



# CSIR Integrated Skill Initiative

## A training program on "Mass and Fluid Flow Metrology" during (18-20) Mar. 2025



Jointly organized by  
**Mass and Fluid Flow Metrology Sub-Divisions**

CSIR-National Physical Laboratory, Dr. K.S. Krishnan Marg, New Delhi-110012, India

### Training Objectives:

**This program is specifically designed for researchers, industry personnel, legal metrology officers and students. The main objectives are to impart a clear understanding about basics of mass and fluid flow metrology, role of mass and fluid flow metrology in industry, measurement techniques and uncertainty etc.**

### Registration link:

<https://forms.gle/bv378mY9nyqThuGSA>

**Training Venue:** CSIR- National Physical Laboratory, Delhi

**Training Fee / Charges:** \*Fee details can be found overleaf

### Calibration Facility



**Weights**



**Volume**



**Balances**



**Water Flow**



**Gas Flow**

Time	Activity
<b>Day 1: March 18, 2025</b>	
9:30 am to 10:00 am	Registration of participants
10:00 am to 10:10 am	Welcome Address
10:10 am to 10:15 am	About CSIR Skill initiative programme
10:15 am to 10:20 am	Overview of Physico-Mechanical Metrology Division
10:20 am to 10:30 am	High tea and Group photograph
10:30 am to 11:15 am	Overview of Mass Metrology
11:15 am to 12:00 pm	Mass Metrology and Calibration of Weights
12:00 pm to 1:00 pm	Volume Metrology and Calibration of Volumetric Instruments
1:00 pm to 2:00 pm	Lunch
2:00 pm to 2:45 pm	Hands-on training - Weights
2:45 pm to 3:30 pm	Hands-on training - Volume
3:30 pm to 3:45 pm	Tea
3:45 pm to 5:00 pm	Hands on training contd.

<b>Day 2: March 19, 2025</b>	
10:00 am to 11:15 am	Calibration of Balances
10:15 am to 11:30 am	Tea
11:30 am to 1:00 am	Hands-on training - Balance
1:00 pm to 2:00 pm	Lunch
2:00 pm to 3:00 pm	Basics of Gas Flow Measurement: Calibration of Gas Flow Meters
3:00 pm to 4:00 pm	Calibration of Gas Flow Meters (Cont'd)
4:15 pm to 4:30 pm	Tea
4:30 pm to 5:15 pm	Hands on Training: Calibration of Gas Flow Meters

<b>Day 3: March 20, 2025</b>	
10:00 am to 10:45 am	Basics of Water Flow calibration Facility
10:45 am to 11:00 am	Tea
11:00 am to 01:00 pm	Hands on Training: Calibration of Water Flow Meters
1:00 pm to 2:00 pm	Lunch
2:00 pm to 4:15 pm	Hands on Training: Calibration of Gas Flow Meters & Water Flow Meters
4:15 pm to 4:45 pm	Tea, feedback and discussions
4:45 pm to 5:15 pm	Valedictory function and Vote of thanks



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*Mass and Fluid Flow Metrology Sub-Divisions, Physico Mechanical Metrology Division  
CSIR-National Physical Laboratory, Dr. K.S. Krishnan Marg, New Delhi-110012, India*

### Training Fee / Charges Per Participant

Participants	1st Day of Course	Additional Days of Course	For the three days course
Professionals	₹3,000 + GST	₹1,000 + GST	₹5,000 + GST
Students and college Faculties	₹500 + GST	₹500 + GST	₹1,500 + GST

- GST is @18%
- TDS : CSIR-NPL is exempted from Tax Deduction at Source under Section 35(1)(ii) of the Income Tax Act, 1961
- The Training Fee includes Course Material, Training Kit, Lunch, Tea/Coffee etc.
- The Training fee should be sent at least two weeks prior to the commencement of the desired training program, through a Demand Draft drawn in favour of the "DIRECTOR, NATIONAL PHYSICAL LABORATORY", payable at "NEW DELHI".
- Online transfer is also acceptable through Canara Bank Account No. 91002010030018, NPL Campus, National Physical Laboratory, Dr. K. S. Krishnan Marg, New Delhi-110012. IFSC Code CNRB0019100, MICR no. 110015428.
- Kindly confirm the NEFT transfer details through e-mail. In the remarks column of NEFT, please mention "HRD, NPL"
- Lodging & Boarding: Charges to be borne by the Trainees – As per prevailing rates in the NPL Guest House (Subject to availability)

### Terms and Conditions

- In case of inadequate number of participants (*less than 10*), for a particular training programme, CSIR- NPL may drop the execution of that programme.
- In view of this, before sending the DD, the prospective participants are advised to confirm with the Head, HRD or the concerned Technical Coordinator about its dates and execution.
- For Technical Queries about the training course, the prospective participants may contact the concerned Technical Coordinator.
- Last date for registration and fee payment: Number of seats are limited. It is based on first come first serve basis. Registration closes 10 days before the commencement of program.

### Contact Persons

**Technical:**

Dr. Nidhi Singh: singhnidhi@nplindia.org, 01147091139; Dr. S. K. Jaiswal: skjaiswal@nplindia.org, 01145609426;

**HRD:**

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**NPL-CSIR Integrated Skill Initiative:**

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