

CSIR SKILL BULLETIN

(A FORTNIGHTLY E-PUBLICATION)

सीएसआईआर कौशल पत्रक

(पाक्षिक ई-प्रकाशन)



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HIGHLIGHTS

- No. of SDP Conducted: 25
- No. of Participants Trained: 939
- No. of Upcoming Trainings: 12
- Skill Area Focus: 25



CSIR-CBRI



CSIR-IIIM



CSIR-SERC



CSIR-CSIO

CSIR-IHBT

IMAGES: Skill Development Training Programs at different CSIR Labs

CSIR - Human Resource Development Centre, Ghaziabad
(Skill Nodal Office)

सीएसआईआर - मानव संसाधन विकास केंद्र, गाज़ियाबाद
(कौशल नोडल कार्यालय)



CSIR-CEERI, Pilani successfully conducted a one-month Skill Development Programme on **“Advanced IIoT”** during the period **13th July - 12th August, 2026** under the aegis of CSIR Integrated Skill Initiative (Phase - III). A total of **40** participants attended this programme.



CSIR-CEERI, Pilani successfully conducted a two day Skill Development Programme on **“Advanced Technology Manufacturing Processes (ATMP)”** during **13th -14th August, 2026** under the CSIR Integrated Skill Initiative – Phase III. Total **70** students and **4** faculty members participated in this programme.

CSIR-CBRI, Roorkee organised a three-Day Skill Development Programme on **“Advances in Building Construction Technologies”** (First Capsule for the J-01, MES) during the period **17th - 19th August, 2026** under the CSIR Integrated Skill Initiative – Phase III. The inaugural session was welcomed by Lt. Col. G.S. Hawal, Officer Commanding, Promotion Course Company. The dignitaries on the dais included Brig. Gaurav Atreya, Commandant, BEG & Centre; Prof. R. Pradeep Kumar, Director, CSIR-CBRI; Dr. Neeraj Jain, Senior Principal Scientist and Head, ODS, CSIR-CBRI; and Dr. M. M. Ansari, Principal Scientist, CSIR-CBRI. A total of **18** participants attended this programme. The programme aimed to strengthen the technical knowledge and practical understanding of participants in contemporary building construction technologies, while fostering a culture of quality, innovation and professional excellence.



CSIR-SERC, Chennai conducted a Customized **“Short-Term Course”** for NTPC Civil Executive Trainees in 5 batches during **27th April - 9th May, 2026, 11th - 23rd May, 2026, 1st - 13th June, 2026, 15th - 27th June, 2026, and 6th - 18th July, 2026** under the CSIR Integrated Skill Initiative – Phase III. The total number of participants were **164**. Each of the batch had a course consisting of 5 Modules with 2 modules (each 3 days) during the first week and 3 modules (each 2 days) during the second week. About 42 topics were covered by both internal and external faculty over the two weeks. Further, lab visits were arranged to the participants to explain the facilities and activities of Advanced Seismic Testing and Research Laboratory, Wind Engineering Laboratory, Fatigue and Fracture Laboratory, Advanced Materials Laboratory and NAFAMS. As part of the course, assessments were also conducted for each module of every batch.

CSIR-NPL, New Delhi successfully conducted a 'STP-6 - Training Program on **“DC-AC & Impedance Metrology”** from **10th - 12th August, 2026** under the CSIR Integrated Skill Initiative. A total of **11** participants attended this programme. The programme provided participants with practical exposure to DC-AC and impedance measurement techniques and enhanced their understanding of precision metrology.





CSIR-NPL, New Delhi successfully conducted a training program on **“IS/ISO/IEC 17025 : 2017 General Requirements for the Competence of Testing and Calibration Laboratories and Internal Audit”** at CSIR-NPL from 3rd - 6th August, 2026 under the CSIR Integrated Skill Initiative Program. This training program was designed to cover introduction to quality infrastructure and role of CSIR-NPL (National Metrology Institute of India), requirements of the IS/ISO/IEC 17025 : 2017 standard, introduction to risk-based thinking, quality system documentation, internal audit technique, accreditation process, etc. **42** participants (26 external and 16 internal) from various Govt. and private organizations, accredited laboratories, non-accredited laboratories (seeking accreditation), etc., as well as scientists and technical officers of CSIR-NPL, participated in the training programme.

CSIR-CSIO, Chandigarh organised a three-day workshop titled **“3D Printing Techniques”** from 18th - 20th August, 2026. Prof. Shantanu Bhattacharya, Director, CSIR-CSIO, inaugurated the workshop and shared his views on the significance of 3D printing, along with a brief overview of its history and evolution. Sh. Narinder Singh Jassal gave an introduction about the programme and CSIR-Integrated Skill Initiatives and its objectives. Dr. Vijay Kumar Meena also addressed and shared his expertise on Additive Manufacturing, and spoke about its applications in healthcare, followed by remarks from Dr. Nayak. Mr. Harsh Kumar, Technical Officer, also addressed the participants. The inaugural session marked the beginning of an informative and engaging workshop on emerging 3D printing techniques and their applications. A total of **44** participants attended this programme.



CSIR-CECRI, Karaikudi organized a one-week Skill Development Training Programme on **“Photolithography Based Microfabrication of Sensors”** during 17th - 21st August, 2026 under the aegis of CSIR Integrated Skill Initiative (Phase-III). A total of **31** participants from different parts of Tamil Nadu (one student from Assam) took part in the Course. During the Inauguration, Mr. T. Ashok Balamurugan, Senior Technical officer, Skill Development Group (SDG), welcomed the dignitaries and the participants. Dr. P. Tamilarasan, Scientist-E, Electrodes and Electrocatalysis (EEC) Division and Coordinator of the Course elaborated in detail on the Course Contents and the various topics that were covered both theoretically and practically. Dr. J. Mathiyarasu, Scientist-G & Head, EEC Division briefed on the divisional R&D activities and the importance of the Skill Development Courses which enhanced their education both at the fundamental and application levels.

CSIR-NBRI, Lucknow organized a week-long Skill Development Training Programme on **“Commercial Floriculture”** from 17th - 21st August, 2026 under CSIR integrated skill initiatives Phase-III. A total of **12** (Male-04 and Female-08) candidates from different states of India, including UP, Jharkhand, J&K, Assam, Odisha and Maharashtra had participated in the programme and gained hands-on experience in different techniques in commercial floriculture. Also, all the participants visited a floriculture cluster developed under the CSIR floriculture mission at Bakshi ka Talab and a friends rosery in Lucknow.





CSIR-NEERI, Nagpur organized a Green Skill Training Program on “**Environmental Impact Assessment (EIA)**” during August 18th - 20th August, 2026 under CSIR Integrated Skill Initiative activities. Dr. S. Venkata Mohan, Director, CSIR-NEERI inaugurated the program and addressed the participants on types of EIA (Rapid & Comprehensive), its importance, accredited sectors of the institute, etc. Dr. Harshvardhan Singh, Scientist-G & In-charge, Skill Development Centre and Course Coordinator briefed the course contents and Green Skill activities of the institute. Dr. T.V.B.P.S. Rama Krishna, Scientist-G, Hyderabad Regional Centre interacted with the participants on latest developments in EIA studies. Participants from various organizations, representing rural and urban areas of Madhya Pradesh, Karnataka, Maharashtra, Gujarat, Uttar Pradesh, Tamil Nadu, Odisha, Jharkhand, New Delhi, Chhattisgarh and Telangana had participated in the program which included technical presentations, Reconnaissance surveys (Green field, Brown field) and visit to Harit Sangrahalaya. A total of 27 participants attended this programme.

CSIR-CLRI, Chennai is conducting a Skill Development Training Programme on “**Leather Products Development from Fish Skin and Other Small Skins**” during the period 24th August - 23rd September, 2026 at Tardha Village, West Bengal. More than 25 women, predominantly belonging to Scheduled Caste (SC) communities, registered for the training programme.



