

CSIR SKILL BULLETIN (A FORTNIGHTLY E-PUBLICATION)

सीएसआईआर कौशल पत्रक
(पाक्षिक ई-प्रकाशन)

Editorial Team

- Dr. Vinay Kumar
- Ms Neeti Sagar

In this issue

- Skill Trainings by CSIR
- Nodal Office Updates
- Upcoming Events
- News Clippings
- General Events
- Glimpses
- Useful Links



IMAGES: Various Skill Development Training Programs at different CSIR Labs

SKILLING/UPSKILLING TRAINING PROGRAMS BY CSIR

सीएसआईआर द्वारा स्किलिंग/अपस्किलिंग प्रशिक्षण कार्यक्रम

CSIR-NCL, Pune conducted a Skill Development Program on "Materials Characterisation Using Powder X-Ray Diffraction (WMC-PXRD)" from 27th - 28th November, 2025 under the CSIR-Skill Development Initiative. A total of 88 Master's Students, research students, as well as faculty and industry representatives attended the workshop. This workshop emphasized the techniques and applications of powder X-ray diffraction (PXRD), a powerful method for structural analysis and material characterization. Special focus had been placed on its applications in pharmaceutical research, including phase identification, polymorphism studies, and quality control.



CSIR-CECRI, Karaikudi and the Rural Training Centre, Amaravathipudur jointly conducted a one-week Skill Development Training Program on "Additive Manufacturing: A technology of rapid customization" during 1st- 5th December, 2025 under the initiative of CSIR Integrated Skill Initiative-Phase III. This programme aimed to provide the latest knowledge & skills in the area of 3D printing technology using Additive manufacturing. This process makes it quick and cost-effective to produce bespoke items, accelerating product development by enabling designers to quickly test multiple versions of a product and make refinements in a fraction of the time it would take with conventional methods. This programme was attended by 43 participants by covering different parts of Tamil Nadu.



CSIR-CECRI, Karaikudi conducted a one-week Skill Development Training Program on “Biosensor: Design and applications” during 1st - 5th December, 2025 as a part of the CSIR Integrated Skill Initiative-Phase III. This programme aimed to provide the latest knowledge & skills in the area of Biosensor. A biosensor's design involves a bioreceptor (like an enzyme or antibody) that specifically binds to a target molecule (analyte) and a transducer that converts this biological interaction into a measurable signal. Applications are widespread, including medical diagnostics for diseases like diabetes, food safety, and environmental monitoring for pollutants. This programme was attended by 57 participants, covering different parts of Tamil Nadu.



CSIR-IICT, Hyderabad launched a four-day Skill Development Training Programme on "Protein extraction, separation and analysis from Mammalian cancer cell lines" during 2nd - 5th December, 2025 under the CSIR Integrated Skill Initiative (Phase-III). This training programme was attended by 23 PG students in Life Sciences from Aurora Degree and PG College, Hyderabad fostering hands-on expertise in cutting-edge biological techniques. The inaugural session was graced by Dr. A. Gangagni Rao, In-Charge Director, CSIR-IICT and delivered the inaugural address. The inaugural event was attended by invited colleagues and team members associated with the skill training.



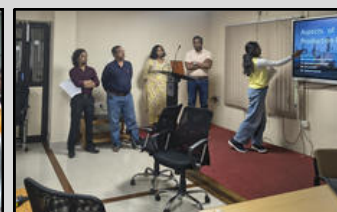
CSIR NIIST, Thiruvananthapuram conducted a skill training program on “Mechanical Testing and Thermal Characterization” during the period from 26th - 28th November, 2025 as part of CSIR Skill Initiative. 23 candidates participated and got benefitted out of this program.



CSIR-IICT, Hyderabad successfully conducted a four-day hands-on training in “Protein lysate preparation, quantification , SDS-PAGE and Western blotting” under the CSIR Integrated Skill Initiative during 2nd - 5th December, 2025. This programme was attended by 23 participants. The program opened with remarks by Dr. T. Anjana Devi, Senior Principal Scientist and Course Coordinator, followed by participant feedback and addresses from distinguished guests including Dr. M. C. Ajay Kumar, Dr. A. Gangagni Rao, Dr. K. Rajender Reddy, and Dr. Shashi Vardhan Kalivendi. Certificates were distributed, and the session concluded with a vote of thanks by Dr. C. Yogesh. The training enhanced participants’ laboratory skills and research readiness.



CSIR-NIIST, Thiruvananthapuram successfully conducted its first MSME-sponsored Skill & Entrepreneurship Development Program on “Biofuels: Opportunities and Pilot-Scale Operations” during 1st - 05th December, 2025. The 5-day program featured hands-on sessions with 1000 L reactors, 150 L fermenters, distillation units, and key process utilities. Participants also received insights on bank loans, MSME schemes, incubation support, and emerging opportunities in bioenzymes, biochemicals, and nutraceuticals under the BioE3 policy. The program concluded with participant presentations on bioethanol.



CSIR-IIP, Dehradun, conducted a three days Skill Development Training Program on “Spectroscopic Analytical Techniques-NMR” during 08th - 10th December, 2025 under the aegis of CSIR IIP Integrated Skill Initiative. This training program provided basic overview of Spectroscopy Theory about NMR Instrumentation & demonstration techniques, preparation of samples- solid & liquid, data collection & analysis along with hands on practice on 500MHz NMR Spectrometer. Total 6 candidates participated and got benefitted out of this program.



CSIR-CECRI, Karaikudi conducted a one-week Industry Oriented Refresher course on “Waste Water Treatment Technologies” during 08th - 12th December, 2025 under the aegis of CSIR Integrated Skill Initiative-Phase III. This programme provided the latest knowledge & skills in the area of Waste Water Treatment Technologies. Wastewater treatment technologies include physical, chemical, and biological methods, often used in primary, secondary, and tertiary stages to remove contaminants. Common biological processes are the Activated Sludge Process (ASP) and Moving Bed Biofilm Reactor (MBBR), while chemical methods like oxidation and reverse osmosis are used for disinfection and removing dissolved solids. Advanced technologies include Membrane Bioreactors (MBRs) for high-quality effluent and Zero Liquid Discharge (ZLD) systems to eliminate liquid waste. This programme was attended by 5 Industry participants covering two different parts of India.



CSIR-CECRI, Karaikudi conducted a one-week Industry Oriented Refresher course on “Corrosion Control using Protective Coatings and Cathodic Protection” during 08th - 12th December, 2025 under the aegis of CSIR Integrated Skill Initiative-Phase III. This programme provided the latest knowledge & skills in the area of Protective Coatings and Cathodic Protection. Protective coatings and cathodic protection (CP) are dual corrosion control methods: coatings act as a physical barrier, while CP changes the metal's electrical potential to stop corrosion, making it as the cathode in an electrochemical cell, with both often combined for superior, cost-effective protection of structures like pipelines, tanks, and ships by preventing rust and extending asset life. This programme was attended by 33 Industry participants covering different parts of India.



CSIR-CIMAP, Lucknow conducted a three-day National Metabolomics Workshop during 09th - 11th December, 2025. Around 40 participants from across the country joined the event. The inaugural session was graced by Director Sir, CSIR-CIMAP, Prof. Ute Höcker, Dr. A. S. Negi Sir, and Dr. Laiq Ur Rehman Sir, who formally opened the workshop with lamp lighting, welcomed all participants, and addressed the gathering. Prof. Raja Roy delivered the inaugural lecture on NMR metabolomics, followed by Prof. Dinesh, who spoke on chemometrics in metabolomics. Dr. Sangeeta presented insights on TOF-MS-based metabolomics, and Dr. Ratnasekhar discussed LC-MS workflows and associated challenges.



CSIR-IMTECH, Chandigarh conducted a hands-on workshop on "Leveraging Artificial Intelligence (AI) in Research" during 11th - 12th December, 2025. The workshop was organised by the Business Development Group (BDG) under the CSIR Integrated Skill Initiative Program. A total of 31 participants from various universities participated in this workshop.



CSIR-CIMAP, Lucknow conducted a five-day Skill Development Training Program on "Cultivation, Primary Processing, Valorisation, Quality and Marketing Aspects of Commercially Important Medicinal and Aromatic Crops" commenced during 1st - 5th December, 2025 under CSIR Integrated Skill Development Program. A total of 35 participants attended this training, represented diverse sectors. This initiative aimed to enhance practical skills and technical knowledge contributing to capacity building and promoting livelihood opportunities in the sector.



CSIR-AMPRI, Bhopal conducted a two, five days Skill Development Training Programme titled "Synthesis, Characterisation and Application of Nanomaterials" and "Materials Development & Characterisation" under the CSIR Integrated Skill Initiative during 08th - 12th December, 2025. The former programme was attended by 25 Students from various institutions and the later one was attended by 16 Students - Jointly with INYAS & IISER Bhopal. These programs were designed to provide the students with skills to do state of art R&D and work for innovations.



