

## INSTITUTE FOR DESIGN OF ELECTRICAL MEASURING INSTRUMENTS, MUMBAI

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### WORKSHOP ON ESTIMATION & EVALUATION OF TOTAL UNCERTAINTY IN MEASUREMENT AS PER NABL - 141

DURATION	Two Days
TIMINGS	9.00 a.m. to 6.00 p.m. daily
VENUE	IDEMI, Mumbai
FEE/PARTICIPANT	Rs. 5515/- (including Service Tax)
INTAKE CAPACITY	20 participants

#### WHO SHOULD ATTEND

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Persons working in Calibration Laboratories, Quality Control, Standards Room, Production Control and Design & Development, who are concerned with measurement, testing & calibration

#### WHY SHOULD YOU ATTEND

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The expression of 'Uncertainty in Measurements' is an integral component of the certificate being issued by the calibration and testing laboratories. The results must be produced with a high degree of exactness in measurement system. This concept is equally true for all other fundamental units of measurement as per ISO/IEC 17025 (General requirements for the competence of testing and calibration laboratories). Further, repeated observations made during precision measurement of any parameter are rarely found identical even when these are made under the same conditions. This is due to, the UNCERTAINTY of measurement, which is prevalent in all measurements

#### OBJECTIVE

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This workshop is designed to expose the participants not only to the concept of measurement uncertainty, but also provide an understanding of how to actually estimate the same for different types of measurement as per NABL Document No. 141 (Revised). Participants would be required to estimate measurement uncertainty of actual case studies

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### WHAT THE PROGRAM CONTAINS

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1. Uncertainty – concept, sources & measures
2. Definitions of related terms and phrases
3. Evaluation of standard uncertainty
4. Expanded Uncertainty
5. Step by step procedure for calculating, the Uncertainty in Measurement
6. Case studies in Calibration of Pressure, Temperature, Mass, Electrical, Dimension Parameters

### FACULTY

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Trained & highly experienced Lab Assessor and the Sr. Technical personnel from Calibration Laboratory

**Certificate of participation will be issued to each participant**