

**FLUID CONTROL RESEARCH INSTITUTE**

**Kanjikode West, Palakkad, Kerala State**

**e – ITEC Training course**

**Course Content**

**Course Title: Calibration Techniques & Uncertainty budgeting of Waterflowmeters**

Course on Calibration Techniques & Uncertainty budgeting of Waterflowmeters is designed to have an indepth knowledge in the calibration techniques of water flowmeters. It also covers the features of Electromagnetic Flowmeters, Uncertainty calculation/budgeting etc

To evaluate the performance of any product, it need to be tested or measured by a laboratory to determine its characteristics against a standard / specification. Laboratory authorities provide a means of evaluating the capability of laboratories to perform specific types of testing, measurement and calibration. International Organization for standardization (ISO) had published ISO/IEC 17025 –2017 - General requirements for the competence of testing laboratories. Once accredited, the laboratory is required to fulfill with the requirements and to maintain the standard of operation and its quality system.

Various calibration techniques has to be developed and validated to cater the needs of the customer. Quality of measurements has assumed great significance in view of the fact that measurements provide the very basis of all control actions. The uncertainty of measurement is a parameter, associated with the result of a measurement, that characterizes the dispersion of the true values which could reasonably be attributed to the measurand.

Keeping the above aspects, discussions on water flowmeters and electromagnetic flowmeter are included in the training course.

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#### Course Schedule:

Sl No.	Date	Time IST(Indian Standard Time)	Topic
1	6/09/2021	14.00Hrs-14.40 Hrs 14.45Hrs- 15.00Hrs 15.00Hrs-16.00hrs 16.00-16.15Hrs 16.15Hrs-17.15Hrs	Corporate Video of FCRI Welcome address –DIRECTOR, FCRI Initial on-line Test Break Flowmeter Calibration and Techniques – Water Flow laboratory -1
2	7/09/2021	15.00Hrs-16.00hrs	Flowmeter Calibration and Techniques – Water Flow laboratory -2 (Continuation...)
3	8/09/2021	15.00Hrs-16.00hrs	ISO/IEC 17025-2017
4	9/09/2021	15.00Hrs-16.00hrs	Electromagnetic Flowmeters- Operating Principles calibration Method, Data presentation & Uncertainty calculation/ budgeting - 1
5	10/09/2021	15.00Hrs-16.00hrs 16.00-16.15Hrs 16.15Hrs-17.15Hrs	Electromagnetic Flowmeters- Operating Principles calibration Method, Data presentation & Uncertainty calculation/ budgeting – 2 (Continuation...) Break Final on-line Test

Technical requirement at far -end/participants end

: Devices or systems compatible with Google meet/

Polycom Online platform to be used by the Institute

:

Microsoft Teams