CSIR-CRRI, New Delhi conducted a Customized Training Programme on "Road Safety Audit and Other Road Safety Related Aspects" for the Engineers of Odisha Works Department (OWD) at Nirman Soudha, Bhubaneswar during 08th - 12th December, 2025, inaugurated by Principal Secretary Sh. Snajay Kumar Singh OWD, Odisha and Sh. Amitav Thakur Transport, Commissioner, Odisha. The programme was attended by 50 Engineers from OWD, Odisha.



CSIR-CIMAP, Lucknow conducted a training program on "Application of Chemistry and high end tools in MAPs research", held during 17th November - 05th December, 2025. The valedictory function was chaired by Director CSIR-CIMAP, who distributed certificates to the participants. Dignitaries interacted with participants and highlighted the importance of research and development accomplished by CSIR-CIMAP.



CSIR- NML, Jamshedpur conducted a five-day training program on "Ultrasonic and Electro-Magnetic NDE" during 17th - 21st November, 2025. Total no. of 18 students from Srinath University, Jamshedpur, pursuing a Diploma in Mechanical Engineering participated in this programme. Participants appreciated the practical exposure and interactive learning environment. The program commenced with an inaugural address by Dr S. Sagar, Head of the IMDC Division. Practical demonstrations and hands-on training were carried out in the Eddy Current, Ultrasonic, and Thermography laboratories.



CSIR-CGCRI, Kolkata conducted a skill development programme on “Skill Development Training on Ceramic Membrane Technology, Water & Wastewater Analysis using Advanced Instrumental Techniques” at the Institute during 09th - 12th December, 2025 as a part of the CSIR Integrated Skill Initiative Programme. Total no. of 21 Engineering and science pursuing students from Calcutta Institute of Technology, Uluberia, Howrah 711316, W.B., Ranchi University, Jharkhand and Banaras Hindu University, Varanasi, UP have successfully completed the training programme.



CSIR-NIIST, Thiruvananthapuram in collaboration with the Ministry of MSME, successfully conducted the second training program on “Patents, Copyrights, GI, and Trademarks for Entrepreneurship” during 8th - 12th December 2025. The program saw 47 participants (29 offline, 18 online) from diverse backgrounds. Expert-led sessions and participant presentations highlighted the practical role of IPR in entrepreneurship.



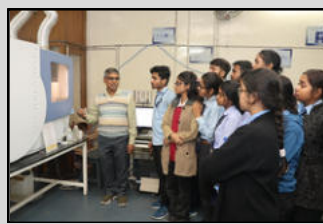
CSIR-CDRI, Lucknow conducted a course on Skill Development Program in “Advanced Spectroscopic Techniques” from 22nd October - 12th December, 2025 under the CSIR-Integrated Skill Initiative. A total of 15 participants participated in this training program that provided understanding and hands-on experience in elucidating the chemical structure of various molecules using advanced spectroscopic techniques in drug discovery and biological science. The convocation took place on December 12, 2025.



CSIR-CEERI, Chennai conducted a three-day hands-on training program on “THz Imaging and Spectroscopic Applications” during 08th - 10th December, 2025, under the CSIR-Integrated Skill Initiative (Phase-III). This program focused on a nationally important and emerging technology area, attracting pan-India participation. A total of 16 participants joined the intensive training, ensuring effective interaction and personalized hands-on exposure. The course was mentored by Dr. A. Mercy Latha, Senior Principal Scientist, and Mr. Rishi Ranjan, Principal Scientist. The training combined core theoretical concepts with extensive practical sessions, covering THz imaging systems, spectroscopic techniques, instrumentation, measurements, and data interpretation, along with discussions on current and future applications.



CSIR-CGCRI, Kolkata conducted a three-days skill development training programme on “Instrumental Methods for Chemical Characterization of Glass & Ceramic Materials & Testing & Calibration Techniques Related to Temperature Measurement and Control” in the analytical chemistry laboratory of the 4M Division during 3rd - 5th December, 2025. A total of 12 engineering diploma students participated in the training programme. The students were given demonstration and hands on training on analytical instruments for chemical characterization used in laboratory for chemical analysis of glass, ceramic and allied materials followed by training on testing and calibration techniques related to temperature measurement and control and, basic instrumentation measurements and techniques.



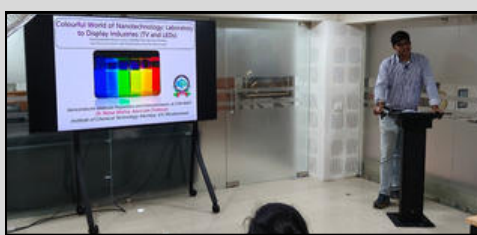
CSIR-NML, Jamshedpur organised Skill Development Program on "Materials for Additive Manufacturing (MAM - 2025)" during 8th - 12th December, 2025, under the CSIR Integrated Skill Initiative. The Program was coordinated by Principal Scientist Mr. Premkumar Murugaiyan (Course Coordinator) and Dr. Animesh Jana (Training Coordinator). The objective of this program was to provide participants with an in-depth understanding of additive manufacturing (AM) technologies, powder metallurgy, and advanced material characterization methods, combining theoretical lectures with practical demonstrations. A total of 28 students were selected and attended the program.



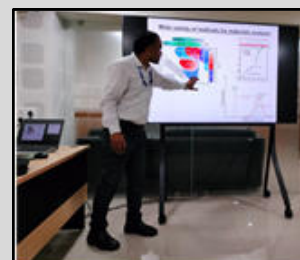
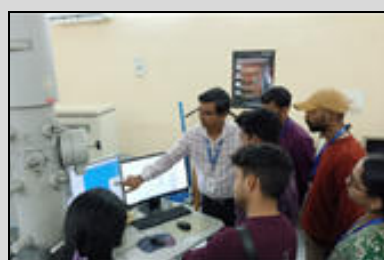
CSIR-IMMT, Bhubaneswar conducted a two-phase programme on Opportunities in "Battery Materials and Recycling" during 8th - 9th December, 2025 under the CSIR Integrated Skill Initiative. The programme comprised a two-day workshop for MSMEs, start-ups, and researchers on 8th to 9th December 2025, followed by a three-day hands-on skill development programme for postgraduate students. About 65 participants attended, supported by nearly 35 resource persons, including scientists and technical staff. The inaugural session was attended by Shri P K Gupta, Joint Director and Head of Office, MSME Development Institute, Cuttack. Practical training included battery discharging, coin cell assembly, materials characterization, mineral processing techniques, and fabrication and electrochemical testing of metal-air batteries. The programme concluded with a quiz, feedback session and an eminent lecture by Nobel Laureate Prof. Joachim Frank.



CSIR-IMMT, Bhubaneswar conducted skill development program on "Semiconductor materials preparation and characterization" during 11th - 12th December, 2025. A total of 32 students from 12 institutes around Bhubaneswar were registered for this program. Various aspects of semiconductor materials preparation and characterizations were covered during this skill development program. Eight invited talks were delivered by the speakers with diverse expertise in various interconnected domains of semiconductor technology. Also, the participants visited to eight different labs at CSIR-IMMT, gained practical exposure on TEM, FESEM-EBSD, bulk crystal growth of semiconductors, CVD growth of thin films, introduction to Density Functional Theory calculations, laser induced graphene, and perovskite material preparation.



CSIR-IMMT, Bhubaneswar conducted three-day skill development program on "Advanced Electron Microscopy" during 3rd -5th December 2025. The programme was attended by 29 participants, comprising 17 Ph.D. students and 12 Master students. The participants were from various premium academic institutions such as NISER-BBSR, IIT BBSR, Ramadevi University, Institute of Physics-Bhubaneswar, ICT-IOCL-Bhubaneswar, IISER-Kolkata, KIIT University and Parala Maharaj Engineering College- Berhampur.

