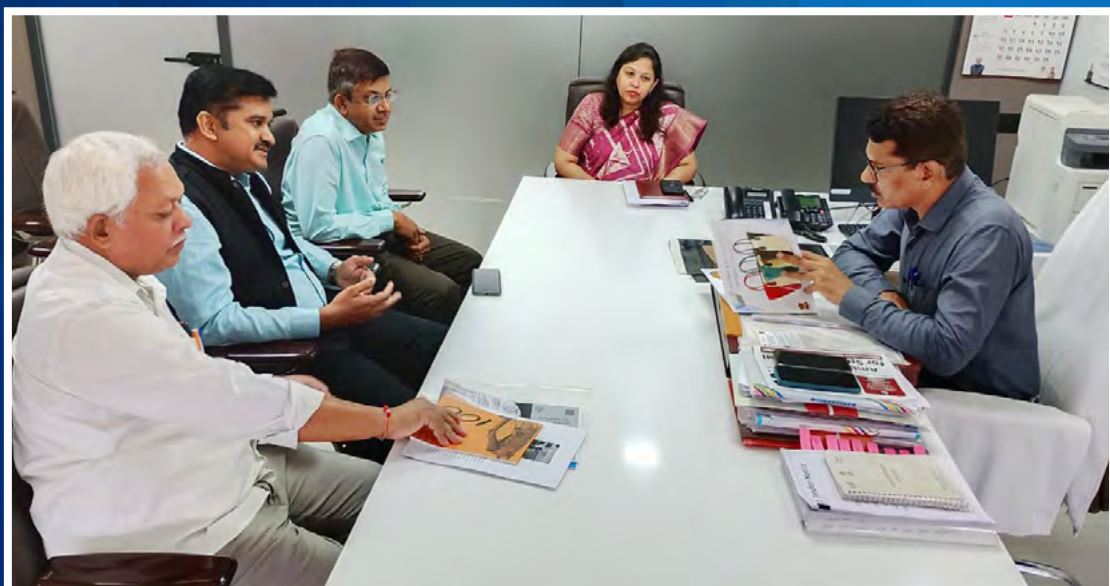


दि लेदर पोस्ट The Leather Post

सीएसआईआर-केन्द्रीय चर्म अनुसंधान संस्थान
CSIR-Central Leather Research Institute



Director, CSIR-CLRI, Visits GRIMCO, Gandhinagar



Technology Transfer to M/S. Kshetragna Agronym Private Ltd

Director's Message

Greetings and Namaskar to the Stakeholders of the leather sector



Dr P Thanikaivelan
Director, CSIR-CLRI

लेदर पोस्ट के प्रिय पाठको,

हमें यह बताते हुए खुशी हो रही है कि 'द लेदर पोस्ट' का जुलाई 2026 अंक आ रहा है, जिसमें सीएसआईआर-सीएलआरआई द्वारा नवाचार, क्षमता निर्माण और प्रभावशाली पहलों के माध्यम से सामाजिक जुड़ाव के लिए किए जा रहे निरंतर प्रयासों पर प्रकाश डाला गया है। एक महत्वपूर्ण उपलब्धि सीएसआईआर-सीएलआरआई और सीएसआईआर-आईआईसीटी, हैदराबाद द्वारा स्पेशलिटी केमिकल्स मिशन प्रोजेक्ट के तहत, चर्म को अंतिम रूप देने वाले अनुप्रयोगों के लिए अरंडी के तेल आधारित एनियोनिक वाटरबोर्न पॉलीयूरेथेन डिस्पर्सियन का संयुक्त विकास और उद्योग को सफल हस्तांतरण था। सीएसआईआर-सीएलआरआई की 82वीं अनुसंधान परिषद की बैठक ने हमारी अनुसंधान एवं विकास प्रगति की समीक्षा करने,

विशेषज्ञ मार्गदर्शन प्राप्त करने और भविष्य की अनुसंधान प्राथमिकताओं को निर्धारित करने के लिए एक महत्वपूर्ण मंच प्रदान किया। इसके अतिरिक्त, निदेशक, सीएसआईआर-सीएलआरआई ने क्षेत्रीय केंद्र, अहमदाबाद और ग्रिमको, गांधीनगर का दौरा किया, जारी शोध, अवसंरचना और सहयोगात्मक पहलों की समीक्षा की जा सके। कुसुनपुर गांव, ओडिशा में हमारा बाल चिकित्सा जागरूकता कार्यक्रम और चर्म वस्तु बनाने का प्रशिक्षण, कर्मचारियों के कल्याण, सामाजिक पहुंच और कौशल विकास के प्रति हमारी प्रतिबद्धता को दर्शाता है। अनुसंधान प्रकाशन पर आईएनवाईएस विशेष लेखक कार्यशाला और सतत प्रौद्योगिकियों के लिए सुप्रामॉलिक्यूलर केमिस्ट्री पर शोध व्याख्यान ने हमारे वैज्ञानिक वातावरण को समृद्ध किया। मेसर्स अवंती लेदर्स के लिए कार्यकारी प्रशिक्षण, जालंधर और कानपुर क्षेत्रीय केंद्रों में गतिविधियाँ, और वार्षिक कौशल प्रशिक्षण कैलेंडर 2026-27 का विमोचन उत्कृष्टता और समावेशी विकास के प्रति हमारी प्रतिबद्धता को और मजबूत करता है।

Greetings!

