

CSIR SKILL BULLETIN (A FORTNIGHTLY E-PUBLICATION) सीएसआईआर कौशल पत्रक (पाक्षिक ई-प्रकाशन)

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- Ms Neeti Sagar
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- Dr Durgavati Yadav
- Mr Pradeep Kr Sharma
- Ms Sindhu Gupta

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- Skill Trainings by CSIR
- Nodal Office Updates
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- General Events
- Glimpses
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CSIR-IIP



CSIR-IIIM



CSIR-NEERI



CSIR-ICT

IMAGES: Various Skill Development Training Programs at different CSIR Labs.

SKILLING/UPSKILLING TRAINING PROGRAMS BY CSIR

सीएसआईआर द्वारा स्किलिंग/अपस्किलिंग प्रशिक्षण कार्यक्रम

CSIR-IIP, Dehradun organized a Training Program entitled "Analysis using Elemental Thermo-Gravimetric and Microscopic Tools" from 06th-17th, January 2025. The training aimed to provide in-depth knowledge and hands-on experience on various analytical instruments namely ICP-OES, AAS, TGA, FE SEM, TEM and Powdered X-Ray. Analytical characterization approaches technique fundamentals, instrumentation and applications were explained in detail to 17 participants.



CSIR-CBRI, Roorkee organized a Five-day training program on "Disaster Resilient Building Construction in Hills" from 27th-31st January 2025. A total of 35 Engineers from two districts of Himachal Pradesh participated in the program.



CSIR-CECRI, Karaikudi organized a week-long Industry Oriented Refresher Course on “Electrochemical Power Sources: Lithium-ion battery - Science and Technology” from 20th -24th January 2025. This program aims to provide the latest knowledge & skills in Lithium-ion batteries. The program was attended by 13 Industrial participants [DRDO DIBER, Haldwani-2, EEE Energy Private Limited, Krishnagiri-2, Renault Nissan Technology & Business Centre India, Chennai-2, Flyon Batteries, Palakkad-2, CSIR-NPL, New Delhi-1, CSIR-CECRI, Karaikudi-1, Sai Delta Inspection & Testing Laboratory, Chennai-1, Self Sponsor-2]. The training program was inaugurated by Dr M. Sathish, Pr Scientist & Head of the Electrochemical Power Sources Division, explained divisional activities. The event was nodally coordinated and hosted by Dr S.M. Rajendran, Sr Pr Scientist, Head & Nodal Officer of ISI under CECRI's Skill Development Group.



CSIR-IIIM, Jammu organized a Three-day training program on “cGMP Pilot Plant for Extraction of Traditional (ISM) Herbal Plants” from 20th-22nd January 2025. About 30 participants from diverse backgrounds of Chemical Sciences, Pharmaceutical Sciences, Life Sciences, Medicine and AYUSH enrolled for the workshop. The program was inaugurated by Dr Zabeer Ahmed, Director & Chief Guest. Speaking on the occasion, Dr Zabeer Ahmed underscored the significance of merging traditional medicinal knowledge with modern scientific methods and regulatory frameworks.



CSIR-NCL, Pune organized a Three-week Program on “Chromatographic Techniques” from 23rd December 2024 to 10th January 2025 in which 25 students got trained. This course provides comprehensive training on various chromatographic techniques including GC, GC-MS, HPLC, and HPLC-MS. It also covered the identification and purification of mixture components for both qualitative and quantitative analysis. Dr Sanjay Borikar, Dr Mahesh Kulkarni, Dr Snehal More, Dr Nilakshi Sadavarte as main coordinators and their team served for successful completion of this course. Skill Nodal Head at CSIR-NCL Dr Rajesh Gonnade supported this program in all possible ways.



CSIR-CCMB, Hyderabad organized a training program on “Introduction to IPR and Patents” from 08th-10th January 2025. 12 participants from all over India got benefited from this program. Training offered a series of modules, lectures and hands-on experiments on Intellectual Property Rights (IPR) like patents, trademarks, copyrights, and Patent filing.



CSIR-NCL, Pune organized a Four-month Program on “Synthetic Organic Chemistry” from 9th September to 30th December 2024. The Course included skills like Synthesizing known molecules via sustainable chemistry as well as new molecules with improved properties; greatly impacting modern society and economy. Practical knowledge of organic synthesis and handling of state-of-the-art facilities is the pre-requirement to contribute to this field. The course provides a hands-on experience of how the planning, designing, execution, and analysis are done in sync to achieve synthetic goals. Upon completing the course, participants will be capable of planning and independently executing commonly practiced and advanced organic transformations on a laboratory scale within a safe environment; guest lectures from industry professionals. Dr Dinesh Sawant and his team served as the main coordinators for this course, with guidance from Skill Nodal Head Dr Rajesh Gonnade.



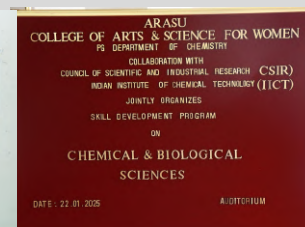
CSIR-NEERI, Nagpur organized a Training Program on “Water and Wastewater-Monitoring, Analysis and Treatment” on 23rd January 2025 at Mumbai Zonal Centre (MZC). Dr C. Anandharamakrishnan, Director, CSIR-NEERI, Nagpur & CSIR-NIIST, Thiruvananthapuram inaugurated the skill training program and addressed the participants on various aspects of Water Resource Management, Wastewater Surveillance, Re-use of Wastewater etc. Dr Harshvardhan Singh, Sr Principal Scientist & In-charge, Skill Development Centre (SDC) briefed about Green Skill Development activities of the Institute. Dr Nitin Goyal, Principal Scientist & Chair, MZC & Course Coordinator welcomed the participants. Dr Shalini Tandon, Principal Scientist, MZC and Course Coordinator briefed about course contents. Participants from rural and urban areas of West Bengal, Maharashtra, Tamil Nadu, Bihar, Jharkhand, Chhattisgarh & Kerala states belonging to different organizations had participated in the skill training program comprising technical presentations and demonstrations of Water and Wastewater analysis at MZC Labs.



