



**Maryland Section 1211**  
**Vernon Alt, Section Coordinator**  
**Hosted By: NIST**  
*April 23, 2008*



**Virginia Section 1213**  
**Tom Hettenhouser, Section Coordinator**

A combined meeting of sections 1211 and 1213 was held at NIST on April 23, 2008. The meeting was well attended and received by 52 people. The meeting started with a continental breakfast and coffee sponsored by Creative Marketing Associates (CMA). Tom Hettenhouser, Virginia section coordinator, and Vernon Alt, Maryland section coordinator started the meeting with announcements, an overview of the agenda, and a review of the latest NCSLI board report.

The first speaker, Elizabeth Gentry of NIST Weights and Measures, discussed the "Strategic Framework" for Learning and Development and touched on each one of the 4 committees, 161-Training Resources, 162-Financial Resources, 163-Workplace and Professional Development and 164-Education Liaison and Outreach. Next year NCSLI will be listed in the CFC (Combined Federal Campaign).

Peter Dack of Fluke spoke about the requirements of the RF Source used in Spectrum Analyzer calibration and how multiple sources are required to cover the characteristics and range, such as Low Noise, Flatness and Attenuation accuracy from low frequency up into the microwave range. Peter also pointed out that proper organization of the tests can reduce the number of connect and disconnects throughout the cal procedure, thereby reducing calibration times and connector wear.

Prior to lunch at the NIST cafeteria, the group broke into smaller groups to attend lab tours of their choice. These tours consisted of temperature, flow, force, dimensional, and radiometry. Thank you to Greg Strouse, Aaron Johnson, Rick Seifarth, Ted Doiron, and Cameron Miller for their time and effort in hosting these tours.



Maryland Section 1211 and Virginia Section 1213

After lunch, Tom Hettenhouser of NVLAP then gave a presentation on uncertainty analysis. Tom started by giving us the formal definition of uncertainty then he hit us with our favorite formula. Once the moans and groans subsided, it actually got easier when Tom showed us how using MS Excel can simplify our calculations. Many questions were asked, which were fielded by Tom as well as many of the attendees.

After the afternoon break and group photo, Michelle Foncannon of NIST Weights and Measures, gave a presentation on risk analysis. Michelle started her presentation with a SAT style analogy question, "Measurement Uncertainty is to the Measurand as Blank is to Risk." Michelle's assistant, Elizabeth Gentry, handed out sweets to attendees who provided inputs and answers. Michelle tabulated the responses on an easel then proceeded to the correct answer using deductive reasoning and an understanding of Measurement Uncertainty. She stressed the value of evaluating both False Acceptances and False Rejections and noted that guard banding only addresses False Acceptances. Using an example Michelle demonstrated three different ways to calculate the risk associated with a performance decision. MS Excel was again shown to have useful formulas.

This was a very lively and informative presentation.

The day concluded with door prizes provided by CMA and NCSLI. Feedback from the meeting survey was mostly positive and comments will definitely be incorporated into the next event held at NIST which is expected to be next spring. Virginia's next meeting is expected to be held in the Norfolk area sometime in October. ■

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