CSIR-NCL, Pune successfully conducted a one-week Skill Development Program on “**Polymer Characterisation with GPC Technique**” from 27th - 31st July, 2026 under the CSIR Skill Development Initiative. A total of 6 postgraduate and research students from diverse scientific backgrounds participated in the program.

CSIR-NCL, Pune successfully conducted a one-week Skill Development Programme (SDP) on “**Bacterial Genome and Amplicon Sequencing by Oxford Nanopore Technology**” from 10th - 14th August, 2026. The programme trained 10 participants, including 5 industry professionals, providing them with practical exposure to advanced sequencing technologies.



CSIR-NCL, Pune successfully conducted a two-week Skill Development Program (SDP) on “**Surface Characterization Techniques**” from 10th - 21st August, 2026, with the participation of 10 candidates. The program provided participants with comprehensive theoretical knowledge and hands-on exposure to advanced surface and materials characterization techniques. The program was coordinated by Dr. Ratnesh Kumar Jha, whose leadership, along with the dedicated efforts of the technical and scientific team, contributed significantly to the successful completion of the program. The Nodal Head of the Skill Development Centre, CSIR-NCL, Dr. Rajesh Gonnade, provided valuable guidance and support throughout the program.

CSIR-IMMT, Bhubhaneshwar conducted the three-Day Skill Development Programme on “**Advanced Electrochemical Techniques & Characterisations for Energy Applications (AETCEA-2026)**” during the period **18th - 20th August, 2026**. Prof. Bidyadhar Subudhi, Director, NIT Warangal, graced the occasion and marked the commencement of the programme, which aimed to foster advanced skills and technical understanding in electrochemical techniques for energy applications. A total of **62** participants attended this programme.



CSIR-CDRI, Lucknow is successfully conducting a Skill Development program in “**Computational Approaches to Drug Design and Development Certificate (CAD)**” under the CSIR Integrated Skills Initiative from **17th August - 25th September, 2026**. A total of **10** candidates had enrolled in this session. During the orientation, participants were introduced to the course objectives, training modules, and laboratory practices. The registration kits were also distributed to all candidates. During the orientation, participants were introduced to the importance of computational approaches in modern drug discovery and development. An overview of computational drug design methods, molecular modelling, virtual screening, molecular docking, and other relevant bioinformatics and computational techniques was provided.

CSIR-IHBT, Palampur conducted two LSSSDC skill courses- **Biologist/Biotechnologist** from **03rd June - 24th August, 2026** and second programme on “**Basics of High-Performance Liquid Chromatography (HPLC) Analysis**” from **04th - 24th August, 2026**. A total of **05** trainees have attended these programme. The trainees represented Gujarat, Punjab, Uttar Pradesh, Himachal Pradesh, Uttarakhand, and Jammu & Kashmir. The closing ceremony and certificate distribution were held in the presence of Dr. Sudesh Kumar Yadav, Director, CSIR-IHBT, who encouraged the trainees to enhance their technical skills, embrace innovation, adopt sustainable practices, and explore entrepreneurship opportunities



CSIR-NBRI, Lucknow organized a month-long Skill Development Training Programme on “**Certificate Course on Plant Molecular Biology Techniques**” during the period **02nd - 30th July, 2026** under the CSIR Integrated Skill Initiative. A total of **25** (Male-09 and Female-16) candidates from different districts of Uttar Pradesh have participated in the programme and gained hands-on experience in different plant molecular biology techniques used in Agro Industry through theory and practical sessions. The programme provided participants with valuable practical exposure to modern molecular biology tools and techniques. The training enhanced their technical skills and knowledge, preparing them for opportunities in research, agriculture and allied industries. The programme also contributed towards strengthening industry-relevant skills and promoting employability among the participants. The training also helped participants develop confidence in handling laboratory equipment and performing molecular biology experiments. Such skill development initiatives play an important role in fostering skilled manpower and supporting the growth of the agro-based sector.

CSIR-IIIM, Jammu is organising an 11-week Skill Development Programme on **"Production Machine Operator (Non-Sterile Formulation) – Granulation, Packaging, Tablets and Capsules"** during **24th August - 05th November, 2026**, sponsored by the National SC-ST Hub of Ministry of Micro, Small and Medium Enterprises (MSME), GoI under the CSIR Integrated Skill Initiative. The inaugural programme was addressed by the Director, CSIR-IIIM Jammu and CSIR-NBRI Lucknow, Dr Zabeer Ahmed. Giving a detailed brief about the programme, Anil Kumar Katare, Scientist-F, Quality Management & Instrumentation Division, said the 11-week course has been designed to provide comprehensive theoretical as well as practical training in pharmaceutical and herbal formulation manufacturing. A total of **30** participants are attending this programme.



CSIR-SERC, Chennai in collaboration with Sri Venkateswara College of Engineering (SVCE), Sriperumbudur, organized a two-day workshop on **"Structural Engineering"** from **24th - 25th August, 2026**. Inaugurating the event, Dr. (Smt.) N. Anandavalli, Director, CSIR-SERC, emphasized the necessity of bridging academic concepts with practical civil engineering solutions. Over the two days, senior CSIR-SERC scientists led sessions on diverse, cutting-edge topics: Dr. S. Maheswaran provided an overview of Intellectual Property Rights, Dr. V. Srinivas discussed Structural Health Monitoring using bridge projects, Dr. P. Kamatchi introduced earthquake-resistant design fundamentals, Dr. Saptarshi Sasmal detailed nano/micro-scale self-sensing smart structures, Dr. S. Vishnuvardhan covered fatigue-resistant steel structures, and Dr. S. Sundar Kumar explained concrete design principles. Coordinated alongside Dr. R. Kumutha (HOD, Civil Engineering, SVCE) and department faculty, the workshop successfully exposed students to emerging technologies, real-world engineering applications, and IPR management. A total of **101** participants attended this programme.

CSIR-CIMFR, Dhanbad organised a three-Day Skill Development Programme on **"Catalysis and Chemical Reactions"** during the period **17th - 19th August, 2026** at its Digwadih Campus. The inaugural programme began with a welcome address by Dr. Pinaki Sarkar, Scientist-in-Charge, CSIR-CIMFR, Digwadih Campus. The ceremony was marked by the traditional lighting of the lamp in the presence of eminent scientists, faculty members, technical officers and participants. A total of **38** participants attended the programme. The three-day programme combined expert lectures, hands-on laboratory training and practical sessions.



CSIR-NPL, New Delhi successfully conducted a training program on **"Precision in Practice, Dealing with Uncertainties"** (STP-08) **19th - 20th August, 2026** under the CSIR Integrated Skill Initiative. The two-day workshop featured insightful discussions and hands-on sessions for scientists, calibration engineers & industry professionals with essential metrological toolkits. A total **13** participants attended this programme.

CSIR-CLRI, Chennai organized a training programme on **“Productivity Improvement in Design”**, for B.Tech. Leather Technology students under the CSIR Integrated Skill Initiative during 17th – 20th August, 2026. A total of 105 students participated in the programme, which was conducted in two batches. The training was conducted using SIEMENS NX tools, which is part of Design Studio, setup under IFLDP scheme, DPIIT & CSIR funds. The training was aligned and equivalent to NSQF Level 5 and focused on the application of advanced digital design tools to enhance product development efficiency and manufacturing readiness. The programme covered key aspects of NX CAD, including parametric and feature-based 3D modelling, assembly modelling, surface design, design modification, and digital visualization.