CSIR-CGCRI, Kolkata organized a Four-days training program on “Instrumental Methods for Chemical Characterization of Ceramic Materials & Testing & Calibration Techniques Related to Temperature Measurement and Control” in the Analytical Chemistry Section of Advanced Materials and Chemical Characterization Division (AMCCD) from 14th to 17th January 2025. 23 diploma (engineering) students participated in the training program. The students were given hands-on-training on instrumental characterization followed in the laboratory for chemical analysis of glass and ceramic materials followed by training on testing and calibration techniques related to temperature measurement & control and, basic instrumentation measurements and techniques.



CSIR-IICT, Hyderabad organized a One-day skill development Orientation Program in “Chemical and Biological Sciences” on 22nd January 2025, jointly with Arasu College of Arts and Science for Women, Karur, Tamil Nadu. CSIR-IICT Scientists interacted with participants and delivered a plenary lecture. Various topics, including research opportunities, CSIR's role in technology development, recent trends in Organic Synthesis and Bioprocessing, Molecular Biology interventions in Life Sciences were discussed. Around 130 UG and PG science students actively participated and engaged in meaningful interactions with resource persons.



CSIR-IICT, Hyderabad organized a National Workshop on “Innovative & Sustainable Business Strategies (ISBS-2025) for Science & Technology” on 27th January 2025. Experts, researchers, and Industry leaders came together to explore the future of commercialization of research work, sustainable growth, and Industry-academia collaboration. With inspiring talks, panel discussions, and technology transfers, the event was a step forward in bridging the gap between science and business sector. ISBS-2025 highlighted the power of collaborations among Academia, Startups, and Industries in driving innovation. The event was attended by approximately 200 people.



CSIR-IIIM, Jammu organized a training program on “Research Methodology, Science Communication, and Intellectual Property Rights (IPR)- A Futurist Perspective” on 31st January 2025. The program attracted a diverse group of participants, including students, research scholars, scientists, and professionals from various fields like management and law.



CSIR-CBRI, Roorkee organized a Hands-on training program on “SolidWorks Software” from 22nd-25th January 2025. A total of 25 working professionals and students participated in the program.



CSIR-CECRI, Karaikudi organized a One-week Skill Development Training Program on “Photolithography based Micro-fabrication of Sensors” from 27th-31st January 2025. This program aims to provide the latest knowledge & skills of the Photolithography. Photolithography is one of the most important and easiest methods of Microfabrication and is used to create detailed patterns in a material. In this method, a shape or pattern can be etched through selective exposure of a light sensitive polymer to ultraviolet light. This program was attended by 31 participants in covering different regions of Tamil Nadu. The training program was inaugurated and divisional activities explained by Dr J. Mathiyarasu, Chief Scientist & Head of Electronics and Electrocatalysis Division.



CSIR-AMPRI, Bhopal organized a Hands-on Internship/Dissertation Program on “Applied Science & Engineering” on 28th January 2025. 37 Participants took part in this program.



CSIR-CMERI, Durgapur organized a hands-on training & demonstration program on “Agricultural Machinery & Implements” on 22nd January 2025 for women farmers. 26 female farmers participated in the program.



CSIR-CEERI, Pilani organized a one-week hands-on training program focused on “Analytical Equipment” from 27th-31st January 2025. Seven master's students participated in the course, where they gained comprehensive knowledge and practical experience in operating advanced instruments such as NMR, Raman Spectroscopy, UV-Vis Spectrophotometry, FTIR, Fat Analyzers, and Protein Analyzers. This training provided the students with valuable skills in using these critical analytical tools.



CSIR-SERC, Chennai organized a 3-Day advanced course on "Seismic Engineering and Testing (ASCET-2025)" from 28th-30th January 2025. Fifty five (55) participants were participated in the advanced course.



CSIR-IIIM, Jammu organized a one-day workshop on "Research Methodology, Science Communication & IPR- A Futurist Perspective" on 31st January 2025. Over 80 participants, including researchers, students, and professionals, gained valuable insights into best practices in research, IPR Protection, and effective science communication.



NODAL OFFICE UPDATES

नोडल कार्यालय अपडेट

- Ms Bineesha Payattati, Member, Technology Development Board (TDB) and RC Member, CSIR visited CSIR Skill Nodal Office on 7th January 2025. She was briefed about CSIR's achievements so far in skilling initiative and way forward. On behalf of the Christ University, Bangalore she proposed joint effort by CSIR Labs and the University in providing skill training to school dropouts on Masonry and related topics, which is in high demand. The matter will be taken up further in consultation with concerned CSIR labs.
- Wing Commander Venkatesh Balasubramanian (Retd) from M/s SMC Corporation India (Indian Unit of SMC, Japan), premier pneumatic and automation manufacturing company visited the Skill Nodal Office Ghaziabad of CSIR on 22 January 2025. Taking advantage of CSIR's high-profile resources and its geo-locations, he proposed to plan joint-effort by SMC and CSIR in providing skill training especially to the workforce of their (SMC) clientele operating in India, who periodically require skilled-manpower in Industry Automation. It was also discussed to explore possibilities to develop new course modules jointly by SMC and CSIR for inclusion in the National Qualifications Register (NQR). A followup meeting involving all concerned CSIR Labs has been suggested in the month of February 2025.



