2019 NCSL INTERNATIONAL WORKSHOP & SYMPOSIUM
August 24 – 29, 2019
Huntington Convention Center, Cleveland, OH
Call for Papers
Abstract Deadline March 31, 2019
Manuscript Deadline May 20, 2019
NCSL INTERNATIONAL
Serving the World of Measurement

Course Catalog Number: Tma-1
Course Track: Mass Measurements
Course Topic: Uncertainty
Course Career Level: Beginner

Sunday, August 25 | 1:00 PM - 5:00 PM | 1/2-Day PM (4 Hours)
Course Title: Automatic and Robot Efficiency Gains for the Modern Mass Metrology Lab
Instructors: Mark Kliebenschaedel and Christian Mueller-Schoell, Mettler Toledo

Abstract: The question arises: how should mass comparators be tested, qualified and calibrated, when used in different missions? Join us as we cover the essential components of a Comparator Qualification and Service. Whether used as a comparison device, or as a high performance, direct-reading balance or scale. We will cover the requirements for both schema. We will also spend some time looking into productivity gains and efficiencies, achieved by the careful and strategic investment in advanced instrumentation for weight calibration. Employing robotic and automatic comparators in the modern Calibration Lab will not only greatly improve achieved uncertainties but will free-up personnel to complete other tasks, whilst the comparators are running their own calibration routines. Hence allowing multi-layer efficiency gains and performance improvements.

Learning Objectives:

1. Attendees will learn how instruments are correctly, and scientifically tested in their given mission.
2. Understand the importance of environment, placement and appropriate testing regimes
3. Learn how a modern metrology lab can increase productivity and reduce uncertainties
4. Leave the session with a "Toolkit" to improve their own Comparator performance and capability

Instructor Curriculum Vitae (CV):
Mark Kliebenschaedel studied mechanical engineering and has worked as a Technical Specialist for automatic and robotic mass comparators for 12 years at Mettler Toledo. He is presently the product manager for automatic and robotic mass comparators and team leader of the service team which produces, installs, and services automatic and robotic mass comparators.

Julian Luescher Pending