH and Temperature sensors. Many of their original products were developed to support the challenging environments of automotive manufacturing. They have found their thin film technology sensors equally suited to the demands of other industries, including the pharmaceutical. They have developed a portable differential pressure-type calibration system that was discussed relative to the loop (and in situ) calibrations that were discussed and demonstrated.

Thanks again to all our speakers for a great day, and to Travis Field and his staff at Agilent Technologies for hosting this event. We look forward to seeing many of you in Nashville!

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New England group photo.