CSIR-CLRI, Chennai, inaugurated a two-week Training Programme on **“Total Quality Management for Footwear Production”** from 31st August - 11th September, 2026 under the CSIR Integrated Skill Initiative at Nayudamma Hall. A total of 16 trainees are participating in the programme, which is organised under the CSIR Integrated Skill Initiative. The programme focuses on strengthening industry-oriented competencies in footwear manufacturing, TQM principles, quality planning and process control, defect analysis, corrective actions, standardisation, documentation, and quality assurance. The programme features practical demonstrations, hands-on sessions, case studies and interactive learning, aimed at enhancing quality consciousness and improving production efficiency in the footwear sector. The training programme is expected to equip the participants with essential knowledge and practical skills required to maintain and improve quality standards in footwear production. Through expert-led sessions and industry-oriented learning, the trainees will gain valuable insights into modern quality management practices. The initiative will also contribute towards enhancing employability and meeting the evolving skill requirements of the footwear industry.

CSIR-CGCRI, Kolkata organized a skill training programme on **“Instrumental Methods for Chemical Characterization of Glass and Ceramic Materials & Process Control Techniques Related to Different Physical Parameters Like Temperature, Pressure, Flow etc. and Their Related Instrumentation”** during the period 24th - 31st August, 2026, in the Multiscale Microstructure and Mechanics of Materials (4M) Division under the aegis of CSIR Integrated Skill Initiative. A total of 20 engineering undergraduate students participated in the training programme. The trainees were given demonstration on the working principles of sophisticated analytical instruments routinely used in the laboratory for chemical analysis of glass, ceramics and allied samples followed by hands on training, finally the trainees were imparted training process control techniques related to different physical parameters like temperature, pressure, flow etc. and their related instrumentation.





सी.एस.आई.आर. - हिमालय बायोसोर्स टेक्नोलॉजी, पालमपुर
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 Culture 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:

- Plant selection and explant collection
- Media preparation and autoclaving
- Sterilization, inoculation and subculturing
- Hardening of tissue culture developed plantlets and record maintenance
- Maintain health and safety in the workplace
- Employability Skills

Course Start Date: 22nd September, 2026

Last date of receiving application: 03.09.2026
Course fee: Rs. 10000/-
No. of Seats: 20
Education Qualification: 12 or equivalent (Science)
OR
10th Grade Pass with 3-year relevant experience
OR
Previous relevant Qualification of NSQF Level 3.5 with 1.5-year relevant experience in Agriculture and allied sectors
OR
Previous relevant Qualification of NSQF Level 3.0 with 3-year relevant experience in Agriculture and allied sectors

Course-coordinator
Dr. Rohit Joshi
Nodal Skill Development Programme
Dr. Girish Nadda

For more details about Institute, kindly scan the QR code

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

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

For more details about the institute, kindly scan the QR code.

Course Duration: 390 Hours
49 Days Approx.

Contact us:
Phone: +91-1894-233339 (Ext.) 371, 346
Fax: +91-1894-230433
Email: sdp@ihbt.org
Website: www.ihbt.org

CSIR-CCMB

Skill Development Program
On

"Advanced Biophysical Tools for Protein-DNA/Bimolecular Interactions"

16th – 20th November 2026

The CSIR-Center for Cellular and Molecular Biology is conducting a hands-on training on "Advanced Biophysical Tools for Protein-DNA/Bimolecular Interactions" (BIOPHY-III) 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 caters to individuals with varying levels of expertise, offering education and training in a range of biophysical techniques within the domain of DNA/Protein Biophysics and demonstrating their applications in research projects. The program includes informative lectures, practical hands-on sessions, guidance on instrument setup, and in-depth instructions on data collection and analysis.

No. of seats: 10-12
Minimum Qualification: Masters in any branch of Life Science/Allied areas
Dates: 16th – 20th November 2026
Mode of the Course: In-house training at CCMB
Mode of selection: Application form & Statement of Purpose
Course Fee: Rs. 18,000/- (includes GST & Accommodation)
Apply using the link: http://recruitment.ccmb.res.in/training_programs/sdp/

Training Curriculum:
Curriculum includes lectures and hands-on sessions on:

- Basics of Biophysics
- Instrument set-up for various biophysical techniques such as ITC, MST, BLI, Fluorescence Spectroscopy, CD Spectroscopy, DLS along with Protein Modeling
- Sample preparation along with tips and tricks
- Data collection and hands on for all participants
- Data analyses and presentation

Salient Features of the Training:

- Expert instructors will provide lectures and hands on 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

Course Coordinator: Dr. Shiv Pratap Singh Yadav
Scientist - C, Biophysics
CSIR-CCMB, Hyderabad

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

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CSIR-CCMB

Skill Development Program
On

"Genetic & Microbial Monitoring of Animals" (GMMA-IV)

05th - 13th October 2026

The CSIR-Center for Cellular and Molecular Biology is organizing a hands-on training on "Genetic & Microbial Monitoring of Laboratory Animals" (GMMA-IV) targeted to faculty members/researchers from universities/institutes/industries and interested individuals in the field of Life Sciences, Medical Sciences, Pharmaceutical Science & allied areas. It is intended to train people in monitoring and maintaining lab animals used for various experiments. The training would involve hands-on experiments and lectures on tissue collection, DNA isolation, genotyping, biochemical analyses, microbial contamination detection and prevention.

No. of seats: 10-15
Minimum Qualification: 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
Course Fee: Rs. 18,000/- (including accommodation & GST)
Apply using the link: http://recruitment.ccmb.res.in/training_programs/sdp/

Training Curriculum: (lectures and hands-on sessions)

- Quality control, both genetic & microbial to maintain genetically homogenous & germ free animals
- Immunogenetic, biochemical and PCR based testing methods
- Disease screening of lab animals, sample collection & processing techniques for molecular & microbiological monitoring
- Things to sort out during standardization & Exposure to laboratory safety regulations

Hands-on:

- Genomic DNA isolation from tail samples and genotyping by standard PCR with gene specific and SSLP markers
- Biochemical markers (HbA, ALP, Albumin, SGPT, etc.) to assess the genotype or genetic contamination
- Tissue collection, DNA & RNA isolation, Complementary DNA synthesis for DNA & RNA viruses
- Identification of infective agents by PCR, RT-PCR and Real time PCR (qPCR)
- Preparation and observation of agar plates for microbial cultures from different platforms
- Microbial identification by different staining procedure, biochemical test and ARST
- DNA isolation from individual bacterial colonies and identification of bacteria by PCR
- Hematology by hematology analyzer and immunological testing of pathogen by ELISA
- Fecal examination for endo-parasites and skin scraping for ecto-parasites

Topics:

- Primer sequence selection, primer design and synthesis
- Basic PCR programming, uses of real-time (qPCR) and reverse transcriptase (RT-PCR) types
- Buffers and Master mix preparation for DNA, RNA isolations and PCR
- Skin and hair sampling to identify the presence of ecto-parasites
- Basic histo-pathological techniques involved in health monitoring program

Salient Features of the Training:

- Expert instructors will provide lectures and hands on training
- One-to-one interaction with the trainers
- Evaluation assignments and Trouble-shooting sessions
- Certificate of participation will be issued to the participants

Course Coordinator: Dr. Jerald Mahesh Kumar
Scientist-G & In-charge
Animal House, CSIR-CCMB, Hyderabad.

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

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Skill Development Program
On

"Molecular Cloning and Protein Expression"

15th September to 01st October 2026

CSIR-Center for Cellular and Molecular Biology shall conduct a hands-on training workshop for sixteen days on "Molecular Cloning and Protein Expression" (RECOMB-VI) targeted to faculty/researchers, Post graduates 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 Molecular Cloning and Protein Expression in basic research for various experiments. It will be supplemented with informative lectures, hands-on training, instrument set-up, data collection and analysis.

