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

CSIR-Integrated Skill Initiative Programme

Training Calendar 2026-27

GENERAL INSTRUCTIONS

In case of an adequate number of participants (less than 10), for a particular training Programme, CSIR- NPL may drop the execution of that program. Hence, before sending the Payment Receipt, it is advised to confirm with the HRD **(**hrd.nplindia@csir.res.in**)** 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

- **Only Indian Citizens can apply for the training program**
- **Fees once submitted are not refundable**

Training Fee/Charges Per Participant

One Day Course	Two Days Course	Three Days Course	Four Days Course	Five Days Course	Participants
₹3,000+GST (@18%)	₹4,000+ GST (@18%)	₹5,000+ GST (@18%)	₹6,000+GST (@18%)	7000+ GST (@18%)	Professionals
₹500+GST (@18%)	₹1000+ GST (@18%)	₹1500+GST (@18%)	₹2000+GST (@18%)	2500 + GST (@18%)	Students

TDS: CSIR-NPL is exempted from Tax Deduction at Source under Section 35(1)(ii) of the IT Act 1961. The Training Fee includes Course materials, Training Kit, Lunch, Tea/Coffee, Certificate etc.

After confirming with HRD, preferably training fees should be sent at least two weeks prior to the commencement of the desired training program through a **Demand Draft** drawn in favor 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 "STP No. & Name of the Participants, HRD, NPL"

All STP courses will be conducted in offline mode, unless there is any inescapable situation. Participants are requested to check their schedules before applying for any course. **No request from participants for changes in venue, date, or mode of training will be entertained.**

Lodging & Boarding: Participants are expected to arrange their own accommodation as limited seats are available at NPL Guest House. However, after the payment of registration fees, requests may be sent to nplguesthouse.nplindia@csir.res.in with HRD in cc. Please note that guest house charges have to be borne by the trainees – at the prevailing rates of NPL Guest House**.**

For registration kindly fill the following Google form

link: https://forms.gle/L1kdHdb1ueC5ZVRM8

For any enquiry, the Participants may contact: -

Mr. Ajeet Singh
Scientist 'G' & Head HRD
National Physical Laboratory
New Delhi Pin: - 110012
Ph: - 011-4560 9366, / 011-4560 9361(O)
E-Mail: - ajeet.singh@csir.res.in