આગામી આયોજન



CSIR-INDIAN INSTITUTE OF CHEMICAL TECHNOLOGY

(Under Ministry of Science & Technology, Govt. of India)
Tarnaka, Uppal Road, Hyderabad – 500007, Telangana, India



CSIR-Indian Institute of Chemical Technology (CSIR-IICT) is a premier National R&D Institute having Eight decades partnership with Industry and contribution to the society. The Institute is located in a sprawling campus in the knowledge innovation hub of the city. CSIR-IICT is equipped with expert pool of scientists in **Chemical, Biological, Analytical, Engineering, Environmental** Research areas etc.

The **SKILL INDIA** Program at CSIR-IICT aims to create opportunities, space & scope for development of talents in the Indian Youth in the sectors which provide Employment and Entrepreneurial skills. The idea is to raise confidence, improve productivity, provide direction with a balanced growth.

Skill India



Courses

- **Finishing School to Post-Graduates in Chemistry**
(16 weeks) (June 2024 - Oct 2024)
- **CRISPR/Cas9 Mediated Gene Knockout in Cell Lines**
(2 weeks) (Aug 2024 - Sep 2024)
- **Organic Coatings & Paints**
(1 week) (Sept 2024)
- **Analytical Techniques in Food and Nutritional Chemistry**
(4 weeks) (Sep 2024 - Oct 2024)
- **Animal Cell Culture Techniques**
(6 weeks) (Sep 2024 - Nov 2024)
- **Powder X-Ray Diffraction-Hands on Training**
(1 week) (Oct 2024)
- **Conventional Chromatographic and Spectral Analysis of Oil & Fats**
(3 days) (Oct 2024)
- **Certificate Course in Basic Bioinformatics & Cheminformatics**
(2 weeks) (Jan 2025 - Feb 2025)

Salient Features

Rigorous training in advanced topics by means of theory and Experimentation

Personal Attention during Hands on sessions

Exposure to Research areas in the Institute

Evaluation of knowledge gained by weekly assignments

Course completion CERTIFICATE to all the Trainees

Target Beneficiaries

Graduates of Post Graduates in Chemical / Biological / Environmental Sciences, etc.,








Nodal Officer- Skill Development
CSIR-Indian Institute of Chemical Technology, Tarnaka-Uppal Road,
Hyderabad – 500 009, Telangana, India



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[facebook](https://www.facebook.com/csirict)

☎ 040-2719346





CSIR -INTEGRATED SKILL INITIATIVE Training Programme on "CERTIFICATE COURSE FOR HERBARIUM TECHNICIAN"

The skill development program is designed to engage enthusiastic students who are eager to learn and enhance their expertise in plant herbarium techniques. The program aims to provide hands-on training in various herbarium curation methods, fostering practical skills essential for classical plant-based studies. Despite their importance, such studies have increasingly been overlooked, highlighting the growing need to develop expertise in this field. This program seeks to bridge that gap, equipping both students and educators with a comprehensive understanding of herbarium and its curation methods. India is home to numerous herbaria that require skilled personnel for proper maintenance and curation. However, there is a significant shortage of professionals with specialized training in herbarium techniques.

Course Highlights

- Plant collection techniques for different cryptogamic groups including dry and wet methods of preservation.
- Herbarium processing including drying, surface sterilization, mounting, labelling etc.
- Herbarium accessioning and incorporation.
- Herbarium digitization.
- Herbarium maintenance including re-mounting, heat treatment, chilling treatment, fumigation etc.

Course Coordinator

Dr. K.M. Prabhukumar
Senior Scientist
prabhu.krishna@nbri.res.in
0522-2297939

Programme Coordinator

Dr. Manish S. Bhoyar
Senior Scientist & PI
manish.bs@nbri.res.in
0522-2297984

Number of Seats: 20 Non-residential

27th Jan to 12th Feb 2025

Course Fees

INR 5,000/- &
INR 20,000 for industry-sponsored.
(Including working food)



Account Details

Director,
National Botanical Research Institute,
Lucknow.
Bank: State Bank of India
Account No.: 30267652846
IFSC Code: SBIN0010173

Educational Qualification:

Graduate in science (Botany, Plant Science,
Life Sciences, Environmental Sciences)

CSIR-NATIONAL BOTANICAL RESEARCH INSTITUTE, RANA PRATAP MARG, LUCKNOW - 226001, UTTAR PRADESH.

SKILL

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

DEVELOPMENT PROGRAMME

Microscopic and Diffraction Techniques for Materials Characterization

What You'll Explore:

- **Microscopic Marvels:** Exploring the hidden microscopic world through techniques like Transmission Electron Microscopy (TEM), Scanning Electron Microscopy (SEM), Atomic Force Microscopy (AFM), and Optical Polarizing Microscopy (OPM). Witness the intricate structures of materials with clarity and precision.
- **Crystal Clarity:** The realm of crystallography with Powder X-ray Diffraction (PXRD) and Single Crystal X-ray Diffraction (SXRD). Learn to decipher the atomic arrangements of crystals, unlocking their secrets with finesse.

**Course fee
Rs. 7500/-**

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

Why Choose This Course:

- **Practical Learning:** Training sessions that blend theory with real-world application. Gain confidence as you navigate through practical experiments under expert guidance.
- **Career Advancement:** Equip yourself with skills highly valued in both academic research and industrial settings. Expand your career opportunities and make significant strides towards your professional goals.

Networking Opportunities:

Connect with fellow participants and experts, fostering valuable collaborations and expanding your professional network.

Interactive Sessions:

Engage in lively discussions and interactive sessions designed to deepen your understanding of complex concepts

Cutting-Edge Facilities:

Access state-of-the-art equipment and facilities that simulate real-world scenarios, ensuring a seamless learning experience.