Duration: 15 days
No. of seats: 10-12
Target Audience: Faculty/ Researcher from Academia/Industries/ Institutes
Minimum Qualification: Masters in any branch of Life Science/Allied areas
Dates: 15th September – 01st October 2026
Mode of the Course: In-house training at CCMB
Mode of selection: Application form & Statement of Purpose
Course Fee: 30,000/- INR (Including Accommodation & GST)
Apply using the link: http://11.171.19/training_programs/sdp/

Training Curriculum for Course:

- Media preparation, handling bacterial cell culture; reagents preparation and equipment use for cloning.
- Competent cell preparation for recombinant DNA cloning and protein expression.
- Polymerase Chain Reaction (PCR) - Its principle, working and designing of oligos for gene of interest.
- Plasmid vector preparation and restriction digestion of the plasmid by restriction enzymes.
- Ligation and transformation of the ligated recombinant gene.
- Screening for positive clones and confirmation using colony PCR or restriction enzyme digestion and DNA sequencing.
- Transformation of the confirmed clone into expression host bacterial strain.
- Protein expression standardization, optimization of purification strategies for the expressed protein and its analysis by SDS - PAGE.

Salient Features of the Training:

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

Course Coordinator: Dr. Shobha Krupa Rani
Scientist-F
Structural Biology Group
CSIR-CCMB, Hyderabad.

Program Coordinator: Dr. Archana Bharadwaj Siva
Scientist-G
Nodal Scientist-Skill Development Program
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नीरी
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(विज्ञान एवं प्रौद्योगिकी मंत्रालय, भारत सरकार / Ministry of Science & Technology, Govt. of India)
हरित कौशल प्रशिक्षण कार्यक्रम / GREEN SKILL TRAINING PROGRAM
विषय / Topic: "जल गुणवत्ता निगरानी, जल सुरक्षा एवं संरक्षण योजना" / "Water Quality Monitoring, Water Safety and Security Planning"
अक्टूबर १४-१५, २०२६ / October 14-15, 2026



पाठ्यक्रम विषय-सूची / COURSE CONTENTS

- जल गुणवत्ता: सुरक्षित पेयजल आपूर्ति के लिए मुद्दे और विकल्प / Water quality: Issues and options for safe drinking water supply
- पेयजल गुणवत्ता निगरानी / Drinking water quality monitoring
- जल आपूर्ति प्रणाली और उससे जुड़े जोखिम और खतरों / Water supply system and associated risks and hazards
- जल सुरक्षा योजना (डब्ल्यूएसपी) / Water Safety Plan (WSP)
- जल आपूर्ति प्रणाली में खतरों और खतरनाक घटनाओं की पहचान करना और जोखिमों का आकलन करना / Identification of hazards and hazardous events and assess the risks in water supply system
- संग्रहण क्षेत्र से लेकर उपभोक्ता तक पेयजल संचरण की रोकथाम / Prevention of drinking water contamination from catchment to consumer
- नियंत्रण उपायों का निर्धारण और स्थापना, जोखिम का पुनर्मूल्यांकन और प्राथमिकता निर्धारण / Determination and validation the control measures, reassessment and prioritization of the risk




अर्हता पत्रता / Applicant Eligibility

- भारतीय नागरिक (छात्र, बेरोजगार युवा, औद्योगिक कर्मों और कामकाजी पेशेवर, आदि) / Indian national (student, unemployed youth, industry personnel and working professionals, etc.)
- शैक्षणिक योग्यता: स्नातक (विज्ञान/ इंजीनियरिंग) / Educational qualification: Graduate (Science/ Engineering)

पंजीकरण प्रक्रिया / REGISTRATION PROCESS

- कृपया पंजीकरण वेबलिनक के माध्यम से पंजीकरण करें / Kindly register through registration weblink
- पंजीकरण शुल्क: ₹. २०००/- / Registration fees: Rs. 2000/-
- Payment Details: The Director, CSIR-NEERI, Nagpur, Account Number: 30266513766 Branch: NEERI SBI Branch, Nagpur (Maharashtra), IFSC, Code: SBIN0004224
- पंजीकरण की अंतिम तिथि सितंबर १४, २०२६ / Last date of registration September 14, 2026
- सीट सीमित हैं और 'पहले आओ-पहले पाओ' के आधार पर पंजीकरण किया जाएगा / Seats are limited and registration will be done on first come first basis
- सीट भर जाने पर पंजीकरण वेबलिनक समय से पहले बंद कर दिया जाएगा / The registration link will be closed earlier once the seats are filled
- हेल्पलाइन नंबर / Helpline Number: 9860248073 / 9370753986

पंजीकरण वेबलिनक / REGISTRATION WEBLINK : <https://forms.gle/9aFDLlNWCrRbA8868>

निदेशक/ DIRECTOR	हरित कौशल समन्वयक / GREEN SKILLS COORDINATOR	पाठ्यक्रम समन्वयक/ COURSE COORDINATOR
डॉ. एस. वेकट मोहन Dr. S. Venkata Mohan निदेशक सीएसआईआर-नीरी Director CSIR-NEERI	डॉ. हर्षवर्धन सिंह Dr. Harshvardhan Singh वैज्ञानिक जी एवं प्रभारी, कौशल विकास केंद्र (एसडीसी) Scientist G & In-Charge, Skill Development Centre (SDC) EMAIL ID : green.skills.neeri@csir.res.in	डॉ. जी. के. खडसे Dr. G. K. Khadse वैज्ञानिक जी, डब्ल्यूईएस Scientist G, WES



CSIR-CCMB



Skill Development Program
On
"Wildlife DNA Forensics" (WF-16)
07th – 12th September 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, other enforcement departments, academic institutions, university or a research laboratory
- Students:** B.Sc. degree holders and above

No. of seats : 12-14
Target Audience : Bachelors/Masters in any branch of Life Science/Allied areas
Mode of the Course : In-house training at CSIR-CCMB, Hyderabad
Mode of selection : Application form & Statement of Purpose
Fee Particulars : Rs.18,000/- (including accommodation & GST)
Course Code : WF-16
Apply using the link : http://recruitment.ccmb.res.in/training_programs/sdp/

Training Curriculum:

- Introduction to DNA, DNA technology and its applications in wildlife forensics
- Status of Wildlife crime in India
- Case Studies from Wildlife DNA Forensics Lab, CSIR-CCMB
- Genetic Sampling Techniques, Proper 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
- Selection of DNA Markers, Primer Designing
- Provide knowledge about the "Universal Primers" technology for Species Identification developed by CSIR-CCMB.
- PCR amplification of the DNA isolated from various types of biological samples
- Sequencing and Data analysis of PCR products for Species Identification
- Understanding the use of Microsatellite markers and Sex specific markers for individual identification, relatedness and sexing
- PCR amplification using single/multiplex markers
- Genotyping and scoring of alleles: DNA profiling
- Data analysis for individual identification, relatedness, and sexing
- Troubleshooting
- Report Preparation

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
Scientist-G
In-Charge - Wildlife Forensics
CSIR-CCMB, Hyderabad.

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

Scan to Apply





CSIR-CCMB



DEPARTMENT OF SCIENCE & TECHNOLOGY



CECRI

CSIR-Central Electrochemical Research Institute
Karaikudi-630003, Tamilnadu

PRINTMED 2026

NATIONAL WORKSHOP ON

Advanced 3D Printing:
from Biomaterials to Patient-specific solutions

17 & 18 September 2026

FOCUS AREAS

- ✓ Biomedical Materials
- ✓ AM Technologies
- ✓ Medical Design & CAD
- ✓ Polymer & Metal 3D Printing
- ✓ Surface Engineering & Characterization
- ✓ Biological & Clinical Evaluation
- ✓ Clinical Translation & Industrial Applications

CERTIFICATE WILL BE PROVIDED

FURTHER INQUIRIES

Dr. D. Jonas Davidson
Scientist-G & Head
Skill Development Group (SDG)
CSIR-CECRI, Karaikudi - 630003

+91 9489500237 / 7598449117
04565 - 241521 / 470
skill.cecri@csir.res.in



REGISTRATION FEE

Students	₹ 500
Faculty	₹ 1000
Others	₹ 3000

Limited Accommodation (shared) available on payment basis

WHO SHOULD ATTEND?

- UG / PG Students
- PhD Scholars / Researchers
- Faculty Members
- Biomedical/Materials Engineers
- Industry Professionals

Few Spots Left! Hurry! Claim Yours!