S. No.	Title of Training Program on	Tentative Dates, Duration
STP-1	Fundamentals and Hands-on Training in Single Crystal Growth	9-10, April 2026, 2 days
STP-2	Advanced Instrumentation Techniques for Materials Characterization and Analysis	8-10, July 2026, 3 days
STP-3	Training program on mass and dimensional metrology	20-24, July 2026, 5 days
STP-4	Training Program on Biomedical Metrology	30-31 July, 2026, 2 days
STP-5	Training Programme on IS/ISO/IEC 17025:2017 (General Requirements for the competence of testing and calibration laboratories) and Internal Audits	3-6 August, 2026, 4 days
STP-6	Training Programme on DC-AC and Impedance Metrology (Calibration of Digital Multimeter, Multi-product Calibrator, LCR Meter and Earth Resistance Testing)	10-12 August, 2026, 3 days
STP-7	Training Program on Plastic Processing, Waste Management and Recycling	11-13 August, 2026, 3 days
STP-8	Training Programme on Precision in Practice, Dealing with Uncertainties	19-20 Aug 2026. 2 days
STP-9	Awareness Program on E-Waste Management and Recycling	1-2 September, 2026, 2 days
STP-10	Training Program on Fluid Flow Measurement	7-9 September, 2026. 3 days
STP-11	Training on Air Quality Measurements	9-11 September, 2026, 3 days
STP-12	Training Programme on Force, Torque and Hardness Metrology	16-17 September, 2026, 2 days
STP-13	Training Programme on Art of Reproducible research: Standardizing Reproducibility	8 October, 2026, 1 day
STP-14	Training Programme on Measurement, Automation and Instrument Control	12-13 October, 2026, 2 days
STP-15	Training Program on Carbon Materials	14-16 October 2026, 3 days
STP-16	Training Program on Laser Interferometer and Dimensional metrology	21-23 October 2026,3 days
STP-17	Training Program on Optical Radiation Metrology	4-6 November, 2026, 3 days
STP-18	Training Program on Dew-Frost Measurements	16 November, 2026, 1 day
STP-19	Training program on Acoustics and Vibration Standard Metrology	17 November, 2026, 1 day
STP-20	Training Programme on Temperature, Humidity and Moisture Metrology	18-20 November, 2026, 3 days
STP-21	Training Program on Terahertz technologies	25-27 Nov, 2026, 3 days
STP-22	Hands on training on thin film deposition and characterization	2-4 Dec 2026, 3 days
STP-23	Training Programme on Moisture Measurements in Food Grains	18 Dec 2026, 1 day
STP-24	Training Program on Time and Frequency Metrology	20-22 January 2027, 3 days
STP-25	Training Program on Quantum Metrology	2-3 February 2027, 2 days
STP-26	Training Program on Electrochemical Techniques for materials and Device Application (EMDA-2026)	3-5 February, 2027, 3 days
STP-27	Training Program on Advance Materials Characterization Techniques	8-12 February, 2027, 5 days
STP-28	Training Programme on Artificial Intelligence and Machine Learning for Advanced Metrology Applications	10-11 February, 2027, 2 days
STP-29	Training Programme on Pressure, Vacuum, Ultrasonic Metrology Non- Destructive Testing	8-10 March, 2027, 3 days
STP-30	Training Programme on Scientific Communications	11-12 March, 2027, 2 days
Free Skill Training Programme 2026-2027		
FSTP-1	Training Program on Intellectual Property Rights	19-20 November, 2026, 2 days
FSTP-2	Training Programme Semiconductor Metrology	14 January 2027, 1 Day

S. NO.	TITLE OF TRAINING PROGRAM ON	TENTATIVE DATES, DURATION	CONTENT OF THE TRAINING PROGRAMME	TECHNICAL COORDINATOR
STP-1	Fundamentals and Hands-on Training in Single Crystal Growth	09-10, April 2026, 2 days	Basics, various methods, practical demo for single crystal growth	Dr. N. Vijayan nvijayan.nplindia@csir.res.in Ph: - 011-45608263
STP-2	Advanced Instrumentation Techniques for Materials Characterization and Analysis	08-10, July 2026, 3 days	Basics of various instrumentation techniques, Applications, practical demo classes etc.	Dr. N. Vijayan nvijayan.nplindia@csir.res.in Ph: - 011-45608263
STP-3	Training program on mass and dimensional metrology	20-24, July 2026, 5 days	Calibration of weights employing substitution method, Volumetric glassware and balances, Vernier caliper, micrometer, gauge blocks, height gauges and angle gauges etc., followed by measurement uncertainty evaluation for all the parameters.	Dr. Nidhi Singh and Dr. Girija Moona singhnidhi.nplindia@csir.res.in moonag.nplindia@csir.res.in
STP-4	Training Program on Biomedical Metrology	30-31 July, 2026, 2 days	Biomedical Metrology: Biomedical parameters, uncertainty evaluation, Calibration of medical device analyzers & simulators and testing of medical devices	Dr. Rajesh and Ms. Sudesh Yadav sudesh.nplindia@csir.res.in rajesh.nplindia@csir.res.in
STP-5	Training Programme on IS/ISO/IEC 17025:2017 (General Requirements for the competence of testing and calibration laboratories) and Internal Audits	03-06 August, 2026, 4 days	This training program is designed to impart interactive experience to the participants in the quality system based on IS/ISO/IEC 17025:2017 standard and to conduct internal audits.	Dr. Goutam Mandal goutam.nplindia@csir.res.in
STP-6	Training Programme on DC-AC and Impedance Metrology (Calibration of Digital Multimeter, Multi-product Calibrator, LCR Meter and Earth Resistance Testing)	10-12 August 2026, 3 days	Earth Resistance Testing (IS 3043), Calibration of Earth Resistance Meter, Calibration of Digital Multimeter, Multi-product Calibrator, LCR Meter	Dr. Satish Ms. Hemavathi A. satish.nplindia@csir.res.in hkarthik.nplindia@csir.res.in
STP-7	Training Program on Plastic Processing, Waste Management and Recycling	11-13 August, 2026, 3 days	Basics of Plastic Processing, Processing Techniques, Processing Equipment's, Relevant Parameters, Plastic Waste and Plastic Pollution, Types of plastic Wastes, Environmental Concerns, Rules and Legislations, Waste Management Strategies, Recycling of Plastic Waste, Waste to Wealth, Circular Economy, Challenges and Opportunities	Dr. Parveen Saini pksaini@nplindia.org
STP-8	Training Programme on Precision in Practice, Dealing with Uncertainties	19-20 Aug 2026. 2 days	Foundations & Philosophy, The GUM Framework, The Anatomy of Uncertainty, Error Analysis & Correction, Practical Case Studies, Intercomparisons & Proficiency Testing	Dr. Ved Varun Agrawal vedvarun.npl@nic.in
STP-9	Awareness Program on E-Waste Management and Recycling	1-2 September, 2026, 2 days	Definition of E-waste, Types of E-waste, Environmental and Human Health Concerns, Rules and Legislations, E- Waste Management Strategies, Recovery Resource Recovery and Recycling, Waste to Wealth Realization, Circular Economy, Challenges and Opportunities.	Dr. Parveen Saini pksaini@nplindia.org
STP-10	Training Program on Fluid Flow Measurement	7-9 September, 2026, 3 days	Basics of Water Flow and Gas Flow Measurement. Calibration of Water Flow meters and Gas Flow meters and Testing of Water Meters	Dr. Shiv Kumar Jaiswal skjaiswal.nplindia@csir.res.in