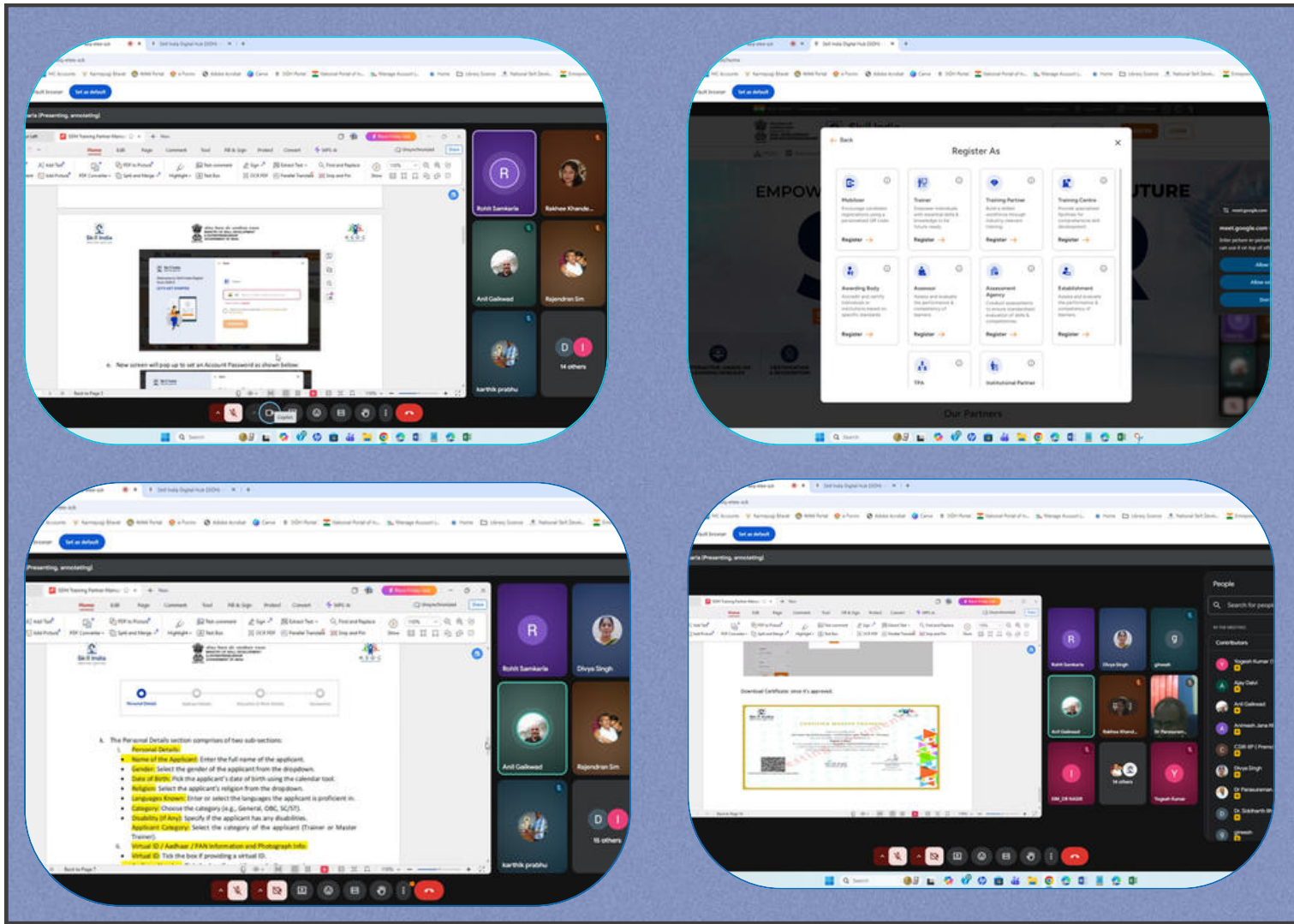


NODAL OFFICE UPDATE

नोडल कार्यालय अपडेट

ToT ORIENTATION SESSION ON SIDH REGISTRATION

A Training of Trainers (ToT) Orientation Session for registration on the SIDH portal as a Trainer was conducted virtually by the Life Sciences Sector Skill Development Council (LSSSDC) for CSIR labs on 10 December 2025. The objective of the session was to orient prospective trainers on the SIDH (Skill India Digital Hub) registration process, eligibility requirements, necessary documentation and certification. The session provided detailed guidelines and emphasized the importance of SIDH in enhancing the quality and standardization of skill training. Participants actively engaged in the session and benefited from the clarifications provided.



UPCOMING EVENTS

आगामी आयोजन

SKILL DEVELOPMENT PROGRAMME

Five-Day Training Program On "Comprehensive Herbal Drug Development"

APPLY ONLINE : <http://sdp.niist.res.in>



TOPICS COVERED

- Overview of herbal drug development and the herbal drug industry in India
- Extraction techniques: Cold, hot, maceration, solvent extraction, and bioactivity-guided isolation of phytoactives using column and flash purification
- Standardization of active extracts/fractions using modern equipments
- Pharmacological evaluation: *in-vitro* and *in-vivo* approaches
- Formulation development and analytical method development of finished products
- Preclinical Toxicity and Efficacy evaluation of Formulations
- Clinical and Regulatory requirements for herbal drug

COURSE BENEFITS

- In-depth knowledge of phytochemistry and herbal drug development
- Understanding of challenges in plant material selection, extraction techniques, and isolation of active fractions
- Insights into herbal formulation development, product validation, quality control, and the global herbal product market
- Knowledge in conducting bioassays of active ingredients or final formulations for managing ailments, leveraging the synergistic actions of various plant actives. Additionally, thorough understanding of herbal drug development up to commercialization.

COURSE OBJECTIVES

Since ancient times, Indian Traditional Medicine has been a cornerstone of healthcare practices globally. Understanding the intricacies of herbal product development, validation, industrial application, and clinical implementation of herbal formulations, including clinical trials, is crucial. This training program aims to equip students, researchers, and faculty members with comprehensive knowledge about herbal formulations for both topical and oral delivery, as well as Pharmacological screening of herbal actives, essential oils, and phytoformulations.

ACCOUNT DETAILS

The Director, CSIR-NIIST
Account No: 6704723825
IFSC Code: SBIN0070030
Bank: State Bank of India (SBI)
Address: Pappanamcode, Industrial Estate

COURSE FEE:

Students: 5,000/-
Faculty: 8,000/-
Industry: 10,000/-

CONTACT
PHONE: 0471-2515326
E-mail: sdp@niist.res.in

Course coordinator:
Dr. A. Kumaran
Senior Principal Scientist, CSIR-NIIST

DATE:
19 to 23 January 2026
(5 days)

<https://www.niist.res.in/english/academics/csir-skill-initiative>

<https://nclsdnp.ncl.res.in/>



Mass Spectrometry

CSIR INTEGRATED SKILL INITIATIVE

CSIR-NCL SKILL DEVELOPMENT PROGRAM

"Mass Spectrometry based proteomics"

FOR WHOM

- Students
- Academic Researchers
- Industrial Professionals

HOW TO APPLY

Application form is available at - <http://www.ncl-india.org/files/SOP/Default.aspx>

ABOUT COURSE

CSIR-National Chemical Laboratory, Pune has a state of art, Mass Spectrometry facility comprising of high and mass spectrometers such as LC-MS/MS (Thermo Q Exactive Hybrid Quadrupole Orbitrap MS), Triple TOF MS (SCIEX 6600) and MALDI TOF/TOF MS (SCIEX 5800). These mass spectrometers cater to various applications.

COURSE CONTENT

This SOP workshop provides an introduction to various technologies of proteomics including peptide mapping, protein identification, characterization of post-translational modifications, quantitative proteomics approaches like iTRAQ, SILAC, SWATH, MS/MS and more.

PRIME INSTRUCTOR

- Dr. Mahesh Kulkarni
- Dr. Nileshji Sadavarte

COURSE DETAILS

Duration: 1 Month
Dates: 08 January to 07 February 2026
No. of Seats: 4
Eligibility: Master or higher degree (enrolled) in Biological Sciences or equivalent
Course Fees:
Students: 30,000/-
Faculty: 50,000/-
Industry: 80,000/-
(The fees do not cover the cost of Accommodation) (Students > 2 days with affordable charges)

Here is the reason why **WHY CHOOSE US**

- More weightage on hands-on practice
- Interactive sessions
- Robust & sustainable training module
- Affordable fee structure
- Brief on career options
- Networking

<https://nclsdnp.ncl.res.in/> | ncl.sdct@ncl.res.in | CSIR-National Chemical Laboratory, Dr. Homi Bhabha Road, Pashan, Pune-411008



National Skill Development Training Program on "MICROALGAL LIPIDOMICS AND BIOECONOMY: PROCESS ENGINEERING, SCALE-UP, AND ADVANCED GC-MS PROFILING"

(Supported by the Ministry of MSME, Government of India)

In alignment with the Government of India's Skill Development Initiative, CSIR-National Institute for Interdisciplinary Science and Technology (CSIR-NIIST) is pleased to announce a five-day residential hands-on training program titled "Microalgal Lipidomics and Bioeconomy: Process Engineering, Scale-up, and Advanced GC-MS Profiling."

This advanced workshop aims to build technical competence and practical skills among young researchers, faculty members, and industry professionals in the emerging field of microalgal biotechnology and lipidomics. Considering the futuristic potential of microalgae-derived bioeconomy in nutraceutical, pharmaceutical, feed, and renewable energy sectors, this training will bridge the gap between laboratory-scale innovation and industrial-scale implementation.