CSIR-SERC Skill Development Program 2026-2027



Advanced Course on Fatigue Life and Fracture Behaviour of Structural Materials and Components under Different Loading Conditions

FLoC '26
9-11 September 2026



Organised by :
CSIR-Structural Engineering Research Centre
(An ISO 9001-2015 Certified Organization)
CSIR Campus, CSIR Road, Taramani
Chennai – 60013, India

About CSIR-SERC

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

About the Course

The course provides necessary background to basic concepts of fatigue and fracture including design of components and structures against fatigue. The workshop gives an opportunity for engineering professionals to familiarize themselves with the recent developments in the area of fatigue and fracture mechanics. The course will be focused on experimental and numerical techniques for fatigue and fracture of metallic structural components. The topics to be covered during the Course include:

- Fundamentals of fatigue and fracture - metals and concrete
- Fatigue and fracture behaviour of metallic specimens / components under various loading conditions
- Specialised fatigue and fracture experimental studies on structural components
- Advanced computational methodologies for fracture analysis of structural components
- Probabilistic modelling of fatigue and fracture
- Structural failure case studies on fatigue and fracture

Scan the QR Code
for Promo Video



Participation

- The course is open to practicing engineers, researchers, academicians, consultants, research scholars, stake holders and decision makers in public and private sector organizations.
- The course will include visit to fatigue and fracture Laboratory and other prominent laboratories at CSIR-SERC.
- The participation certificate will be provided to all the registered participants.

Venue & Duration

Training and Development Complex, CSIR-SERC, Chennai
9-11 September 2026; Time: 09.30 a.m. to 5.00 p.m.

Registration & Fee

The registration fee for the course is Rs. 3,000/- (inclusive of GST) per participant for Indian delegates, Rs. 1,500/- (inclusive of GST) per participant for students (with proper authentication) and US\$ 450/- for foreign delegates. Presentation material (pdf format) shall be provided to all the registered participants. The brochure and details of the registration can be downloaded from the CSIR-SERC web site.
<https://serc.res.in/course>

Boarding & Lodging

- The participants or their sponsoring organizations must bear travel, boarding and lodging expenses.
- Limited accommodation in the Guest House/Trainee Hostel at CSIR-SERC campus may be arranged on first come-first-served basis.

Prerequisites

The course registrants can ensure adequate knowledge on the background to course contents through academic qualifications/working experience to fully exploit the benefits of attending advanced courses.

For further details, contact us

Nitin Khandelwal & V. Thondamon
Coordinators, FLoC '26

CSIR-SERC
CSIR Campus, CSIR Road Taramani,
Chennai - 600 113, India

Tel.: +91-44-22549129/9136

Mob: 9971757326 / 9445777584

nitin.serc@serc.res.in / thondamon.serc@serc.res.in

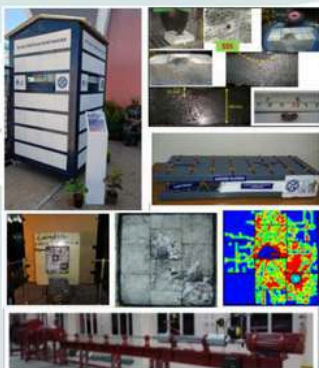
<https://www.serc.res.in>



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

A Short Term Advanced Course on

Fortified Futures: Next-Gen Hardened Protective Structures
September 21-25, 2026



Organized by
CSIR-Structural Engineering Research Centre
(An ISO 9001:2015 Certified Organization)
CSIR Campus, Taramani, Chennai-600113, India



About the Organization

CSIR-Structural Engineering Research Centre, Chennai, is one of the national laboratories under the Council of Scientific & Industrial Research (CSIR), India. CSIR-SERC has built-up excellent facilities and expertise for the 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 serve on many national and international committees and, this Centre has recognition nationally and internationally as a leading research institution in the field of structural engineering.

Background

Protective structures face unprecedented challenges in today's world, where extreme loadings such as impact, blast, explosions, and vehicle crashes continue to evolve with advances in technology and research. These events, though rare, often prove catastrophic—causing severe injuries, fatalities, economic losses, and social disruption. Designing resilient structures capable of withstanding multiple or coupled extreme events is therefore one of the most demanding tasks for practicing structural engineers. Traditional simplified approaches, including single-degree-of-freedom models and closed-form solutions, have long been used to predict structural responses under such conditions. However, modern advancements in computational and experimental mechanics now enable more reliable analysis and design. Techniques such as Smoothed Particle Hydrodynamics (SPH) and Peridynamics (PD) allow engineers to simulate complex responses under blast and impact loadings, while laboratory and field testing validate these models and provide deeper insights into real structural behavior.

The use of innovative materials and bio-inspired designs has further opened pathways to lightweight, shock-resistant, and structurally optimized protective systems. Coupled with advanced experimental facilities and instrumentation, these developments are reshaping our understanding of how materials and structures perform under extreme shock environments.

In this context, CSIR-SERC is organizing a five-day advanced offline course on "Fortified Futures: Next-Gen Hardened Protective Structures." The program will equip participants with cutting-edge knowledge of computational and experimental techniques, innovative materials, and resilient design strategies to address the pressing challenges of modern protective engineering.

Objectives

The advanced course "Fortified Futures: Next-Gen Hardened Protective Structures" is designed to address the complex challenges in analyzing and designing protective systems against extreme loadings such as impact, blast, explosions, and crashes. It aims to provide students, consultants, practicing engineers, and professionals from both public and private sectors with a comprehensive overview of current trends and recent advancements in protective structural engineering. Participants will gain exposure to cutting-edge computational and experimental techniques, innovative material applications, and resilient design strategies, with emphasis on both numerical modelling and experimental validation. Through expert lectures, case studies, and demonstrations, the program will equip attendees with the knowledge and practical tools needed to critically evaluate protective structures and develop robust solutions that safeguard lives, assets, and infrastructure against modern extreme events.

Course Contents

- Introduction to protective structures
- Analysis of Protective structures under various loading conditions (Blast / Impact / Crash)

- Design philosophy & current practices for determination of impact, shock and blast loads
- Behavior of concrete/composite structures under high strain rate loadings
- Shock wave propagation in materials under impact/blast loading
- Numerical simulation of explosion and impact loading
- Innovative and bio-inspired materials for advanced protective structures with enhanced shock resistance
- Strengthening and mitigation measures for infrastructure protection
- Case studies on protective structures
- Demonstration on instrumented impact machine and high velocity impact tests with gas gun facility at CSIR-SERC.

Faculty

Faculty for the course would comprise mainly scientists from CSIR-SERC and experts from reputed research/academic institutions /industry.

Prerequisites

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

Venue & Duration

Training and Development Complex, CSIR-SERC, Chennai.
Timing: 10.00 a.m. to 5.00 p.m.

Registration and Fee

Registration fee is Rs. 5000/- per participant inclusive of GST for Indian delegates and US\$750/- for foreign delegates. Course material in pdf format and certificate of participation will be provided to all the registered participants. The above registration fee includes a kit, lunch and refreshments for five days. The course registration can be completed via online form in the URL below:
<https://serc.res.in/course>

Travel, Boarding and Lodging Arrangements

The participants or their sponsoring organizations must bear travel, boarding and lodging expenses. Limited accommodation in the Guest House/Trainee's Hostel at CSIR-SERC Campus may be arranged on a first-come-first-served basis at extra cost. Participants wishing to avail of this facility are advised to write to the course coordinator well in advance.

Course coordinators

Dr. Amar Prakash, Scientist-G
Shri V. Ramesh Kumar, Scientist -E
Advanced Protective Structures & Mechanics Laboratory
Contact
Tel.: +91-44-2254-9179/ 2254-9241
Fax: +91-44-2254-1508
E-mails: amar.serc@serc.res.in; rameshkumar.serc@serc.res.in
Website: <https://serc.res.in>

Scan QR Code
for the Course
Promo Video





Join. Learn. Measure. Improve.