STP-11	Training on Air Quality Measurements	9-11 September, 2026, 3 days	Basics of Plastic Processing, Processing Techniques, Processing equipment, Relevant Parameters, Plastic Waste and Plastic Pollution, Types of plastic Wastes, Environmental Concerns, Rules and Legislations, Waste Management Strategies, Recycling of Plastic Waste, Waste to Wealth, Circular Economy, Challenges and Opportunities National ambient air quality standards (NAAQS), quality infrastructure (as per ISO/IEC 17025), general definitions, gas measurement techniques (greenhouse and pollution gases), PM10 and PM2.5 measurements and their calibration (gravimetric sampler, FRM, BAM), particle size concentration measurement, gas standard preparation (ISO 6142, ISO 17034) and analysis (by GCs and CRDS), calibration of gas analyzers, dilutors, primary techniques of gaseous pollutant measurements (including wet chemical), airflow measurement techniques, analysis of particulate bound chemicals using ICP-OES, measurement uncertainty estimations, with hands-on training on most of the parameter of NAAQS. Noise pollution and ambient sound standard and measurement techniques.	Dr Shankar G. Aggarwal Dr Daya Soni aggarwalsg.nplindia@csir.res.in
STP-12	Training Programme on Force, Torque and Hardness Metrology	16-17 September, 2026, 2 days	Calibration of Force, Torque and Hardness parameters along with laboratory demonstration and followed by measurement uncertainty evaluation for all the parameters.	Dr. Rajesh Kumar Dr. Surya Kumar Gautam suryag.nplindia@csir.res.in
STP-13	Training Programme on Art of Reproducible research: Standardizing Reproducibility	8 October, 2026, 1 day	Data and Documentation, Workflow Automation, Tidy Data Principles, Version Control (Git), Open Science, Open-source tools for science, The One-Click Workflow, latex and markup languages, project structures\project organization.	Dr. Ved Varun Agrawal vedvarun.npl@nic.in
STP-14	Training Programme on Measurement, Automation and Instrument Control	12-13 October, 2026 2 days	Measurement Automation, RS 232, IEEE 488.2, Data Acquisition, Microcontroller, Case studies, Automation for accredited laboratory es	Dr. Satish satish.nplindia@csir.res.in
STP-15	Training Program on Carbon Materials	14-16 October, 2026, 3 days	Conventional Carbon, Carbon Fiber, Carbon Nanomaterials like Carbon Nanotubes, Graphene, Synthesis of Carbon nanotubes and Graphene by Chemical vapor deposition, Carbon Based Polymer composites and nanocomposites	Dr. Bhanu Pratap Singh Dr. K.M. Subhedar bps.nplindia@csir.res.in kms.nplindia@csir.res.in
STP-16	Training Program on Laser Interferometer and Dimensional Metrology	21-23 October, 2026, 3 days	Laser Interferometer, GBI, LMM, ZyGO, Gage block, Angle etc. and their uncertainty evaluation	Dr. Mukesh Jewariya jewariyam.nplindia@csir.res.in
STP-17	Training Program on Optical Radiation Metrology	4-6 November, 2026, 3 days	Basics in calibration and measurement of parameters of optical radiation metrology, involved uncertainties and related standards	Dr. V K Jaiswal jaiswalvk.nplindia@csir.res.in Dr. Parag Sharma
STP-18	Training Program on Dew-Frost Measurements	16 November, 2026, 1 day	Demonstration and Training on newly established facility on dew/frost measurements from -90 °C to 70 °C crucial for Pharma, Semiconductor Fabs, Compressed air for various applications, Climate and Meteorology, Aviation, Calibration Labs, etc measurement protocols as per standards requirements and uncertainty.	Dr. D. D. Shivagan shivagand.nplindia@csir.res.in