Participants will receive hands-on exposure to:

- Microalgal cultivation and bioprocess optimization
- Lipid extraction, transesterification, and FAME profiling
- Process engineering and scale-up methodologies
- GC-MS based analytical workflows for lipidomics research

DATE:

January 27-31, 2026

VENUE:

CSIR-NIIST, Thiruvananthapuram

SUPPORTED BY:

Ministry of MSME, Government of India and CSIR-NIIST, Trivandrum

ELIGIBILITY
MSc and MTech, PhD scholars, early-career researchers, faculty, and industry professionals working in Algal Biotechnology and Related Fields

NUMBER OF SEATS
25 only

NATURE OF SUPPORT
A comprehensive residential training program that includes food, accommodation, and applicable travel and other associate expenses either fully or partially.

REGISTRATION DETAILS
Interested candidates are requested to register online by filling out the form available at: <http://sdp.niist.res.in>
(Registration is open until December 31, 2025 or until seats are filled.)

For further information, contact:
Coordinator: Dr. V. Moni, monivishnu@niist.res.in
Principal Investigator: Dr. Muthu Arumugam, arumugamm.niist@csir.res.in

सी.एम.आई.आर. - हिमालय जैवसम्पदा प्रौद्योगिकी संस्थान, पालनपुर

CSIR - Institute of Himalayan Bioresource Technology, Palampur

पोस्ट बॉक्स नं. 06, पालनपुर - 176 061 (हिमाचल प्रदेश) भारत


Post Box. No.06, Palampur - 176061 (Himachal Pradesh) INDIA

CSIR - Integrated Skill Initiative (Phase-III)


Applications are invited for the Course of

Herb Grower

Course Code: AGR/Q0903, NSQF Level-2



An Herb Grower is responsible for growing medicinal and aromatic plants. In the process, the individual selects a suitable site for cultivation; prepares the site; carries out cultivation and harvests the plants on their maturity. The person also performs post-harvest processing of Herbs including cleaning, packing and labelling.



Course Start Date: 22nd December, 2025

Course Includes:

- Prepare for cultivation of MAPs
- Carryout cultivation of MAPs
- Carryout harvesting, post-harvest processing and marketing of MAPs
- Maintain health and safety in the workplace

Course-coordinator
Dr. Ramesh


Nodal Skill Development Programme
Dr. Gireesh Nadda

Last date of receiving application: 15.12.2025

Course fee : Rs. 800/-

No. of Seats : 20


Education Qualification : No formal education.



Course Duration: 210 Hours
30 Days Approx.

For more details about Institute, kindly scan the QR code

Evaluation: Conducted by the Agricultural Skill Council of India (ASCI), a unit of National Skill Development Corporation (NSDC), Govt. of India



Contact us:
Phone: +91-1894-233339 (Ext): 488; 346
Fax: +91-1894-230433
Email: skill.devt@csir.res.in
Website: www.hibt.res.in

Accommodation will be provided on sharing and payment basis, as per the availability

Advanced Course on Engineering of Special Concretes with focus on Sustainability, Rheology and Microstructural characterisation (ESCOSURM)
07-09 January 2026
(under CSIR Integrated Skill Initiative)

Organized by
CSIR - Structural Engineering Research Centre
(An ISO 9001:2015 certified organization)

About CSIR-SERC
Civil Structural Engineering Research Centre (CSIR-SERC), Chennai, is one of the national laboratories under the Council of Scientific & Industrial Research, India. CSIR-SERC has built an excellent facilities and expertise for analysis, design and testing of structures and structural components. Services of CSIR-SERC are being extensively used by the Central and State Governments and public and private sector undertakings. Scientists of CSIR-SERC work on many national and international committees. The Centre is recognised at the national and international levels as a leading research institution in Structural Engineering.

Advanced Materials Laboratory (AML)
AML is a leading centre for research and innovation in concrete and construction materials, with a strong emphasis on sustainability and long-term durability. The laboratory advances both conventional and non-conventional material systems, that meet emerging environmental objectives and safety requirements. Alongside its research mandate, AML delivers specialised technical consultancy and testing services through sponsored and consultancy projects.

AML's core expertise includes the development of novel construction materials, performance evaluation and testing of advanced components and materials, condition assessment of reinforced concrete structures, and the formulation of repair and retrofitting strategies for distressed or deteriorated structures.

Background
Advancements in infrastructural development have led to the emergence of several innovative concrete materials. Sustainability has become a central design criterion for these new concretes, many of which are also tailored for high pumpability to enable efficient and reliable placement. As a result, understanding the rheological behaviour of advanced concretes—such as self-compacting concrete and 3D-printable concrete—is essential for achieving the desired fresh and hardened properties. The macroscopic performance of these materials is governed by their microstructural features, which can be systematically evaluated using advanced characterisation techniques, including X-ray diffraction (XRD), Thermogravimetric analysis (TGA), and scanning electron microscopy (SEM). In parallel, decarbonisation remains a critical theme in contemporary construction materials research, aligning with global sustainability targets. Against this backdrop, the proposed course examines selected special concretes with a focus on sustainability, rheology and microstructural characterisation.

Objectives
The primary objective of the course is to provide an opportunity for researchers, students, practicing engineers, academicians, and consultants from public and private sector organisations/institutions, as well as other engineering professionals, to familiarise themselves with the new proportions of special concretes, microstructural characterisation, rheological behaviour, and sustainability aspects. The course discusses the details of special concretes, such as self-compacting concrete, 3D printable concrete, and ultra-high performance concrete, with a focus on rheology, microstructure, and sustainability.

Faculty
Faculty for the course would comprise mainly scientists from CSIR-SERC and few experts from academia and industry.

Prerequisites
The course registrants can ensure adequate knowledge on the background to ensure contents to fully exploit the benefits of attending the advanced course.

Venue & Duration
Training and Development Complex, CSIR-SERC, Chennai. Timing: 9.30 a.m. to 5.00 p.m.

Registration and Fee
Rs. 2000/- per participant inclusive of GST for working professionals, Rs. 1500/- for student participants and INR 8450/- for foreign delegates. Presentation material (in pdf format) and participation certificate will be provided to all the registered participants. The course registration will be completed via online form with the URL below:
<https://www.serc.res.in>

Travel, Boarding and Lodging Arrangements
The participants or their sponsoring organisations must bear travel, boarding and lodging expenses. Limited accommodations in the Guest House/Traffic's Hostel at CSIR-SERC Campus may be arranged on a first-come-first-serve basis at extra cost. Participants residing in the vicinity are advised to write to the course coordinator well in advance and in any case, not later than 31st December 2025.

Scan QR code for course promo

Contact Us
Dr. (Ms.) T. Hemalatha and Dr. Prabhat Ranjan Prasad
Course Coordinators (ESCOSURM-2026)
CSIR-Structural Engineering Research Centre
CSIR Campus, TTI, Phase, Taramani, Chennai - 600113
Tel: 9643378058, 9840305626
Fax: (91) 441 23541508
hemalatha.serc@csir.res.in
prabhat.serc@csir.res.in
<https://www.serc.res.in>

सी.एस.आई.आर. - हिमालय जैवसंपदा प्रौद्योगिकी संस्थान, पालमपुर
CSIR - Institute of Himalayan Bioresource Technology, Palampur
पोस्ट बॉक्स नं. 06, पालमपुर - 176 061 (हिमाचल प्रदेश) भारत
Post Box. No. 06, Palampur - 176 061 (Himachal Pradesh) INDIA

CSIR- Integrated Skill Initiative (Phase-III)
Applications are invited for the Course of
Biologist/Biotechnologist

Course Code: LFS/Q4101, NSQF Level-5

Learn how biologists and biotechnologists transform plants and microbes into cutting-edge bio-products by using biotechnological tools.
Build the skills that power tomorrow's bio-economy

Course Start Date: 12th January, 2026

Course Includes:

- Perform critical activities in upstream processing of bio-products
- Perform purification of harvested material by downstream processing
- Perform advanced RNA, DNA, and protein analyses in plant and microbial systems.
- Maintain health and safety in the workplace

Course-coordinator
Dr. Gaurav Zinta and Dr. Arun Kumar

Nodal Skill Development Programme
Dr. Gireesh Nadda

Last date of receiving application: 25.12.2025
Course fee : Rs. 7000/-
No. of Seats : 10
Education Qualification : B.Tech (biotechnology) Final Year Student
or
M.Sc (biology and biotechnology related subject) Final Year Student
or
B. Pharma final year student (with Pharmacognosy Subject)
or
B. Sc. (biology and biotechnology related subject) Pass
or
NSQF Level 4 Certificate of Production Machine Operator Sterile Formulations with 3 Years of Experience

For more details about Institute, kindly scan the QR code

Evaluation: Conducted by the Life Sciences Sector Skill Development Council (LSSSDC), a unit of National Skill Development Corporation (NSDC), Govt. of India

Accommodation will be provided on sharing and payment basis, as per the availability