TRAINING ON AIR QUALITY MEASUREMENTS (STP-11)



DATE: 9-11 SEPTEMBER, 2026

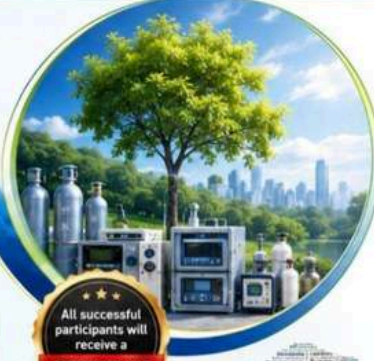
VENUE: CSIR NPL, NEW DELHI

CSIR-INTEGRATED SKILL INITIATIVE, PHASE III

**SCAN TO REGISTER
OR GO TO THE LINK**



<https://forms.gle/L1kdHdb1ueC5ZVRM8>



**TRAINING HIGHLIGHTS
and Importance**

This training programme provides a valuable opportunity to gain in-depth knowledge and enhance skills in Air Quality Measurements. Participants will receive specialized training in-

- Understanding relevant standards
- Pollutant measurement (gases & particulate matter)
- Calibration of the related analyzers /samplers
- Preparation of reference gas mixtures and their analysis
- Measurement Uncertainty Evaluation
- Hands-on demonstration

CONTENT DETAILS

- 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, CRDS, FTIR)
- 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
- CAAQM station, Hands-on demonstration of the measurement of major NAAQS parameters
- Noise pollution, Ambient noise standards and Noise measurement techniques.

**Register now for the
AIR QUALITY MEASUREMENTS
TRAINING PROGRAMME**

FEE FOR PROFESSIONAL

Rs. 5000+18% GST

FEE FOR STUDENTS

Rs. 1500+18% GST

EXPERT FACULTY
Learn from highly experienced experts in the field.

HANDS-ON LEARNING
Practical sessions for better understanding.

INDUSTRY RELEVANT
Gain skills aligned with global standards and real-world applications.

IMPACTFUL FUTURE
Be a part of the solution for clean air and a sustainable planet.

Dr. K.S. Krishnan Marg, New Delhi

npl.skillindia25@gmail.com

<https://www.nplindia.org/index.php/skill-development>

+91-11-2584-0446

For more detailed information: https://www.nplindia.org/wp-content/uploads/2026/03/skill_training_calendar_2026_2027.pdf

CSIR Integrated Skill Initiative Program

CSIR-Central Drug Research Institute, Lucknow

SAIF Sophisticated Analytical Instrument Facility
Supported by Department of Science & Technology (Gov. of India)



**CERTIFICATE COURSE ON
ADVANCED SPECTROSCOPIC TECHNIQUES**
(UV/IR, HPLC, LC-MS & NMR)

04th November 2026 to 04th December 2026

Master advanced spectroscopic techniques and gain hands-on experience with state-of-the-art instruments essential for modern research and drug discovery.



**EXPLORE.
ANALYZE.
DISCOVER.**

SALIENT FEATURES OF THE TRAINING

Small batch size
for effective training

Exposure to diverse sample preparation techniques

Demonstrations of working of state-of-the-art equipment

Interactive sessions

Understanding basic principles and instrumentation

Planning experiments for obtaining meaningful results

Lectures assisted with multimedia aids

DURATION 04 Weeks 04 Nov to 04 Dec, 2026	SEATS 16 (Limited Seats)	ELIGIBILITY M.Sc./B. Pharm./M. Pharm./B.Tech./M.Tech./Ph.D. with Chemistry as one of the major subjects	FEE COURSE ₹ 10,000 (Non refundable)	VENUE CSIR-CDRI, Lucknow	COURSE COORDINATOR Dr. Sanjeev Kanojia Sophisticated Analytical Instrument Facility & Research, Div., CSIR-CDRI, Lucknow saifcdri@csir.res.in
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TRAINING CURRICULUM

- UV-VIS & FT-IR Spectroscopy**
Theory, instrumentation and applications of UV-VIS and FT-IR spectroscopy. Hands on training on instrument, analytical method development and data analysis.
- HPLC / PDA**
Principles, instrumentation and applications of HPLC/PDA. Theory of chromatography, hands on training on HPLC system, analytical method development and data analysis.
- Mass Spectrometry**
Basic Principles of Mass Spectrometry, instrumentation, MS/MS, fragmentation process and pattern, various MS techniques (i.e., API-MS, DESI, IMS and MS), hands on training on data interpretation and analysis. Applications of LC-MS techniques in drug discovery.
- NMR Spectroscopy**
Basics of NMR Spectroscopy, NMR instrumentation, chemical shifts and spin-spin coupling constants, FT-NMR, homo and hetero nuclear two-dimensional NMR. Hands on training on NMR data interpretation, analysis and its variety of applications in Drug Discovery.

EVALUATION OF TRAINEES

Evaluation will consist of the following components

Theory Courses (50 Marks)

- Continuous assessment through assignments
- Term and examination

Practical Courses (50 Marks)

- Guided Experiments
- Unguided Experiments

IMPORTANT INFORMATION

Hostel Facility:
Subject to availability.

- About 40% Theory and 60% Practical hands-on sessions as per course curriculum
- Understanding basic principles
- Planning experiments for obtaining meaningful results
- Interactive sessions

IMPORTANT DATES

LAST DATE TO APPLY: 10/10/2026

INTIMATION TO SELECTED CANDIDATES: 12/10/2026

COURSE START: 04/11/2026

KINDLY APPLY THROUGH ONLINE PORTAL

<https://www.cdri.res.in/sdptraining>

SCAN TO APPLY



CONTACT US

Phone: 0522-277067

E-mail: saifcdri@csir.res.in

Address: CSIR-Central Drug Research Institute, Sector-10, Indraprastha Extension, Greater Noida, Lucknow-201315, India



CSIR Integrated Skill Initiative

National Metrology Institute, India

The Nation's Benchmark for Flow Accuracy.

A training program on
"Fluid Flow Metrology"
during (7-9) September 2026

organized by
Fluid Flow Metrology Sub-Division
CSIR-National Physical Laboratory, Dr. K.S. Krishnan Marg, New Delhi-110012, India



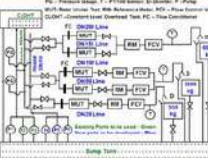
Registration Link:
[Registration Link: https://forms.gle/L1kdHdb1ueC5ZVRM8](https://forms.gle/L1kdHdb1ueC5ZVRM8)

Training Venue: CSIR- National Physical Laboratory, Delhi

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

Training Objectives:

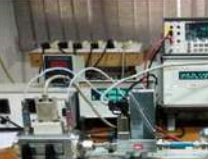
This program is specifically designed for researchers, industry personnel, legal metrology officers and students. The main objectives are to impart a clear understanding about basics of fluid flow metrology, role of fluid flow metrology in industry, measurement techniques and uncertainty etc.