Course Experts: Dr. Biswapriya Deb, Dr. Adersh Asok, Dr. Praveen V. K., Dr. Satyajith Shukla, Dr. Surendran K. P., Dr. Sunil Varughese, Dr. Subrata Das, Mr. Chandrakanth C. K., Mr. Kiran Mohan, Mr. Harish Raj V.

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

COURSE COORDINATORS:
DR. BISWAPRIYA DEB
DR. SUNIL VARUGHESE

DATE:
17th - 28th February
2025

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



**CSIR
INTEGRATED
SKILL
INITIATIVE**

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

CSIR-NCL SKILL DEVELOPMENT PROGRAM

"Food Safety And Quality Assessment"

FOR WHOM

- Students
- Academic Researchers
- Industrial Professionals

HOW TO APPLY

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

Here is the reason why
WHY CHOOSE US

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

<https://ncsldp.ncl.res.in/>
ncl.sdtc@ncl.res.in

CSIR-National Chemical
 Laboratory, Dr. Homi
 Bhabha Road, Pashan,
 Pune-411008

Envalior
 Imagine the Future
 CSIR Sponsor

ABOUT COURSE

The food safety and Quality Assessment course focuses on testing microorganisms from contaminated food and feed samples for microbial contamination and ensure food safety and quality. It covers following topics: Isolation, molecular identification of bacteria, fungi, and yeast. Also genome data analysis, food safety gene sequencing, PCR and phylogenetic analysis. The course also includes culture techniques, isolation and methods for enumerating closely related species and strains. It covers chromatographic techniques for antibiotic, pesticide, toxin, and metabolite. course emphasizes HACCP for controlling food safety hazards and food safety management system. microbiological standards, chemical, physical, and environmental regulations, all vital for protecting public health.

COURSE CONTENT

This course focuses on the isolation and identification of microorganisms from contaminated food, using both phenotypic and molecular techniques for bacteria, fungi and yeast. It covers 16S/18S rRNA gene sequencing and Oxford Nanopore sequencing. The course also explores chromatographic principles, HPLC instrumentation, method development, validation, troubleshooting, and software for controlled operations. Practical training includes the quantitative assessment of mycotoxins, antibiotic contamination, byproduct analysis, method validation and statistical analysis to ensure food quality and safety.

PRIME INSTRUCTOR

Dr. Koteswara Rao
 Senior Scientist
 Biochemical Sciences Division
 CSIR-National Chemical Laboratory
 Area of Expertise :

Microbiology & Molecular Biology

COURSE DETAILS

Duration: 2 Weeks
Dates: 14th Feb to 14th Feb 2025
No. of Seats: 15
Eligibility: Masters (completed/ pursuing) 1st or 2nd semister student or employee.
Course Fees:
 Students: 5000/-
 Faculty: 15000/-
 Industrial Professionals: 25000/-

(The fees stated include 10% GST)
 Accommodation 2 week + 2 days with
 affordable charges.

CSIR-SERC Skill Development Program 2024-2025



AI Assisted Techniques for Health Monitoring & Assessment of Special Structures (AI-SHM '25)

27 & 28 February 2025



Organised by :

CSIR-Structural Engineering Research Centre
(An ISO 9001-2015 Certified Organization)
CSIR Campus, CSIR Road, Taramani
Chennai -600 113, India

Scan the QR Code for
Course Promo Video



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. Special & Multifunctional Structures and Structural Health Monitoring Laboratories of CSIR-SERC are working in the areas of AI/ML focusing on the structural health monitoring and assessment of different types of critical structures

About the Course

This course is designed to provide a comprehensive introduction to the fundamental concepts of artificial intelligence (AI) and machine learning (ML), with a primary focus on their applications in health monitoring and assessment of special structures. Participants will gain an in-depth understanding of how AI and ML techniques can be leveraged to enhance the reliability, safety, and efficiency of infrastructure systems. The course offers a unique opportunity for engineering professionals to explore the latest advancements in the integration of AI with structural health monitoring, particularly in the context of complex and specialized structures. Emphasis will be placed on experimental and computational approaches to assess the health and performance of these structures. Topics covered during the course will include:

- ◆ Introduction to health monitoring & special structures
- ◆ Sensors & data acquisition for health monitoring
- ◆ Fundamentals of AI and Machine Learning for SHM
- ◆ AI-Driven Analysis and Diagnostics Techniques
- ◆ Predictive Analysis and Decision Support Systems
- ◆ Case Studies & Real-World Applications
- ◆ Advanced AI Techniques for SHM
- ◆ AI Tools/Software for SHM

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 Special & Multifunctional Structures 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
27 & 28 February 2025; Time: 09.30 a.m. to 5.00 p.m.

Registration & Fee

The registration fee for the course is Rs. 2,000/- (inclusive of GST) per participant for Indian delegates and US \$300/- 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, please contact:

Dr. Srinivasa B. Ramisetty /
Dr. A. Thirumalaiselvi
Coordinators, AI-SHM '25
CSIR-Structural Engineering
Research Centre [CSIR-SERC]
CSIR Campus, CSIR Road
Taramani, Chennai - 600 113, India
Tel.: +91 44 22549113/5725
E-mail: ramisetty@serc.res.in/
selvi@serc.res.in
Mobile Nos.: 8185920120 /
7708910636
Website: <https://www.serc.res.in>



Synthesis and In vitro Toxicity Analysis of Gold Nanoparticles using Eco-Friendly Cappings

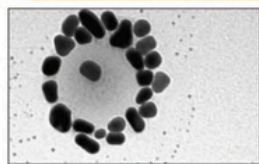
Learnings-

- ▲ Skills in the wet chemical approach of synthesizing nanoparticles
- ▲ Hands-on training on synthesizing gold nanoparticles
- ▲ Protocol for synthesizing gold nanoparticles using eco-friendly cappings
- ▲ Introduction to mammalian cell culture and in vitro assays for toxicity evaluation
- ▲ Evaluation of toxicity of gold nanospheres via MTT/Alamar Blue assays