Course Duration: 540 Hours
70 Days Approx

Contact us:
Phone: +91-1894-233339 (Ext.): 346, 401, 495
Fax: +91-1894-230433
Email: skill.lhb@csir.res.in
Website: www.lhb.res.in

सीएसआईआर - राष्ट्रीय अंतरविषयी विज्ञान तथा प्रौद्योगिकी संस्थान
CSIR - NATIONAL INSTITUTE FOR INTERDISCIPLINARY SCIENCE AND TECHNOLOGY (NIIST)
Industrial Estate, Pappanamcode, Thiruvananthapuram

APPLIED SPECTROSCOPY SKILL ENHANCEMENT PROGRAM FOR FYUGP STUDENTS

29th December 2025 - 2nd January 2026

HIGHLIGHTS

- Fundamentals and Applications of
 - IR Spectroscopy
 - UV-Visible Spectroscopy
 - Fluorescence Spectroscopy
- Hands-on Training
- Discussions

IMPORTANT DATES

- Last Date to Apply: December 20, 2025
- Confirmation will be sent by: December 21, 2025

COURSE COORDINATOR
Dr. Joshy Joseph
Senior Principal Scientist, CSTD, CSIR-NIIST
Ph: 9495618444

***Registration is limited to 50 Students.**
***Participants are required to arrange their own accommodation.**
***Certificates will be issued upon successful completion**

REGISTER HERE:

FEES
Rs. 2500/- Incl. GST
(Food & Registration Material included)

ACCOUNT DETAILS

The Director, CSIR-NIIST
Account No: 67047723825
IFSC Code: SBIN0079030
Bank: State Bank of India (SBI)
Address: Pappanamcode, Industrial Estate

http://sdp.niist.res.in

SHORT TERM TRAINING PROGRAMME
Development of Probiotic millet beverage and probiotic millet curd
07.01.2026 – 09.01.2026

CSIR-CFTRI is organizing a Three -day training programme on "Development of Development of Probiotic millet beverage and probiotic millet curd" at CSIR-CFTRI, Mysuru.

The training programme would focus on:

- Basic microbiological techniques and microbial storage studies
- Introduction to millets and their health benefits
- Preparation of instant pour over millet powder
- Millet milk extraction and primary inoculum preparation
- Preparation of pour over millet beverage and curd Products evaluation
- Proximal, Rheological, and Sensory analysis of the product.

Course Organizer:
Dr. Prakash M Halami
Microbiology and Fermentation Dept

Training Fee:

- Rs. 18,000/- for industry/company sponsored candidates.
- Rs 9,000/- for Government agencies/ Academic institutions and others.

(Fee Inclusive of GST, Registration kit, working lunch & Session tea.)

Certificate will be issued to the participants on successful completion of the training program.

Accommodation available on first-come-first-served basis (hostel facility with non-AC rooms on twin-sharing basis).


Contact us:
Coordinator, Short Term Courses,
C.F.T.R.I, Mysore – 570 020, India
☎: 0821 – 2514310,
Fax: 0821 – 2517233
E -✉: stc@cftri.res.in

ELIGIBILITY CRITERIA


- Knowledge of the subject under focus and preferably a basic degree.

How to apply: Kindly register and apply online <http://stc.cftri.res.in>

Targeted Audience: Industry personnel, Students and Researchers.



CSIR-NEERI, Nehru Marg, Nagpur-440020
Green Skill Training Program on
"Water Quality: Testing and Data Management"
January 07-09, 2026



OBJECTIVES

Water quality testing involves analysing water samples to determine the presence and concentration of various physical, chemical, and biological parameters. These tests help assess the suitability of water for specific uses, such as drinking, irrigation, or industrial processes, and ensure it meets safety standards.

This training module aims at providing the participants with following objectives:

- To produce valid data & information on the quality of water, for appropriate treatment and management
- To ensure meaningful water quality assessment
- To have confidence in results, based on standardized procedures for all components of water quality monitoring
- Validation of water quality data

COURSE CONTENTS

- > Introduction to drinking water quality
- > Important water quality parameters and their testing methods
- > Hands on training for testing of water quality parameters
- > Instrumentation techniques for water quality testing
- > Water quality data management
- > Ensuring Quality assurance and quality control (QA/QC) in water quality data

VENUE: CSIR-NEERI, Nagpur

MODE OF TRAINING: Classroom lectures/ demonstration/ interaction. The lecture material shall be provided to the participants after the completion of the program.

REGISTRATION

- > Interested candidates (Educational qualification: Graduate in Science / Engineering & above) can register through weblink: <https://forms.gle/2KA1RLcDKcVEuQy8>
- > Registration fees: Rs. 3000/-
- > Closing Date: December 07, 2025
- > Seats are limited (20 seats) and registration will be confirmed on first come first get basis by email. Registration weblink will be closed after receiving requisite registrations.
- > Accommodation (twin sharing basis) at CSIR-NEERI Guest House can be arranged for registered participants only on payment basis, if available
- > For query/assistance, contact on mobile no 9860248073, 9503138008

CERTIFICATE OF PARTICIPATION: Certificate of Participation will be issued on successful completion.

DIRECTOR	GREEN SKILLS COORDINATOR	COURSE COORDINATOR
Dr. S. Venkata Mohan Director CSIR-NEERI	Dr. Harshvardhan Singh Chief Scientist & In-Charge, Skill Development Centre (SDC)	Dr. G.K.Khadse Chief Scientist, Water Resources (WR)



CSIR- Centre for Cellular & Molecular Biology

Skill Development Program
On
Zebrafish Husbandry & Microinjection



Course Curriculum includes:
Lectures and Hands-on-sessions on the following topics:

- Zebrafish as Model Organism
- Zebrafish husbandry
- Microinjection
- Gene Editing Techniques
- Imaging

Training Dates
05th to 10th January 2026

About the course:

- ❖ **Duration** : 1 week
- ❖ **No. of seats** : 12
- ❖ **Target Audience:** Students/ Faculty /Scientists /Professionals with a Masters in Life Science or Allied areas
- ❖ **Mode of the Course:** In-house training at CCMB
- ❖ **Mode of selection:** Online- Application form & Statement of Purpose.
- ❖ **Course Fee:** INR 18,000/- (Incl. GST & Accommodation)
- ❖ **Course Code:** ZHM-2

Course Coordinator:
Dr. Megha Kumar
 Senior Scientist
 CSIR-CCMB

Program Coordinator:
Dr. Archana B. Siva
 Chief Scientist
 Nodal Scientist - Skill Development Program
 CSIR-CCMB
sdp.ccmb@csir.res.in

Scan to Apply





CSIR-NEERI, Nehru Marg, Nagpur-440020
Green Skill Training Program on
"Monitoring and Analysis of Volatile Organic Compounds as Air Pollutant and Control Measures"
January 29-30, 2026



OBJECTIVES

Rapid urbanization and industrialization contribute to the growing emissions of Volatile Organic Compounds (VOCs) in air. Emission of VOCs can be from a wide range of outdoor and indoor sources. VOCs are a group of carbon-based chemicals that easily evaporate at room temperature. VOCs have been identified as highly toxic in nature and may have both short/ long term effect on human health as well as on environment. Identifying these VOCs becomes an important task in the process of monitoring and their control. This training programme aims to provide an insight on VOCs, sampling, analysis and control measures.

COURSE CONTENTS

- > Introduction to VOCs as Air Pollutant
- > Monitoring of VOCs (Instrumental training for selected VOCs)
- > Analysis and Detection of VOCs (using Gas Chromatography)
- > An overview on VOCs mapping and modelling
- > Technology based control measures for VOCs

VENUE: CSIR-NEERI Hyderabad Zonal Centre, IICT Campus, Uppal Road, Hyderabad

MODE OF TRAINING: Classroom lectures/ demonstration/ interaction. The lecture material shall be provided to the participants after the completion of the program.

REGISTRATION

- > Interested candidates (Educational qualification: Graduate in Science / Engineering & above) may submit the application through the web link: <https://forms.gle/KoVzytARW6ddXNE8>
- > Email will be sent to screened applicants for payment of registration fees
- > Confirmation of registration will be communicated after receipt of registration fees.
- > Seats are limited and registration will be done on first-come-first get basis.
- > Accommodation (twin sharing basis) at Guest House can be arranged for registered participants only on payment basis, if available

CERTIFICATE OF PARTICIPATION: Certificate of Participation will be issued on successful completion.

