February 25 – 27, 2019
The Florida Hotel & Conference Center | Orlando, Florida
1500 Sand Lake Road, Orlando, Florida 32809
1-800-588-4656

TE- 16| February 26 & 27| 8:00 AM - 5:00 PM | 2-Day (16 hours)

Course Title: The NIST Uncertainty Machine and the NIST Consensus Builder

Instructor: Antonio Possolo, PhD, National Institute of Standards and Technology (NIST)

Course Description: The NIST Uncertainty Machine (NUM) and the NIST Consensus Builder (NICOB) are web-based applications accessible worldwide via any internet browser. The NUM provides a user-friendly interface to uncertainty analysis for measurement models of the type described in the GUM ("Guide to the Expression of Uncertainty in Measurement"), using the GUM approach and also the Monte Carlo method of the GUM Supplement 1. The NICOB provides a user-friendly interface for the analysis and reduction of measurement results obtained in interlaboratory studies, including key comparisons: computation of consensus values, characterization of associated uncertainty, evaluations of reproducibility, and degrees of equivalence. This course will provide a hands-on familiarization with the NUM and with the NICOB, using concrete examples and real data from a wide range of fields of measurement science, and will also give the participants sufficient background and guidelines to empower them to make the particular choices needed to apply these tools thoughtfully and appropriately. The participants will have the opportunity to apply these tools also to their own data during the course, and to share their experiences while doing so. The participants are expected to have general familiarity with the basic notions and methods of uncertainty analysis as are explained in the GUM (or in NIST Technical Notes 1297 and 1900), but do not need to possess specialized knowledge of probabilistic or statistical methods.

Instructor Biography: Born in Lisboa, Portugal, a naturalized U.S. citizen, living in the U.S. since 1978, earned a Licentiate in Geology from the Classical University of Lisboa, Portugal, and a Ph.D. in statistics from Yale University (under John Hartigan's guidance).