Seats - 15

Benefits of Workshop:

- ✓ The participants will gain an understanding and hands-on training in synthesizing metal gold nanoparticles via the solution phase
- ✓ Understand the cytotoxicity of metal nanoparticles when exposed to cancer cells
- ✓ This will allow them to look forward into the field of nanomaterial-cell interactions that can bring new avenues for translational technologies



Venue
CSIR- IITR
M. G. Marg, Lucknow

- Eligibility:- M.Sc. / M. Tech/ Ph. D in Life sciences or chemical sciences
- Course Fee:- For academia- Rs.3000/- For industry- Rs.5000/-
- Last date of registration:- 05.02.2025
- Time :- 9:00 AM-5:30 PM
- Venue:- CSIR-IITR, M. G. Marg, Lucknow

COURSE COORDINATORS

Dr. R. Raja Gopal
Dr. Pradeep K. Sharma

STUDENT COORDINATORS

Monika Yadav - 7905199463
Sadiya Zafar - 9838608758

Dr. Ravi Ram Kristipati (Nodal Scientist)- 9307449236



scan / click here to register
<https://iitr.res.in/EnSDP.aspx>

click here to see Payment <https://www.onlinebilibilibicollectcollecthome.htm>



*Course fee is only for imparting training. Additionally, wherever applicable, candidates have to make their own arrangements (related to lodging/boarding, travel, local transportation, etc.) and bear those expenses on their own. The fee once paid is not refunded, unless the course is cancelled.
*Do not Book your tickets until you get a confirmation mail from our end

CERTIFICATES WILL BE PROVIDED TO ALL PARTICIPANTS

CSIR-Indian Institute of Toxicology Research, (CSIR-IITR) Vishvgyan Bhawan, 31 Mahatma Gandhi Marg, Lucknow-226001



CSIR- INDIAN INSTITUTE OF INTEGRATIVE MEDICINE, JAMMU

SKILL DEVELOPMENT TRAINING PROGRAMME

HANDS-ON TRAINING ON SYNTHESIS OF KEY INTERMEDIATES AND ACTIVE PHARMACEUTICAL INGREDIENTS (APIs)

03 - 05 FEBRUARY 2025

CSIR-IIIM, JAMMU

Who Can Participate ?

Ph.D, PG & UG Students who have Completed / Pursuing Degrees in Chemical Sciences & Chemical Engineering / Biological and Pharmaceutical Sciences . Working Professionals having same Background are also Eligible.

Instructions

- Registration Kit and Food for all participants shall be provided by Host Institute.
- Candidates should apply through Google Form available on website www.iiim.res.in till 30th Jan 2025 (4.00 PM)
- A Registration Fee of Rs 1180/- (Rs 1000 + 18% GST) must be paid in Institute's account and the receipt needs to be uploaded in the online Registration/Google Form.
- Maximum of 15 Seats are available on First Cum First SERVE.

QR LINK





REGISTRATION LINK

<https://forms.gle/DJmeCeaZDhXjawaGA>

skilliiim2025@gmail.com

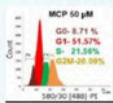
www.iiim.res.in

WORKSHOP ON FLOWCYTOMETRY

Program Coverage:

- Principles & Basics of Flowcytometry
- Spectral Overlap & Compensation
- Flow cytometry -based assays in cytotoxicity: ROS, cell cycle
- Flow cytometric evaluation of Apoptosis, Mitochondrial membrane potential
- Flow micronucleus (MN) Assays
- Basic data analysis, interpretation and presentation of the data
- Basics of sorting principles




Course Fee:-
For academia-Rs.3000/-
For industry-Rs.5000/-

Course Coordinators
Dr. Alok K. Pandey
Dr. Prabhanshu Tripathi
Dr. Puneet Khare

Eligibility
M.Sc/Ph.D scholars/Technical Faculty/Faculty

10 - 12 February, 2025
9:30 AM ONWARDS

Share 

Venue
CSIR- IITR
M.G. Marg Campus

Certificates will be provided to all participants

For queries, contact:
Monika Yadav (Project Associate-1)- 7905199463
Sadiya Zafar (Project Associate-1)- 9838608758
Dr. Ravi Ram Kristipati (Nodal Scientist)- 9307449236
sdp1.iitr@iitr.res.in, sdp1iitr@gmail.com

Registration link-
<http://csiriitrprograms.in/sdp/applysdp.html>

COURSE FEE IS ONLY FOR IMPARTING TRAINING. ADDITIONALLY, WHEREVER APPLICABLE, CANDIDATES HAVE TO MAKE THEIR OWN ARRANGEMENTS (RELATED TO LODGING/BOARDING, TRAVEL, LOCAL TRANSPORTATION, ETC.) AND BEAR THOSE EXPENSES ON THEIR OWN. THE FEE ONCE PAID IS NOT REFUNDED, UNLESS THE COURSE IS CANCELLED.
DO NOT BOOK YOUR TICKETS UNTIL WE SEND YOU A CONFIRMATION MAIL FROM OUR SIDE

CSIR-INDIAN INSTITUTE OF TOXICOLOGY RESEARCH, (CSIR-IITR) VISHVIGYAN BHAWAN, 31 MAHATMA GANDHI MARG, LUCKNOW-226001




CSIR-Indian Institute of Integrative Medicine, Jammu

Hands on Training on Upstream & Downstream Processing of Industrially Important Products

10th Feb - 14th Feb, 2025
CSIR -IIIM, Jammu

TRAINING HIGHLIGHTS

- Isolation and Preservation of Microbes
- Production of secondary metabolite in fermenters
- Recombinant DNA technology
- Upscaling of fermentation process
- Downstream processing
- Enzymes from extremophiles
- Technology Development

Who Can Apply?