Primary Water Flow Calibration Facility (WFCF)
Flow Range: upto 650 m³/h, Uncertainty: 0.03%-0.05%



Setup for calibration of syringe pump/infusion pump and Infusion Device Analyzer at NPLI



Gas Flow Calibration Facility, Flow Range:
0.5 mL/min to 2000 L/min
Expanded Uncertainty of the System : ± 0.20% (at k=2)



Ventilator Tester/ Gas Flow Analyzer Calibration Set-up for flow parameter (Maximum Flow: 300 slm)

CSIR - Human Resource Development Centre, Ghaziabad

(Skill Nodal Office)

सीएसआईआर - मानव संसाधन विकास केंद्र, गाजियाबाद

(कौशल नोडल कार्यालय)



LATEST
NEWS

सीएसआईआर-सीआईएमएफआर द्वारा 'उत्प्रेरण एवं रासायनिक अभिक्रियाओं' पर तीन दिवसीय कौशल विकास कार्यक्रम आयोजित

पूर्ववर्तन एवं प्रतिनिधि

धनबाद। केंद्रीय खनन एवं ईंधन अनुसंधान संस्थान (सीएसआईआर-सीआईएमएफआर), धनबाद ने अपने डिगवाडीह परिसर में 'उत्प्रेरण एवं रासायनिक अभिक्रियाओं' विषय पर तीन दिवसीय कौशल विकास कार्यक्रम (एसडीपी) का शुभारंभ किया। यह कार्यक्रम 17 से 19 अगस्त तक सीएसआईआर-एकीकृत कौशल पहल - चरण बुद्ध के अंतर्गत आयोजित किया जा रहा है। कार्यक्रम का शुभारंभ सीएसआईआर-सीआईएमएफआर, डिगवाडीह परिसर के वैज्ञानिक प्रभारी डॉ. पिनाकी सरकार के स्वागत संबोधन से हुआ। इसके पश्चात पारंपरिक दीप प्रज्वलन समारोह आयोजित किया गया, जिसमें प्रख्यात वैज्ञानिकों, संकाय सदस्यों, तकनीकी अधिकारियों एवं प्रतिभागियों की उपस्थिति रही। दीप प्रज्वलन कार्यक्रम ई. अमर नाथ, एचओआरजी, प्रौद्योगिकी प्रबंधन एवं अडिस्ट्रेटरी, डॉ. पिनाकी सरकार, डॉ. पवन कुमार गुप्ता तथा डॉ. स्वाति सिंह, द्वारा संयुक्त रूप से किया गया। इस अवसर पर संबोधित करते हुए ई. अमर

नाथ ने उत्प्रेरण एवं रासायनिक अभिक्रियाओं के महत्व पर प्रकाश डाला। उन्होंने कौशल विकास कार्यक्रम के मिशन एवं विजन तथा विकसित भारत 2047 के लक्ष्य को साकार करने में ऐसे कार्यक्रमों की महत्वपूर्ण भूमिका पर बल दिया। डॉ. पवन कुमार गुप्ता ने कार्यक्रम के उद्देश्य एवं संरचना के बारे में विस्तृत जानकारी दी। उन्होंने बताया कि कार्यक्रम की रूपरेखा वर्तमान औद्योगिक आवश्यकताओं तथा कैटेरलिसिस के बढ़ते महत्व को ध्यान में रखते हुए तैयार की गई है। कार्यक्रम में कैटेरलिसिस की मूलभूत अवधारणाओं, उत्प्रेरक संश्लेषण, उत्प्रेरक के अभिलक्षण तथा उनके विभिन्न अनुप्रयोगों पर विशेष जोर दिया गया है। कार्यक्रम का आयोजन एचआरडी, कौशल विकास एवं जिज्ञासा समूह द्वारा उत्प्रेरण एवं उत्प्रेरक अनुसंधान समूह, सीएसआईआर-सीआईएमएफआर के सहयोग से किया जा रहा है। प्रशिक्षण का उद्देश्य प्रतिभागियों के उत्प्रेरण एवं रासायनिक अभिक्रियाओं संबंधी ज्ञान को बढ़ाना, प्रयोगशाला एवं रिक्टर संचालन में व्यावहारिक कौशल विकसित करना, उत्प्रेरक संश्लेषण एवं अभिलक्षण तकनीकों की समझ को मजबूत करना तथा

उन्नत अनुसंधान एवं नवाचार के लिए वैज्ञानिक अभिरुचि को प्रोत्साहित करना है। उद्घाटन समारोह में दिलीप कुंभकार, वैज्ञानिक 'जी' एवं प्रमुख, एचआरडी; डॉ. सुदीप दत्ता, वैज्ञानिक 'जी'; डॉ. एस. के. मैती, वैज्ञानिक 'जी'; डॉ. आशीष घोष, वैज्ञानिक 'जी'; डॉ. एम. एस. संतोष, डॉ. तथा डॉ. जे. के. सिंह, कौशल नोडल अधिकारी, सहित कई वैज्ञानिक, तकनीकी अधिकारी एवं आयोजन दल के सदस्य उपस्थित रहे। इस कार्यक्रम में आईआईटी पटना, आईआईटी (आईएसएम) धनबाद, बीआईटी सिंदरी, केंद्रीय दक्षिण बिहार विश्वविद्यालय, गया, एसआरएम विश्वविद्यालय, नोएडा परिसर तथा बिनोद बिहारी माहो कोयलांचल विश्वविद्यालय (बीबीएमकेयू), धनबाद जैसे प्रतिष्ठित संस्थानों से कुल 38 प्रतिभागी भाग ले रहे हैं। उद्घाटन के तुरंत बाद प्रो. अरुण कुमार खर्मा, आईआईटी (आईएसएम) धनबाद ने 'कॉन्फरेन्स और डेटेरोनियस कैटेरलिसिस' एंड इट्स इंडस्ट्रियल एप्लिकेशंस विषय पर उद्घाटन व्याख्यान दिया। उन्होंने विषयवस्तु उत्प्रेरण के मूलभूत सिद्धांतों तथा औद्योगिक प्रक्रियाओं में इसकी प्रामाणिकता से प्रतिभागियों को अवगत



कराया। तीन दिवसीय कार्यक्रम में विशेषज्ञ व्याख्यान के साथ व्यावहारिक प्रयोगशाला प्रशिक्षण एवं प्रायोगिक सत्र शामिल है। प्रथम दिवस में उत्प्रेरण के मूलभूत सिद्धांत, उत्प्रेरक संश्लेषण, इलेक्ट्रोकेटेरलिसिस, फोटोकेटेरलिसिस एवं बायोकेटेरलिसिस के साथ प्रयोगशाला विधिभेद एवं उपकरणों का व्यावहारिक प्रशिक्षण दिया जाएगा। दूसरे दिवस में उत्प्रेरक अभिलक्षण तकनीकों, थर्मल संपद सुलन, संश्लेषण एवं मूल्यवर्धन तथा उत्प्रेरक अभिलक्षण

के प्रति आधार व्यक्त किया। कार्यक्रम का समापन प्रतिभागियों के मूल्यांकन, अवलोकन एवं प्रमाण-पत्र वितरण के साथ होगा। यह कार्यक्रम वैश्विक ज्ञान और व्यावहारिक औद्योगिक अनुप्रयोगों के बीच की दूरी को कम करने के उद्देश्य से तैयार किया गया है। इसके माध्यम से विद्यार्थियों एवं युवा शोधकर्ताओं को अभ्युक्ति उत्प्रेरक प्रक्रियाओं, उत्प्रेरक अभिलक्षण, रासायनिक रिक्टर प्रौद्योगिकी एवं प्रयोगशाला कार्यप्रणालियों का प्रत्यक्ष अनुभव प्राप्त होगा। यह कार्यक्रम प्रतिभागियों की तकनीकी दक्षताओं को सुदृढ़ करने तथा उन्हें उत्प्रेरण एवं संबंधित क्षेत्रों में उन्नत अनुसंधान एवं नवाचार के लिए प्रेरित करने में महत्वपूर्ण भूमिका निभाएगा। सीएसआईआर - सीआईएमएफआर, सीएसआईआर-एकीकृत कौशल पहल - चरण बुद्ध के अंतर्गत ऐसे उद्योगमुख एवं अनुसंधान-आधारित कौशल विकास कार्यक्रमों का निरंतर आयोजन कर रहा है, जिसका उद्देश्य कुशल मानव संसाधन का विकास तथा विद्यार्थियों, शोधकर्ताओं एवं पेशेवरों के बीच वैज्ञानिक एवं तकनीकी क्षमताओं को बढ़ावा देना है।