DIRECTOR	GREEN SKILLS COORDINATOR	COURSE COORDINATOR
Dr. S. Venkata Mohan Director, CSIR-NEERI	Dr. Harshvardhan Singh Chief Scientist & In-Charge, Skill Development Centre (SDC)	Dr. Basha Shaik Chief Scientist & Chair Dr. TVBPS Ramakrishna Senior Principal Scientist Dr. Satinder Kaur Senior Technical Officer (2) Hyderabad Zonal Centre

MINISTRY OF MSME SPONSORED

TWO DAYS SKILL TRAINING PROGRAM

on


LIFE CYCLE ASSESSMENT STUDIES & CARBON CREDITS QUANTIFICATION

(Entrepreneurship Awareness Program)

(Selected Participants From The Course Will Be Eligible For Fully Funded 5 Days Residential Program At NIIST During February 2026)

APPLY ONLINE : <http://sdp.niist.res.in>

Transaction details along with a resume (mentioning educational qualification and experience) must be sent by mail to: esdp.niist@gmail.com



Online event on: 28, 29 December 2025

Course fee:
 Rs. 1000/- (UG/PG Students)
 Rs. 1500/- (PhD Scholars)
 Rs. 2000/- (Faculties and Industry Personals)*
 *Fee is waived for Licencees of NIIST Technologies

The participants from the online course will be shortlisted and becomes eligible for the fully funded residential program on "Empowering MSMEs: Leveraging Life Cycle Assessment & Carbon Credits for Sustainable Growth and Market Advantage" with free boarding and lodging facilities.

Last Date to Apply: 26th December 2025

28 December 2025 (7:30 - 9:30 PM)

- Introductory class about the course
- Assistance in downloading openLCA & Simapro
- Discussion of problem statement

29 December 2025 (10.00 AM - 12.30 PM)

- Introduction to Life Cycle Assessment (LCA)
- Effectiveness of Carbon Credits Trading Scheme of GOI and How MSMEs can earn carbon credits

29 December 2025 (2.00 PM - 4.00 PM)

- Demonstration of LCA in SimaPro and OpenLCA
- Application of LCA in calculating Green House Gas emissions
- Demonstration of LCA studies on bioethanol production, cement manufacturing and electricity generation




Who can apply?
 Government Officials involved with Policy Decisions, Scientists and Professionals from Govt Autonomous Bodies, Entrepreneurs and Industrialists, MSMEs/Start-ups, UG/PG and PhD scholars from relevant fields and others who wish to explore and practice LCA for their processes.

ACCOUNT DETAILS
 The Director, CSIR-NIIST
 Account No: 67047723825
 IFSC Code: SBIN0070030
 Bank: State Bank of India (SBI)
 Address: Pappanamcode, Industrial Estate

CONTACT:
 PHONE: 0471-2515326
 E-mail: sdp@niist.res.in

Course Coordinator:
 Dr. T. Venkatesh (Senior Scientist)
 Dr. V. Moni (Senior Principal Scientist)

<https://www.niist.res.in/english/academics/csir-skill-initiative>


Skill Development Program On "Wildlife DNA Forensics" (WF-15) 27th – 31st January 2026

Objective: To sensitize and provide hands on training to participants on DNA Technology and its use in Wildlife Forensics.

Eligibility:

- Working Officers:** Any officer working in wildlife and forest departments at/a over the Range Forest Officer, Police, coastguard, customs, central excise, Food safety authentication department, judiciary, law enforcement department, academic institution, university or a research laboratory
- Students:** B.Sc. degree holders and above

No. of seats	: 10-12
Target Audience	: Bachelors/Masters in any branch of Life Science/Allied areas
Mode of the Course	: In-house training at CCMB, Hyderabad
Mode of selection	: Application form & Statement of Purpose
Fee Particulars	: Rs.18,000/- (including accommodation & GST)
Course Code	: WF-15
Apply using the link	: http://recruitment.ccmb.res.in/training_programs/sdp/




Training Curriculum:
Introduction to DNA, DNA technology and its applications including wildlife forensics
Status of Wildlife crime in India and abroad
Case Studies from LaCONES, CSIR-CCMB
Demonstration of collection, preservation, packaging and transportation of biological samples collected in the field
Isolation of DNA from various type of biological samples
Quantification of DNA by spectrophotometric and in-gel methods
Provide knowledge about the "Universal Primers" technology for Species Identification developed by CCMB.
PCR amplification of the DNA isolated from various types of biological samples
Sequencing and Data analysis of PCR products for Species Identification from various type of biological samples
Understanding the use of Microsatellite markers and Sex specific markers for individual identification, relatedness, sexing and repatriation.
PCR amplification using single/multiplex markers
Genotyping and scoring of alleles: DNA profiling
Data analysis for individual identification, relatedness, sexing and repatriation
Troubleshooting & Report preparation
Impart knowledge about the legal application and implication of the DNA analysis report generated

Salient Features of the Training:

- Expert instructors/Resource Persons will provide lectures and hands on training
- Exposure to laboratory safety regulations
- Interaction with the **leading scientists and experts** in the field
- Evaluation assignments and Trouble-shooting sessions
- Certificate of participation will be issued to the participants

Course Coordinator: Dr. Ajay Gaur Senior Principal Scientist Wildlife Forensics CSIR-CCMB, Hyderabad.	Program Coordinator: Dr. Archana Bharadwaj Siva Chief Scientist Nodal Scientist - Skill Development Program CSIR-CCMB, Hyderabad. sdp.ccmb@csir.res.in
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Scan to Apply





CSIR - Institute of Himalayan Bioresource Technology, Palampur पोस्ट बॉक्स नं. 06, पालमपुर- 176 061 (हिमाचल प्रदेश) भारत Post Box. No.06, Palampur - 176 061 (Himachal Pradesh) INDIA




CSIR- Integrated Skill Initiative (Phase-III) Applications are invited for the Course of **Plant Tissue Culture Technician** Course Code: AGR/Q8101, NSQF Level-4





A Plant Tissue Technician performs several activities such as preparing the lab, culture media and mother plant, extracting, preparing, planting and maintaining explants. The person also transplants the tissue cultured plants and maintains record of laboratory operations.



Course Includes:	Course Start Date: 5th January, 2026
<ul style="list-style-type: none"> Prepare for Plant Tissue Culture Carry out Plant Tissue Culture Transplant the tissue-cultured plants and maintain records Maintain health and safety in the workplace Employability Skills 	<p>Last date of receiving application: 26.12.2025</p> <p>Course fee : Rs. 10000/-</p> <p>No. of Seats : 20</p> <p>Education Qualification : 12 or equivalent (Science)</p> <p>OR</p> <p>10th Grade Pass with 3-year relevant experience</p> <p>OR</p> <p>Previous relevant Qualification of NSQF Level 3.5 with 1.5-year relevant experience in Agriculture and allied sectors</p> <p>OR</p> <p>Previous relevant Qualification of NSQF Level 3.0 with 3-year relevant experience in Agriculture and allied sectors</p>
<p>Course coordinator Dr. Ashish R. Warghat</p> <p>Nodal Skill Development Programme Dr. Gireesh Nadda</p>	<p>For more details about Institute, kindly scan the QR code</p>  <p>Evaluation: Conducted by the Agriculture Skill Council of India (ASCI), a unit of National Skill Development Corporation (NSDC), Govt. of India</p> <p>Accommodation will be provided on sharing and payment basis, as per the availability.</p> <p>For more details about the institute, kindly scan the QR code.</p>
	<p>Contact us: Phone-+91-1894-233339 (Ext.) 315; 346 Fax-+91-1894-230433 Email: skill_sdt@csir.res.in Website: www.ihbt.res.in</p>
	<p>Course Duration: 390 Hours 60 Days Approx.</p>

Skill Development Program On "Introduction to IPR and Patents" 04th- 06th February 2026




CSIR-Center for Cellular and Molecular Biology is conducting a hands-on training on "Introduction to IPR and Patents" (IPRPAT-3) targeted to faculty members/researchers from universities/institutes/industries and interested individuals in the field of Life Sciences, Medical Sciences, Pharmaceutical Science & allied areas. This training is intended to train into various aspects of intellectual property management and it will be supported by lectures along with hands-on exercises by experts to develop a deeper understanding of the concepts.