Ph.D, PG and UG students Pursuing degree in:

- Life Sciences (Any Branch)
- Biochemical Engineering
- Pharmaceutical Sciences
- Working professionals having same background in any of the above fields are also eligible

GUIDELINES

- Registration Kit and Food for all participants shall be provided by Host Institute.
- Candidates should apply through Google forms available on website www.iiim.res.in till 7th February 2025 (4:00 PM).
- A registration fee of Rs 1770/- (Rs 1500 + 18% GST) must be paid in Institute's account and the receipt needs to be uploaded in the online registration/Google form.
- Maximum 15 seats are available on First Cum First serve

<https://forms.gle/u5KD9gaWhECKBS8SA>

Registration Link Here 

Scan To Register

skilliiim2025@gmail.com www.iiim.res.in




सी एस आई आर- भारतीय पेट्रोलियम संस्थान

CSIR- Indian Institute of Petroleum

Skill Development Training on

‘Analysis using Chromatography and Mass-spectrometry’

February 03-14, 2025

under
CSIR-IIP Integrated Skill Initiative

For details visit: www.iip.res.in/skill-development, Qualification: MSc Chem./Biotech/M Pharm

For queries : cdsharma@iip.res.in, M-9412028789 Landline:01352525 950




CSIR-Indian Institute of Integrative Medicine, Jammu

Skill Development Training Program

Hands on Training Program on Plant Tissue Culture Techniques



Who can Apply?

Ph.D, PG, and UG students Pursuing Degree in:

- Biological Sciences
- Agricultural Sciences
- Working Professional with a Same background in any above of the fields are also eligible.

ABOUT OUR TRAINING PROGRAM

- Registration Kit and Food for all participants shall be provided by Host Institute.
- Candidates should apply through Google forms available on website www.iiim.res.in till 15th February 2025 (4:00 PM).
- A registration fee of Rs 1180/- (Rs 1000 + 18% GST) must be paid in Institute's account and the receipt needs to be uploaded in the online registration/Google form.
- Maximum 15 seats are available on First Come First serve.

18th Feb - 20th Feb, 2025

Scan To Register 

CONTACT US

skilliiim2025@gmail.com

CSIR-Indian Institute of Integrative Medicine, Canal Road, Jammu, Jammu & Kashmir (U.T.) - 180001

www.iiim.res.in

NEWS CLIPPINGS

न्यूज़ क्लिपिंग

Building the AYUSH Workforce: Skilling, Innovation, and Entrepreneurship

Dali Agrahari

India's traditional systems of medicine - Ayurveda, Yoga, Unani, Siddha, and Homeopathy (AYUSH) - have long been revered for their holistic approach to health and wellness. Rooted in ancient texts and practices, these systems emphasise balance between the mind, body, and spirit, offering preventive and curative healthcare solutions. As the world increasingly turns towards natural and integrative healthcare models, India is emerging as a global leader by revitalising and modernising the AYUSH ecosystem.

The Ministry of AYUSH has spearheaded numerous initiatives aimed at enhancing education, skill development, innovation, and entrepreneurship in the sector. These measures not only safeguard India's ancient medical traditions but also create a robust framework for economic growth, job creation, and healthcare delivery.

Building a Skilled AYUSH Workforce

A thriving AYUSH ecosystem necessitates a well-trained, highly skilled workforce. The Healthcare Sector Skill Council (HSSC), under the Ministry of Skill Development and Entrepreneurship, has been ensuring the development of AYUSH professionals through targeted skilling, reskilling, and upskilling initiatives.

The Role of HSSC and AYUSH Sub-Council

In collaboration with the Ministry of AYUSH, HSSC has formed an AYUSH sub-council to standardise training, certification, and assessments across the sector. This sub-council affiliates training centers nationwide, ensuring alignment with the National Skills Qualifications Framework (NSQF).

Key Certifications and Qualifications

To date, 19 AYUSH qualifications and micro-credentials have been registered under NSQF, allowing individuals to pursue specialised careers such as:

1. **Panchakarma Technician** - Specialising in detoxification therapies rooted in Ayurveda.
2. **Yoga Wellness Trainer** - Facilitating yoga for physical and mental well-being.
3. **Ayurveda Dietician** - Advising on nutrition through Ayurvedic principles.
4. **Garbhini Rakshak (Maternity Care Assistant)** - Supporting maternal health with Ayurvedic methods.
5. **Ayurvedic Masseuse** - Delivering therapeutic massages using Ayurvedic oils and techniques.
6. **Basics of Millets Nutrition (Shri Anna)** - Promoting millet-based diets for improved health.
7. **Kshara Karma Technician** - Specialising in Ayurvedic para-surgical procedures.
8. **Panchakarma Assistant** - Assisting in Panchakarma detoxification procedures.
9. **Yoga Therapy Assistant** - Supporting yoga-based therapeutic practices.
10. **Prakriti Evaluator** - Assessing body constitution to personalise treatments.
11. **Naturopathy Assistant** - Aiding naturopathy treatments and practices.
12. **Ayurvedic Beauty Assistant** - Focusing on Ayurvedic skincare and beauty treatments.
13. **Cupping Therapy Assistant** - Assisting in traditional cupping therapy procedures.
14. **Cupping Therapist** - Administering therapeutic cupping for pain relief and detox.
15. **Assistant Yoga Instructor** - Supporting lead yoga instructors in classes and workshops.
16. **Ayurveda Diet and Nutrition Assistant** - Guiding patients on Ayurvedic dietary practices.
17. **Introduction to Music Therapy** - Exploring the therapeutic benefits of music in healing.
18. **Basic Principles of Sujok Therapy** - Introducing principles of Sujok, a Korean hand and foot therapy.
19. **Geriatric Health Assistant** - Specialising in Ayurvedic care for elderly patients.