उत्प्रेरण एवं रासायनिक अभिक्रियाओं पर तीन दिवसीय कौशल विकास कार्यक्रम आयोजित मूलभूत अवधारणाओं, उत्प्रेरक संश्लेषण, उत्प्रेरक के अभिलक्षण पर दिश गया जोर

जाटखंड जागरण संवाददाता

धनबाद। केंद्रीय खनन एवं ईंधन अनुसंधान संस्थान धनबाद ने अपने डिगवाडीह परिसर में उत्प्रेरण एवं रासायनिक अभिक्रियाएं विषय पर तीन दिवसीय कौशल विकास कार्यक्रम (एसडीपी) का शुभारंभ किया। यह कार्यक्रम 17 से 19 अगस्त तक सीएसआईआर-एकीकृत कौशल पहल - चरण तीन के अंतर्गत आयोजित किया जा रहा है। कार्यक्रम का शुभारंभ सीएसआईआर-सीआईएमएफआर, डिगवाडीह परिसर के वैज्ञानिक प्रभारी डॉ. पिनाकी सरकार के स्वागत संबोधन से हुआ। इसके पश्चात पारंपरिक दीप प्रज्वलन समारोह आयोजित किया गया, जिसमें प्रख्यात वैज्ञानिकों, संकाय सदस्यों, तकनीकी अधिकारियों एवं



प्रतिभागियों की उपस्थिति रही। दीप प्रज्वलन कार्यक्रम ई. अमर नाथ, एचओआरजी, प्रौद्योगिकी प्रबंधन एवं आईएसटीएजी; डॉ. पिनाकी सरकार, डॉ. पवन कुमार गुप्ता तथा डॉ. स्वाति सिंह, द्वारा संयुक्त रूप से किया गया। इस अवसर पर संबोधित करते हुए ई. अमर नाथ ने उत्प्रेरण एवं रासायनिक अभिक्रियाओं के महत्व पर प्रकाश डाला। उन्होंने

कौशल विकास कार्यक्रम के मिशन एवं विजन तथा विकसित भारत 2047 के लक्ष्य को साकार करने में ऐसे कार्यक्रमों की महत्वपूर्ण भूमिका पर बल दिया। डॉ. पवन कुमार गुप्ता ने कार्यक्रम के उद्देश्य एवं संरचना के बारे में विस्तृत जानकारी दी। उन्होंने बताया कि कार्यक्रम की रूपरेखा वर्तमान औद्योगिक आवश्यकताओं और

कैटेरलिसिस के बढ़ते महत्व को ध्यान में रखते हुए तैयार की गई है। कार्यक्रम में कैटेरलिसिस की मूलभूत अवधारणाओं, उत्प्रेरक संश्लेषण, उत्प्रेरक के अभिलक्षण तथा उनके विभिन्न अनुप्रयोगों पर विशेष जोर दिया गया है। कार्यक्रम का आयोजन एचआरडी, कौशल विकास एवं जिज्ञासा समूह द्वारा उत्प्रेरण एवं उत्प्रेरक अनुसंधान समूह, सीएसआईआर-सीआईएमएफआर के सहयोग से किया जा रहा है। प्रशिक्षण का उद्देश्य प्रतिभागियों के उत्प्रेरण एवं रासायनिक अभिक्रियाओं संबंधी ज्ञान को बढ़ाना, प्रयोगशाला एवं रिक्टर संचालन में व्यावहारिक कौशल विकसित करना, उत्प्रेरक संश्लेषण एवं अभिलक्षण तकनीकों की समझ को मजबूत करना तथा उन्नत अनुसंधान एवं नवाचार के लिए

वैज्ञानिक अभिरुचि को प्रोत्साहित करना है। उद्घाटन समारोह में दिलीप कुंभकार, वैज्ञानिक एवं प्रमुख, एचआरडी; डॉ. सुदीप दत्ता, वैज्ञानिक 'जी'; डॉ. एस. के. मैती, वैज्ञानिक 'जी'; डॉ. आशीष घोष, वैज्ञानिक 'जी'; डॉ. एम. एस. संतोष, डॉ. तथा डॉ. जे. के. सिंह, कौशल नोडल अधिकारी, सहित कई वैज्ञानिक, तकनीकी अधिकारी एवं आयोजन दल के सदस्य उपस्थित रहे। इस कार्यक्रम में आईआईटी पटना, आईआईटी (आईएसएम) धनबाद, बीआईटी सिंदरी, केंद्रीय दक्षिण बिहार विश्वविद्यालय, गया, एसआरएम विश्वविद्यालय, नोएडा परिसर तथा बिनोद बिहारी माहो कोयलांचल विश्वविद्यालय (बीबीएमकेयू), धनबाद जैसे प्रतिष्ठित संस्थानों से कुल 38 प्रतिभागी भाग ले रहे हैं।



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- India Launches Nationwide Cloud and AI Skilling Initiative for 150,000 Learners
- Global Skills Park playing key role in preparing youth for jobs, says MP CM Yada
- IIT Kharagpur outreach network launches Texas AI Learning Centre in Houston, US
- Wipro's Upskilling AI Agent Crosses 7,500 Conversations With Employees
- AI to reshape sports sector jobs, create career avenues: Jayant Chaudhary
- Skill ministry, Amazon launch nationwide cloud, AI skilling programme
- 87 mn Indian youth are not studying, working or in training: NITI Aayog
- PM Modi announces AI training for 10 million youth over the next year
- India joins WEF initiative to reskill 850 mn people globally
- Talent gaps put India GCC mandates at risk as firms weigh competing geographies: PwC India-FICCI study

- Empowering Tier 2 and Tier 3 Youth with Future Skills is Key to Viksit Bharat 2047: Shri Jayant Chaudhary Program plans to equip 150,000 learners
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- NITI Aayog August 2026 Report: Reimagining Skilling for Viksit Bharat@2047
- NITI Aayog backs decentralised skilling even as states flag NEP control

- जिला कौशल विकास योजना में उद्योगों की मांग को मिलेगी प्राथमिकता
- इंडिया स्किल प्रतियोगिता 2026-27 में युवाओं को विभिन्न कौशल श्रेणियों में भाग लेने का अवसर मिलेगा
- क्लासरूम से सीधे इंडस्ट्री तक: यूपी के युवाओं के लिए खुलेंगे रोजगार के नए रास्ते, 8 जिलों से होगी शुरुआत
- यूपी में स्किल डेवलपमेंट का नया मॉडल, सीधे नौकरी और स्वरोजगार से जोड़ेगी सरकार
- नीति आयोग विकेंद्रीकृत कौशल विकास का समर्थन करता है, जबकि राज्य सरकारें नई नीति के नियंत्रण पर सवाल उठा रही हैं।
- कौशल प्रशिक्षण से संवर रहा युवाओं का भविष्य
- बहराइच में कौशल विकास एवं उद्यमशीलता मंत्रालय द्वारा भारत कौशल प्रतियोगिता 2026-27 का आयोजन किया जा रहा है
- रोजगार की मांग के अनुरूप तैयार होगी वैशाली की कौशल विकास योजना, जिला पदाधिकारी ने प्रभावी समन्वय पर दिया जोर
- कौशल के प्रदर्शन को आयोजित होगी प्रतियोगिताएं मुख्य विकास अधिकारी कार्यालय में बैठक के दौरान दी जानकारी ललितपुर
- कौशल विकास और उद्यमिता मंत्रालय ने उत्तर प्रदेश सरकार के सहयोग से लखनऊ में पीएम-एसईटीयू उद्योग सम्मेलन

INTERNATIONAL

- WorldSkills Conference will advance the global agenda for TVET
- WorldSkills Jamaica and Studica Robotics host skilled talent at a five-day training camp
- The search begins for the WorldSkills Champions Trust 2027 to 2028
- Call For Applications: UNESCO-UNEVOC Skills in Action Photo Competition 2026 Offers Up to \$750 for Showcasing the Power of TVET
- Five years on: Keeping learning alive for girls and women in Afghanistan



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