

Regional News

1110 New England Region



Hosted By: GE Sensing
May 5, 2009

GE Sensing opened their doors for NCSLI on May 5th, and the New England Region showed up with 43 attendees for the Tuesday meeting. We had members come from as far

away as New Jersey for this meeting!

Dr. Jim Salsbury, the Corporate Metrologist at Mitutoyo America, was our first speaker. The topic, "Rethinking uncertainty: When to ignore resolution and repeatability," drew interest and attention from as far away as Israel (NCSLI truly is an international organization). In measurement uncertainty analysis, it is not uncommon to see "resolution" and "repeatability" as contributors. For the calibration of measuring instruments, some experts say they both should be included, while others say to use only one or the other. Dr. Salsbury discussed new research which demonstrates many situations where neither should be included in the uncertainty. His presentation opened our eyes to new ideas for evaluating uncertainty when calibrating measuring instruments. Any feathers that may have been ruffled by the new concepts were not evident in our group!

Low pressure calibrations can be difficult and complex. Tom Reid, the Lead Product Specialist for Pressure Instruments at GE Sensing, had the next meeting segment. Tom presented solutions for these measurements from NIST through the traceability chain to the process level. He shared with us some challenges that GE Sensing had faced in their calibration operations, and steps taken to resolve them. Tom's 20 years of experience in the pressure instrumentation industry were evident in this presentation.

Ken Soleyn is the Product Manager for the humidity test and calibration instruments at GE Sensing and inspection technologies. Ken is also the product manager for GE Sensing's new tunable diode laser hygrometer, and he kept us entertained and alert in the afternoon. Ken says water can occur in three states: solid (ice), liquid, or gas (vapor). In which form is it most predominant on earth? I guess we're not sure, but what we do know is that the measurement of humidity and trace moisture plays a critical role in many aspects of commerce and industry. Ken presented calibration methods as well as a synopsis of types of instrumentation used for humidity measurement. The theory behind the gravimetric primary standards used by NIST and other national metrology labs was reviewed along with chilled mirror hygrometer transfer



Dr. Jim Salsbury, Mitutoyo America



Tom Reid

standards, two-pressure, two temperature and divided/mass flow humidity generators. Thanks to Ken for a truly great presentation. Ken also spearheaded (along with help from Gail...the IM girl) the meeting arrangements at GE Sensing, so we owe him a double debt of gratitude.

Dennis Plant, also with GE Sensing, concluded the speakers for the classroom portion of the meeting with a presentation on facility monitoring for temperature, humidity & pressure. There is a big trend toward automated monitoring, and we learned about different communications technologies and wireless communication configurations.

After the meeting, the folks at GE offered a plant tour through the manufacturing and test operations. Thanks to our host, speakers, and NCSLI members for a successful spring meeting.

Tim Cooke, Committee Chair
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Ken Soleyn