No. of seats	: 10-12
Minimum Qualification	: Bachelors in any branch of Life Science /Allied areas
Dates	: 04 th – 06 th February 2026
Mode of the Course	: Hybrid mode
Mode of selection	: Application form & Statement of Purpose
Course Fee	: Rs. 7,500/- (including GST & Accommodation)
Apply using the link	: http://recruitment.ccmb.res.in/training_programs/sdp/
Course Code	: IPRPAT-3

Training Curriculum for Course:


- Evaluating patentability of inventions
- Mining Patent Literature
- IP databases
- Patent drafting & Filing
- Patent Valuation
- Sequence Listing
- Structuring a Licensing deal
- Technology landscaping
- Technology Assessment






Salient Features of the Training:

- Skilled resource persons will provide lectures and hands-on exercises
- One-to-one interaction with the trainers
- Evaluation assignments and Trouble-shooting sessions
- Certificate of participation will be issued to the participants


Training Coordinator: Dr. Divya Singh IP Officer CSIR-CCMB, Hyderabad.	Program Coordinator: Dr. Archana Bharadwaj Siva Chief Scientist Nodal Scientist-Skill Development Program CSIR-CCMB, Hyderabad. sdp.ccmb@csir.res.in
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Scan to Apply

Skill Development Program On "Next-Generation Sequencing and Bioinformatics: From Bench to Insight" 16th – 20th February 2026



The CSIR-Center for Cellular and Molecular Biology is organizing a hands-on training on "Next-Generation Sequencing and Bioinformatics: From Bench to Insight" (NGS-1) targeted to faculty members/researchers from universities/institutes/industries and interested individuals in the field of Life Sciences, Medical Sciences, Pharmaceutical Science & allied areas. This advanced-level workshop is intended to train participants in the principles and practical aspects of Next-Generation Sequencing (NGS) using Illumina and Oxford Nanopore platforms. It will be supplemented with expert lectures, hands-on training in library preparation, sequencing run setup, and bioinformatics data analysis for comprehensive end-to-end learning

No. of seats	: 20
Target Audience	: Faculty/ Researcher from Academia/Industries/ Institutes
Minimum Qualification	: Masters in any branch of Life Science/Allied areas
Mode of the Course	: In-house training at CCMB, Hyderabad
Mode of selection	: Application form & Statement of Purpose
Course Fee	: Rs. 18000/- (Including accommodation & GST)
Course Code	: NGS-1

Training Curriculum:

- DNA/RNA quality control (QC) using Qubit and TapeStation, data interpretation, and sample preparation for sequencing
- Illumina library preparation, followed by library QC, sequencer setup and run demonstration
- Oxford-Nanopore library preparation, followed by flow cell loading, sequencer setup, and run demonstration
- Raw data QC and adapter trimming, followed by sequence alignment, SAM format, variant calling, VCF, variant annotation, and introduction to long-read sequencing (LRS) data analysis

Salient Features of the Training:

- Exposure to multiple sequencing platforms and comparison of short-read (Illumina) and long-read (Oxford-Nanopore) technologies
- Expert lectures from scientists, and experienced NGS facility staff on sequencing principles, emerging technologies, and real-world applications
- Training in basic bioinformatics tools for quality assessment, read alignment, annotation, variant calling and data analyses
- Exposure to laboratory safety regulations
- Evaluation assignments and Trouble-shooting sessions
- Certificate of participation

Apply using the link/scanner: http://recruitment.ccmb.res.in/training_programs/sdp/

Course Coordinators: Dr. Subhajt Sen Scientist, CSIR-CCMB, Hyderabad Dr. Karthik Bharadwaj Senior Scientist, CSIR-CCMB, Hyderabad Dr. Divya Tej Sowpati Senior Scientist, CSIR-CCMB, Hyderabad	Program Coordinator: Dr. Archana Bharadwaj Siva Chief Scientist Nodal Scientist-Skill Development Program CSIR-CCMB, Hyderabad. sdp.ccmb@csir.res.in
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Scan to Apply

Under CSIR Integrated Skill Initiative



ABOUT CSIR INTEGRATED SKILL INITIATIVE

The Council of Scientific and Industrial Research (CSIR) is embarking upon the "Skill India" mission of the Government of India under its "CSIR Integrated Skill Initiative" Programme. Under this umbrella of Skill India, CSIR laboratories have taken up various skill training programs under different domains.

ABOUT CSIR-IMMT SKILL DEVELOPMENT PROGRAMMES

CSIR-IMMT conducts a variety of skill development and training programmes under the CSIR Integrated Skill Initiative, designed for industry, academia, research professionals, and society. Leveraging its expertise in basic research and technology-oriented programmes, the institute addresses the R&D challenges of the mining, mineral, and metals industries with a strong focus on sustainable development.

Each programme is designed with a blend of expert lectures hands-on training, demonstrations, and practical sessions conducted in state-of-the-art laboratories by CSIR-IMMT scientists and invited specialists. With their short duration and focused content, these courses are well-suited for students, academicians, industry professionals, and entrepreneurs, while also offering flexibility through industry sponsored and on-demand options.

ANNUAL PLANNER FY 2025-2026

S.No.	Title of Skill Program	Start Date	Duration	S.No.	Title of Skill Program	Start Date	Duration
1	Workshop on AI/ML	September 2025	1.000	41	Hands-On Training on Air Conditioning & Refrigeration Installation, Maintenance & Troubleshooting	January 2026	1.000
2	Demonstration and Training on Nuclear Distribution Surface Source Assembly	September 2025	1.000	42	Machine Learning using Python	January 2026	1.000
3	Continuing Course in Industrial Engineering	October 2025	1.000	43	Brothers of Inclusion for metal manufacturing application	January 2026	1.000
4	Foundation Course on Basic Design	October 2025	1.000	44	Workshop for Technological Advancement in Nanotech - use of electron (SEM, AFM)	January 2026	1.000
5	Mechanical Characterization & Evaluation of Engineering Materials	October 2025	1.000	45	Environmental Impact Assessment	January 2026	1.000
6	Modeling, Casting, and Defect Analysis of Brass, Steel, and India Alloys	October 2025	1.000	46	Aerospace spin training program on atmospheric pollution and its health impact	January 2026	1.000
7	Industrial Instrumentation: Practical Skills for Real-World Applications	October 2025	1.000	47	Training in low cost drying skills for food food	January 2026	1.000
8	Hands-On Training in Bakery Baking & Packaging	October 2025	1.000	48	Hands-On Training on General Mining, Drilling and Safety Courses	January 2026	1.000
9	Industrial Instrumentation: Practical Skills for Real-World Applications	October 2025	1.000	49	Hands-On Training on Solar System Connection & Maintenance	February 2026	1.000
10	Introduction and Skills for Sustainable Development	October 2025	1.000	50	Core Data Security Concepts	February 2026	1.000
11	Hands-On Training in Bakery Baking & Packaging	October 2025	1.000	51	Writing, Casting, and Defect Analysis of Brass, Steel, and India Alloys	February 2026	1.000
12	The Art of Organic Synthesis: Chemistry & Synthetic Examples	November 2025	1.000	52	Preventive Maintenance & Troubleshooting of Thermal and Laboratory Equipment	February 2026	1.000
13	AI for Safety: Models, Algorithms, Applications, and Ethical Considerations	November 2025	1.000	53	Machine Learning using Matlab	February 2026	1.000
14	Introduction to AI for Sustainable Development	November 2025	1.000	54	Biotech: Fundamentals, Characterization and Application	February 2026	1.000
15	AI for Safety: Models, Algorithms, Applications, and Ethical Considerations	November 2025	1.000	55	Methodological methods for the separation of metals	February 2026	1.000
16	AI for Safety: Models, Algorithms, Applications, and Ethical Considerations	November 2025	1.000	56	Training in Cybersecurity & Security Systems	February 2026	1.000
17	AI for Safety: Models, Algorithms, Applications, and Ethical Considerations	November 2025	1.000	57	Principles and Practice of Mineral Processing: Focus on Iron Ore and Copper Beneficiation	February 2026	1.000
18	AI for Safety: Models, Algorithms, Applications, and Ethical Considerations	November 2025	1.000	58	Drilling Skills for Road Safety, Smart Mobility, and Sustainable Transport	February 2026	1.000
19	AI for Safety: Models, Algorithms, Applications, and Ethical Considerations	November 2025	1.000	59	Electrochemical processing of materials (drilling, Anodizing, Oxidation plating and Electroplating)	March 2026	1.000
20	AI for Safety: Models, Algorithms, Applications, and Ethical Considerations	November 2025	1.000	60	Applying Strategies	March 2026	1.000
21	AI for Safety: Models, Algorithms, Applications, and Ethical Considerations	November 2025	1.000	61	Training in Mineral Characterization and Beneficiation	March 2026	1.000
22	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
23	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
24	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
25	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
26	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
27	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
28	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
29	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
30	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
31	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
32	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
33	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
34	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
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36	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
37	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
38	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
39	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
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49	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				
50	Hands-On Training in Bakery Baking & Packaging	November 2025	1.000				

CONTACT

Dr. Santosh Kumar Behera
 Sr. Principal Scientist & Coordinator (Skill Development)
 E-mail: skbehera.immt@csir.res.in
 Phone: 0674-237-9381
 Mobile: 9438182457

CSIR-Institute of Minerals & Materials Technology
 DSIR, Ministry of Science and Technology, Govt. of India





Skill Development Program on "R in Biology"

23rd – 27th February 2026

The CSIR-Center for Cellular and Molecular Biology is organizing a hands-on training on "R in Biology" (R-1) targeted to faculty members/researchers from universities/institutes/industries and interested individuals in the field of Life Sciences, Medical Sciences, Pharmaceutical Science & allied areas. This workshop intended to equip researchers, students, and faculty with computational and analytical skills necessary to handle, analyze, and interpret biological data using the R programming language.