Nurturing the AYUSH Workforce and Talent through Skill Development and Promotion of Innovation and Entrepreneurship

Impact and Outreach: Since 2021, more than 30,000 individuals have been certified across these roles, contributing to a stronger, more capable AYUSH healthcare workforce. This structured approach ensures the highest standards of competence, meeting both domestic and international healthcare demands.

Nurturing Research and Innovation

Research and innovation are essential to elevating AYUSH to new heights globally. The Ministry of AYUSH has introduced groundbreaking programmes to foster scientific inquiry and innovation within traditional medicine systems.

AYUSH PhD Fellowship Programme

To promote higher studies and research in AYUSH disciplines, the government launched the AYUSH PhD Fellowship Programme in 2016 under the Ministry of AYUSH. This programme is implemented through the Central Council for Research in Ayurvedic Sciences (CCRAS), which acts as the nodal council for all research councils. The objective is to encourage quality research in AYUSH systems, provide better research opportunities for meritorious AYUSH scholars, and develop skilled human resources in the sector. Candidates selected through the AYUSH National Eligibility Test (NET) receive a Senior Research Fellowship (SRF) with a monthly stipend of Rs. 35,000 along with House Rent Allowance (HRA). In addition, each fellow receives an annual contingency grant of Rs. 20,000 and a one-time research contingency grant of Rs. 1 lakh. This fellowship is also available to postgraduate NET-qualified candidates from non-AYUSH (non-medical or allied sciences) backgrounds who are interested in conducting research in AYUSH-related fields. The tenure of SRF for AYUSH scholars is three years, whereas non-AYUSH scholars receive a Junior Research Fellowship (JRF) for two years, followed by SRF for three years.

A total of 53 fellowships are awarded under this programme, with 32 reserved for AYUSH scholars, 16 for non-AYUSH scholars, and 5 for selected universities. By 2019, a total of 27 scholars had been awarded the AYUSH PhD Fellowship, including 21 from AYUSH and 6 from non-AYUSH backgrounds. However, new admissions to the programme have been temporarily suspended since 2019 for revisions to the fellowship. Nevertheless,

the fellowship continues to be provided to students already enrolled under the programme.

CCRAS Post-Doctoral Fellowship (PDF)

In 2021, the CCRAS introduced the Post-Doctoral Fellowship (PDF) scheme to nurture PhD and MD holders by providing:

- **Monthly Fellowship:** Rs. 60,000 + HRA
- **Annual Contingency Grant:** Rs. 3 Lakh.

As of December 2024, 30 fellowships have been awarded, facilitating cutting-edge AYUSH research.

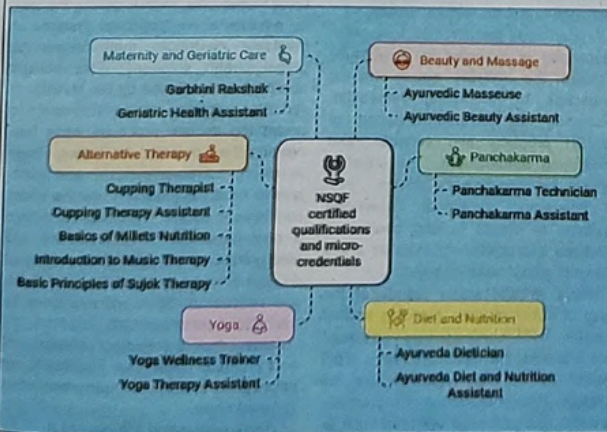
SPARK Programme for Undergraduate Research

The Studentship Programme for Ayurveda Research Ken (SPARK), launched by the Central Council for Research in Ayurvedic Sciences (CCRAS) in 2022, encourages innovative research ideas and promotes evidence-based scientific inquiry, by providing hands-on experience, and enabling students to engage in short-term independent research projects, thereby familiarising them with essential research methodologies.

Open to Bachelor of Ayurvedic Medicine and Surgery (BAMS) students from recognised Ayurveda colleges across India, the programme specifically targets those in their first to fourth years, prior to their final exams. Selected participants receive a fellowship of Rs. 50,000, disbursed as Rs. 25,000 per month over two months, contingent upon the successful completion and approval of their projects. To apply, students must submit their research proposals online through the dedicated SPARK portal, where expert panels evaluate and select projects based on merit.

During the 2023-24 academic year, over 200 students participated in SPARK, with plans underway to expand the intake to 300 students in the coming year. This growth highlights the programme's success and increasing interest within the Ayurvedic student community. The initiative also emphasises faculty collaboration, ensuring that each student works under the supervision of a permanent faculty member from their institution. To preserve originality, only one student is permitted to research a

Continued on page 6



Skill development training on herbal plants extraction begins

NL CORRESPONDENT

Jammu Tawi: A three-day skill development training program focused on "cGMP Pilot Plant for Extraction of Traditional (ISM) Herbal Plants" commenced today at the CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM) in Jammu. Around 30 participants from various fields such as Chemical Sciences, Pharmaceutical Sciences, Life Sciences, Medicine, and AYUSH have enrolled for the workshop. The program was inaugurated by Dr. Zabeer Ahmed, Director of CSIR-IIIM Jammu, who highlighted the importance of integrating traditional medicinal knowledge with modern scientific methods and regulatory frameworks. Dr. Ahmed emphasized that the training aims to advance the herbal medicine industry while preserving the heritage of the Indian System of Medicine (ISM).

