

Traceability from the NCSLI Industrial Programs Committees' Perspective

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Abstract

Over the past four years NCSLI has hosted a series of panel sessions on (metrological) traceability that first focused on issues at or near the 'top' of the traceability chain, and then last year moved to cover issues at the industrial metrology level. Issues covered have included: (1) The relationship between "traceability" and "degree of equivalence" (as described in the BIPM MRA); (2) How data in the key comparison database might be used to support traceability across international boundaries; (3) What the role is of measurement uncertainty in establishing traceability (and vice versa); (4) The meaning and usefulness of the expression "Traceability to the SI;" and (5) What needs to be traceable in a 'statement of traceability,' from both a technical and trade perspective.

Issues that were discussed at last year's industrial metrology session included: (6) Barriers to examining traceability chains, including identification of 'weak links'; (7) Needs to interpolate and extrapolate from calibration services provided by NIST; (8) Unrealistic (large and small) estimates of measurement uncertainty; (9) Different wording for traceability requirements in different standards (e.g., "known or valid relationships" versus "unbroken chain of comparisons") and (10) What do assessors and regulators look for concerning traceability in an industrial setting?

Other topics pertinent to the industrial environment include: (11) The role of quality management systems and accreditation in achieving and demonstrating traceability; (12) How to incorporate instrument manufacturer's specifications into statements of traceability; (13) Traceability requirements for intrinsic standards, and (14) How can uncertainty and traceability requirements be established and met when only a single measurement is performed?

This session will feature panelists from most of the NCSLI Industrial Programs Committees, and will be an open forum in which the panelists will first present a short opening statement about traceability issues they face with respect to their Committees; then the panel will respond to audience questions and comments.

As before, please come to this session to ask questions, raise issues and share your traceability experiences from an industrial perspective. We hope to see you there!

NOTE: Definition of "traceability" from the International Vocabulary of Basic and General Terms in Metrology, ISO, 1993: "property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties".

DISCLAIMER: The discussion at this panel session should not be construed to represent the current policy of the National Institute of Standards and Technology.