- No. of seats : 20
- Target Audience : Faculty/ Researcher from Academia/Industries/ Institutes
- Minimum Qualification : Masters in any branch of Life Science/Allied areas
- Mode of the Course : In-house training at CCMB, Hyderabad
- Mode of selection : Application form & Statement of Purpose
- Course Fee : Rs. 18,000/- (Including accommodation & GST)
- Course Code : R-1

Training Curriculum

- > Introduction to R, R Studio & Programming
- > Introduction to tidyverse and dplyr
- > Data Visualization with ggplot2
- > More Data Visualization – Heat Maps Volcano Plots etc.,
- > Case study - Analyzing real RNA-Seq data & Metgenomics data



Salient Features of the Training:

- > Bridge the gap between biology and data science
- > Develop proficiency in data visualization, analysis, and modeling
- > Gain foundational skills in R programming and environment configuration.
- > Efficiently handle and process data using R's tools and structures
- > Communicate findings visually through effective data visualizations in R.
- > Lectures from experts of CCMB
- > One-to-one interaction with the trainers
- > Evaluation assignments and Trouble-shooting sessions
- > Certificate of participation




Apply using the link/scanner: http://recruitment.ccmb.res.in/training_programs/sdp/

Course Coordinator:
Dr. Nitesh Kumar Singh,
Senior Technical Officer,
CSIR-CCMB,
Hyderabad.

Program Coordinator:
Dr. Archana Bharadwaj Siva
Chief Scientist
Nodal Scientist-Skill Development Program
CSIR-CCMB, Hyderabad.
sdp.ccmb@csir.res.in

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Skill Development Program On "LC-MS based Proteomics"

23rd – 28th March 2026

CSIR-Center for Cellular and Molecular Biology shall conduct a hands-on training workshop for six days on "LC-MS based Proteomics" targeted to faculty/researchers from Universities/ institutes as well as people working in the industry in the field of Life Sciences, Medical Sciences, Pharmaceutical Science & allied areas. This introductory workshop is intended for beginners to teach and train them about the basics of proteomics and its applications in research for various experiments. It will be supplemented with informative lectures, hands-on training, instrument set-up, data collection and analysis.

- Duration : 6 days
- No. of seats : 8-10
- Target Audience : Faculty/ Researcher from Academia/Industries/Institutes
- Minimum Qualification : Masters in any branch of Life Science/Allied areas
- Dates : 23rd to 28th March 2026
- Mode of the Course : In-house training at CCMB
- Mode of selection : Application form & Statement of Purpose
- Course Fee : Rs. 18,000/- (includes accommodation and GST)
- Apply using the link : http://recruitment.ccmb.res.in/training_programs/sdp/PROTEO-5
- Course Code : PROTEO-5

Training Curriculum for Course:

- Basic operational fundamentals of liquid chromatography, mass spectrometry, and LC/MS interface
- Qualitative and quantitative aspects of LC-MS: from simple molecular weight determination to large scale proteome analysis
- Sample preparation of LC-MS, SDS PAGE, staining/deslating, processing of gel pieces towards in-gel trypsin digestion, extraction of peptides, desalting
- LC-MS run & interpretation & analysis of MS data


Salient Features of the Training:

- > Skilled resource persons will provide lectures and laboratory training
- > Certificate of participation will be issued to the participants
- > Exposure to laboratory safety regulations
- > One-to-one interaction with the trainers
- > Evaluation assignments and Trouble-shooting sessions

Training Coordinator:
Dr. Swasti Raychaudhuri
Senior Principal Scientist,
Proteomics,
CSIR-CCMB Hyderabad.

Contact details:
Dr. Archana Bharadwaj Siva
Chief Scientist
Nodal Scientist-Skill Development Program
CSIR-CCMB, Hyderabad.
sdp@ccmb.res.in

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GENERAL EVENTS

सामान्य आयोजन

(Please click on the link to view the details)

- | | | |
|--|---|---|
| <ul style="list-style-type: none"> PM VIKAS scheme to boost skill development and livelihood opportunities for minority communities: Kiren Rijju India Skills 2025 inaugurated at Kohima CJI launches skill development centres, polytechnic courses for inmates across Haryana jails Latest News Delhi Bridging the talent and skill gap is crucial: Sandeep Kumar, Chief Executive, L&T Semiconductor Technologies IGNOU partners with MSDE to establish 70 skill centres in nation | <ul style="list-style-type: none"> How early exposure to skills shapes innovative mindsets Rustom Kerawalla Highlights the Growing Impact of Government Skill Development Programmes on India's Youth - PNN Digital AI won't take our jobs - if we train for the right ones
The skills gap, not capital, is India's real green energy bottleneck Ministry of Labour, Microsoft partner to expand employment linkages, scale AI-led skilling Future Skills PRIME benefits over 15.78 lakh candidates in IT sector | <ul style="list-style-type: none"> कौशल प्रशिक्षण कंपनियों पर कसेगा शिकंजा, बदली चयन प्रक्रिया। परियोजना प्रभावित युवाओं के लिए कौशल विकास प्रशिक्षण शुरू इंडस्ट्री के मांग की अनुसार आधुनिक ट्रेड्स में युवाओं को दिया जाए प्रशिक्षण : मुख्यमंत्री डॉ. यादव यूपी में कौशल प्रशिक्षण में अब गरीब परिवारों को दी जाएगी प्राथमिकता, लागू होगी ये नई व्यवस्था लखनऊ में युवाओं को रोजगार के लिए करेंगे प्रशिक्षित:कौशल विकास मिशन और फॉरेंसिक साइंस इंस्टीट्यूट की संयुक्त पहल Skill India : स्किल इंडिया पहल को बढ़ावा देने के लिए मिलाए हाथ, छात्रों का होगा कौशल विकास |
| <ul style="list-style-type: none"> StreaX Professional Strengthens Skill Development in Beauty & Wellness Through Knowledge Partnership with Krishnashray Gurukul Cognizant beats 1 mn AI skilling goal, doubles target to 2 mn; over 1.5 lakh Indians benefit From ancient skills to future readiness: How India is reclaiming the dignity of work through vocational education 66 years of NTT: Nation building through industry- ready talent | <ul style="list-style-type: none"> Bosch Home Comfort India To Establish HVAC Skill Development Centres In Northern Gujarat ISACA, Nasscom Join Hands to Standardize Digital Skills for India's Workforce IITM Pravartak in Partnership With Simplilearn, Launches 'The Smart Shield: AI-Powered Cybersecurity Mastery Program' AI Upskilling: New Program Brings Healthcare and Tech Closer | <ul style="list-style-type: none"> दिल्ली IGNOU ने देश में 70 स्किल सेंटर खोलने के लिए MSDE के साथ पार्टनरशिप की विकास के लिए कौशल आधारित शिक्षा जरूरी : अवस्थी प्रतियोगिता में 229 प्रतिभागियों ने दिखाया कौशल । बदलता यूपी: डिग्री के साथ अब हुनर भी, राज्य में युवाओं के लिए खुले रोजगार के नए द्वार Lakhimpur Kheri News: एडेड स्कूलों के छात्रों को दिया जाएगा रोजगारपरक कौशल प्रशिक्षण |

- Path paved to link India's skill base with Russia's demand for labourers.
- India-Australia roundtable charts path for future-ready workforce.
- 46% of US Gen Z employees plan to quit their job: Here's what is pushing them to leave
- Roads eyed for action as UN Decade for Sustainable Transport kicks off
- Cybersecurity skills matter more than headcount in an AI era: ISC2 study
- Five must-have soft skills for 2026

GLIMPSES

झलकियां



CSIR-IMTECH



CSIR-IICT



CSIR-CECRI



CSIR-NIIST



CSIR-AMPRI



CSIR-CIMAP



CSIR-IMMT

USEFUL LINKS उपयोगी लिंक्स

<https://www.csir.res.in/csir-labs-units>

<https://msde.gov.in>

<https://nsdcindia.org>

<https://ncvet.gov.in>

<https://www.education.gov.in>

<https://www.nqr.gov.in>



CSIR-Human Resource Development Centre (Skill Nodal Office)

Sector -19, Central Govt. Enclave,
Kamla Nehru Nagar
Ghaziabad- 201002 (UP) India

e-mail: head[at]csirhrdc[dot]res[dot]in
Tele-Ph.: +91-120-2788940/2785053

हमें फॉलो करें



(CSIR Integrated Skill Initiative)

सीएसआईआर-मानव संसाधन विकास केंद्र (कौशल नोडल कार्यालय)

सेक्टर -19, केंद्र सरकार एन्क्लेव,
कमला नेहरू नगर
गाजियाबाद- 201002 (यूपी) भारत

ई-मेल: head[at]csirhrdc[dot]res[dot]in
टेली-फोन: +91-120-2788940/2785053