STP-19	Training program on Acoustics and Vibration Standard Metrology	17 November, 2026, 1 day	Fundamental of Acoustics and Vibration Standard Metrology	Dr Naveen Garg ngarg.nplindia@csir.res.in Dr. Chitra Gautam cgautam.nplindia@csir.res.in
STP-20	Training Programme on Temperature, Humidity and Moisture Metrology	18-20 November, 2026, 3 days	Basics in calibration and measurement of parameters of ITS-90 fixed points and comparison Calibration of SPRTs/PRTS, Thermocouples, Radiation Thermometers and Thermal Imagers, Clinical Thermometers, Thermo-hygrometers, dew/frost point, moisture in agricultural food grains and thermal mapping. Requirements towards equipment's, IQCs, uncertainty, reporting of results and related standards.	Dr. D. D. Shivagan shivagand.nplindia@csir.res.in
STP-21	Training Program on Terahertz technologies	25-27 Nov, 2026, 3 days	Basics of terahertz technologies, spectroscopy and Imaging	Dr. Mukesh Jewariya jewariyam.nplindia@csir.res.in
STP-22	Hands on training on thin film deposition and characterization	2-4 December 2026, 3 days	Growth of thin films using sputtering and chemical vapor deposition processes on the different substrates and characterizations for their photo response properties	Dr. Sunil Singh Kushvaha kushvahas.nplindia@csir.res.in
STP-23	Training Program on Moisture Measurements in Food Grains	18 December, 2026, 1 day	Demonstration and Training on Calibration and Testing of Various Grain Moisture Meters and Food Grain Samples as per the Legal Metrology Rules for "MOISTURE METERS FOR CEREAL GRAINS AND OILSEEDS" released on 4th August 2025 and implemented from 1st January 2026. Measurement protocols as per standards requirements and uncertainty.	Dr. D. D. Shivagan shivagand.nplindia@csir.res.in
STP-24	Training Program on Time and Frequency Metrology	20-22 January 2027, 3 days	Basics of atomic clocks, precision timekeeping, global timekeeping framework, T&F measurements and calibration, quality system, time dissemination techniques, cyber security and application of T&F Metrology	Dr Poonam Arora arorap.nplindia@csir.res.in
STP-25	Training Program on Quantum Metrology	2-3 February, 2027, 2 days	Basics of Quantum Mechanics, Quantum SI, Introduction to quantum metrology, realization of quantum standards for SI units, applications etc.	Dr. Poonam Arora and Dr. D. D. Shivagan arorap.nplindia@csir.res.in shivagand.nplindia@csir.res.in
STP-26	Training Program on Electrochemical Techniques for materials and Device Application (EMDA-2026)	3-5 February, 2027, 3 days	Scientific Writing, Ethics, Plagiarism etc. Fundamentals of electrochemical techniques such as CV, CA, GCD, EIS and its analysis. Application of electrochemical techniques for energy devices such as batteries, fuel cell, supercapacitor, solar cell and organic electronics	Dr. Kiran M Subhedar Dr. B P Singh kms.nplindia@csir.res.in bps.nplindia@csir.res.in
STP-27	Training Program on Advance Materials Characterization Techniques	8-12 February, 2027, 5 days	Thermogravimetric Analysis (TGA), Differential Thermal Analysis (DTA), Differential Scanning Therogravimetry (DSC), Dynamic Mechanical Analysis (DMA), Thermo- Mechanical Analysis (TMA), Fourier Transform Infrared (FTIR) and Raman Spectroscopy, Electron Paramagnetic Resonance (EPR) Spectroscopy, Nuclear Magnetic Resonance (NMR), Scanning Electron Microscopy (SEM), Transmission Electron microscopy (TEM), Atomic Force Microscopy (AFM), ICPMS, ICPOES, Physical Property Measurement System (PPMS), Time Resolved Photoluminescence (TRPL) Spectroscopy, Ultrafast Transient Absorption (TA) Spectroscopy, X-ray Techniques (XRD, XRF, XPS), Vector Network Analysis (VNA), Electrochemical Characterization	Dr. Parveen Saini pksaini@nplindia.org