"Extraction is the cornerstone of any herbal formulation, and optimal extraction requires a deep understanding of plant materials, meth-



ods of extraction, quality control, and factors influencing the stability of bioactive compounds," Dr. Ahmed explained. He also stressed that the extraction, formulation,

and packaging of traditional herbal products are critical to ensuring their safety, efficacy, and quality. The training program, which follows the National Education

Policy (NEP) guidelines, seeks to equip participants with essential skills in the extraction, formulation, and packaging of herbal medicinal formulations. Over the

next three days, experts and distinguished speakers will lead sessions on advanced extraction technologies and practical experiments, including extraction, distillation, and evaporation.

Day 1 saw Er. Anil Katara, Principal Scientist, deliver a lecture on the role of Good Manufacturing Practices (GMP) in herbal extraction processes and their application in Ayurvedic drugs. Participants also engaged in hands-on experimentation on grinding and sifting of plant materials under the guidance of Sumit Roy, Technical Officer and Goutam Dubey, Project Associate-I.

This initiative is part of CSIR-IIIM Jammu's broader efforts under the CSIR Integrated Skill Initiatives program. The event was organized under the supervision of Er. Abdul Rahim, Chief Scientist and Head of RMBD & IST, with Dr. Deepika Singh, Principal Scientist, welcoming the dignitaries and participants. Dr. Nasir Ul Rasheed, Senior Scientist, delivered the formal vote of thanks.

IndiaAI and Microsoft Join Forces to Advance AI Innovation and Skilling

IndiaAI and Microsoft have joined forces to harness artificial intelligence for inclusive development and economic transformation in India. The collaboration aims to skill 5 lakh individuals, including students, educators, developers, government officials, and women entrepreneurs, by 2026. Key initiatives include establishing "AI Catalysts" Centers of Excellence in Tier-2 and Tier-3 cities, setting up AI Productivity Labs in 20 National Skill Training Institutes, and empowering 100,000 AI innovators and developers. The partnership also focusses on responsible AI development, supporting startups, and creating an AI Safety Institute. This initiative seeks to position India as a global AI leader while fostering innovation, inclusivity, and sustainable growth.



GENERAL EVENTS

सामान्य आयोजन

(Please click on the link to view the details)

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> ➤ <u>Karnataka to Set Up ₹2,500 Cr CoE Focused on Skill Development Spurring Innovation</u> ➤ <u>Not-for-Profit Public Limited Company, National Skill Development Corporation (NSDC), Recognized for Excellence with Great Place to Work Certification</u> ➤ <u>3-day Hands-on Training on cGMP commenced at IIM Jammu</u> ➤ <u>Indian talent prove mettle everywhere, here to share India's skill success story: Jayant Chaudhary</u> | <ul style="list-style-type: none"> ➤ <u>Essential skills and strategies for young professionals in a tech-driven corporate landscape</u> ➤ <u>Post Graduate Teaching Department of Law, Nagpur University, organised a one-day skill development workshop</u> ➤ <u>Telangana Bridging Heritage and Innovation on the Path to Sustainable Development</u> ➤ <u>India ranks among the world's best in readiness for future in-demand jobs</u> ➤ <u>India and Meta Collaborate for Skill Development</u> | <ul style="list-style-type: none"> ➤ <u>Policymaking can't promise jobs, skill development is key: Priyank Kharge at ThinkEdu Conclave 2025</u> ➤ <u>Government likely to boost employment-linked incentives, skill development, and infrastructure to tackle inflation: Deloitte</u> ➤ <u>SB champions women entrepreneurship: Launches skill development program for 5,200 women</u> ➤ <u>Govt must introduce incentives for AI research and development, says Gaurav Sahay, Practice Head - Technology & General Corporate, Fox Mandal & Associates</u> |
| <ul style="list-style-type: none"> ➤ <u>Budget Expectations: MSMEs want focus on skill development, better credit access, GST simplification</u> ➤ <u>India Showcases Vision for Skill Development and Innovation at World Economic Forum Annual Meeting 2025</u> ➤ <u>Union Ministers Pledge Full Support to Telangana's Skill Development and Food Processing Initiatives at WEF Davos</u> | <ul style="list-style-type: none"> ➤ <u>India's Path to Economic Growth: Leveraging Skills and Infrastructure</u> ➤ <u>Skill development diploma course launched at Kodagu University</u> ➤ <u>Empowering women: Unlocking opportunities through skill development</u> ➤ <u>Skill development initiatives: Bridging the gap between education and employment</u> | <ul style="list-style-type: none"> ➤ <u>Carrier India signs skills development deal</u> ➤ <u>THSC honors PM Vishwakarma & PMKVY 4.0 achievers at Gurugram</u> ➤ <u>Tips to craft financially savvy skill development plans in India</u> ➤ <u>The Role of the Training of Trainers (ToT) Program in Skill Development</u> |
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- India and Tanzania Partner for Youth Skill Development
 - Telangana and Singapore institute sign deal on skill development cooperation
 - Odisha strengthens ties with ITEES Singapore for tech, skill development
 - India-Korea Partnership Strengthens With Launch Of Strategic Initiative To Foster Skill Development And Innovation
 - World Bank urges coordinated action on skills and employment for India's \$5 trillion economy goal

GLIMPSES

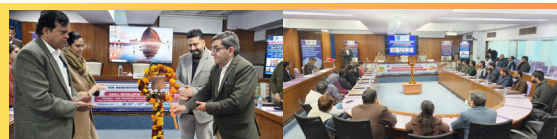
झलकियां



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CSIR-IICT



CSIR-IIIM



CSIR-NCL



CSIR-CECRI



CSIR-SERC



CSIR-NEERI

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>



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हमें फॉलो करें



(CSIR Integrated Skill Initiative)

Detailed Brochure

