SESSION 2
TUESDAY, AUGUST 27 | 1:00 PM - 2:00 PM

2A – Quality Systems and Management |
Measurement Quality Assurance of Metrology: The Criteria to Update the Control Chart
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Abstract:
According to ISO/IEC 17025:2017 section 7.7.1, the laboratory shall have a procedure for monitoring the validity of results. Creating a control chart is the most frequently used method when we monitor the stability of measurement systems in a laboratory. Because the control limits of the control chart will influence the validity of monitoring, it is necessary to recalculate the control limits regularly. For this reason, this paper is focused on finding the right timing to recalculate the control limits, and using the hypothesis testing to establish the criteria for updating the control chart. Laboratory staff can follow this criteria to decide whether the previous and present data of the control chart are consistent or not, and update the central line (CL), the lower control limit (LCL) and the upper control limit (UCL). In the meantime, from the perspective of quality assurance, figuring out the mistakes that the laboratory staff usually make when they create the control chart. It will help the laboratory staff to recalculate the control limits more easily and monitor the stability of measurement system more efficiently.

Learning Objectives:
1. To decide whether the control chart need to be updated.
2. To recalculate the control limits.
3. To know the mistakes that laboratory staff usually make when they create the control chart.

Instructor Curriculum Vitae (CV):
My name is Chi-Hsuan Lin. I work for Center for Measurement Standards (NML)/Industrial Technology Research Institute (ITRI) in Taiwan. I am a quality assurance in quality engineering department!