STP-28	Training Programme on Artificial Intelligence and Machine Learning for Advanced Metrology Applications	15-16 February, 2027, 2 days	The program will cover foundational concepts of different machine learning used in relevance to the anomaly detection, regression and classifications in the field of metrology, and the measurement systems. Special emphasis will be placed on uncertainty quantification in line with the Guide to the Expression of Uncertainty in Measurement, digital calibration certificates, sensor data analytics, predictive maintenance of measurement systems, and intelligent decision-support tools.	Dr. Paramita Guha Paramita.nplindia@csir.res.in
STP-29	Training Programme on Pressure, Vacuum, Ultrasonic Metrology Non- Destructive Testing	08-10 March, 2027, 3 days	Fundamentals and measurement principles of pressure (hydraulic and pneumatic), vacuum, and ultrasonic metrology; calibration and practical training; and associated measurement uncertainty	Dr. Nita Dilawar ndilawar.nplindia@csir.res.in
STP-30	Training Programme on Scientific Communications	11-12 March, 2027, 2 days	Scientific Writing, Ethics, Plagiarism etc.	Dr. Mukesh Jewariya jewariyam.nplindia@csir.res.in

Free Skill Training Programme 2026-2027

FSTP-1	Training Program on Intellectual Property Rights	19-20 November, 2026, 2 days	This training program provides hands-on training in conducting prior art searches, analysing patent documents, interpreting claims, and understanding the structure of patent specifications, including drafting descriptions, claims, abstracts, and drawings. The program also covers various aspects of IPR, including copyrights, trademarks, and their role in protecting research outputs and innovations.	Dr. Preeti Kumari and Dr. Shashank Ranjan Chaurasia preeti.nplindia@csir.res.in shashank.nplindia@csir.res.in
FSTP-2	Training Programme Semiconductor Metrology	14 January 2027, 1 Day	Tools and Techniques for Semiconductor Metrology	Dr. Suraj Khanna and Dr. Satish khanna.nplindia@csir.res.in satish.nplindia@csir.res.in

Program Coordinators

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In case of any technical query regarding training program, please contact respective Technical Coordinator (for detail see CSIR-Skill Initiative Training Calendar)
For General queries regarding registration, accommodation etc.,
Please contact at npl.skillindia25@gmail.com and copy to hrd.nplindia@csir.res.in