We are pleased to share the July 2026 issue of *The Leather Post*, which highlights CSIR-CLRI's continued efforts towards innovation, capacity building and societal engagement through impactful initiatives. A significant milestone was the joint development by CSIR-CLRI and CSIR-IICT, Hyderabad, under the Speciality Chemicals Mission Project, of castor oil-based anionic waterborne polyurethane dispersions for leather-finishing applications, and successful transfer to industry. The 82nd Research Council Meeting of CSIR-CLRI provided an important platform to review our R&D progress, receive expert guidance and chart future research priorities. Additionally, the Director, CSIR-CLRI, visited the Regional Centre, Ahmedabad and GRIMCO, Gandhinagar, to review ongoing research, infrastructure, and collaborative initiatives. Our Pediatric Awareness Programme and Leather Goods Making training at Kusunpur Village, Odisha, reflect our commitment to staff welfare, societal outreach and skill development. The INYAS Special Author Workshop on Research Publishing and Research Lecture on Supramolecular Chemistry for Sustainable Technologies enriched our scientific environment. Executive Training for M/s Avanti Leathers, activities at the Jalandhar and Kanpur Regional Centres, and the release of the Annual Skill Training Calendar 2026-27 further strengthened our commitment to excellence and inclusive growth.

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Fungal Pigments: Green Solution for Sustainable Leather Dyeing

Leather dyeing, the process of applying colour to leather, is normally performed during the wet-finishing phase of leather making to enhance colour hue, intensity, penetration, and uniformity. Almost 90% of the dyes used in the leather industry are azo dyes, which have a detrimental effect on human health and the environment. Further, conventional synthetic dyes are associated with environmental and health concerns owing to their potential carcinogenicity, high heavy metal content, and the presence of other restricted hazardous substances. In contrast, nature offers an abundant reservoir of renewable pigments with diverse colour profiles and environmentally benign characteristics, many of which remain largely unexplored for industrial use. Sustainable alternatives like natural colourants can replace synthetic dyes. However, natural colours remain largely unexplored, particularly for dyeing leather.

In this scenario, the search for natural alternatives that are eco-friendly, non-toxic, and sustainable is getting accelerated.

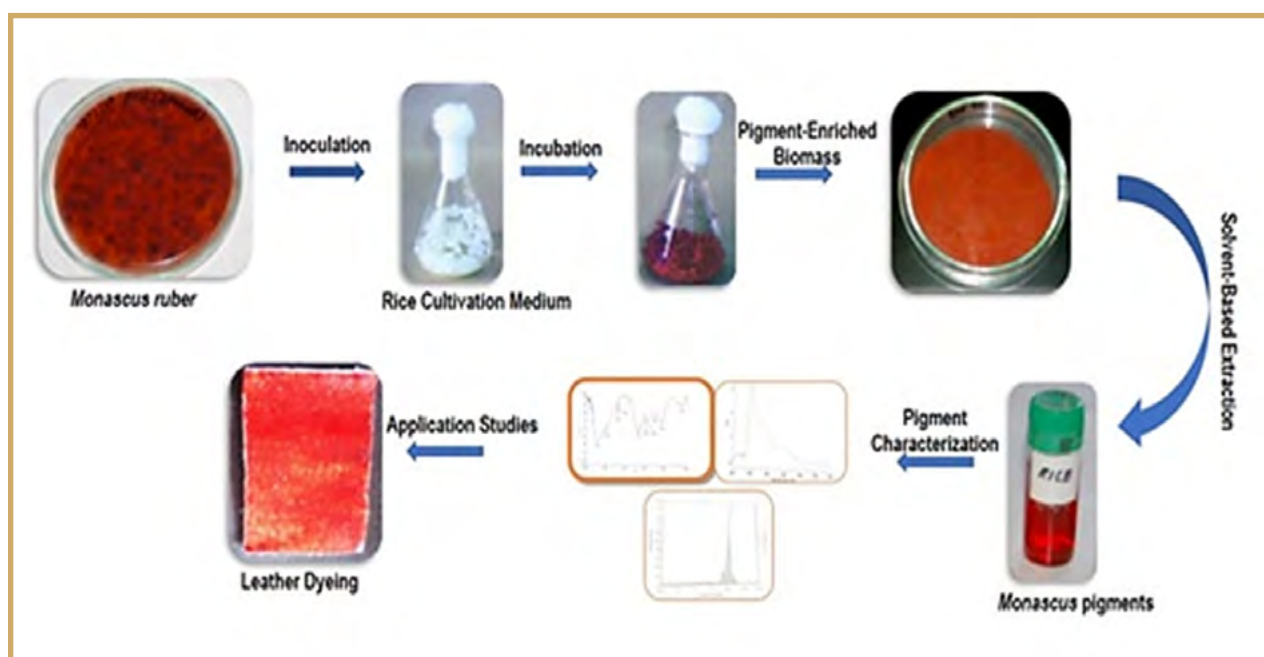
The researchers at CSIR-CLRI prepared a bio-colorant produced by the filamentous ascomycetous fungus, *Monascus ruber*. It is known to produce red, orange, and yellow pigments and are widely used in traditional fermented foods as natural colorants. In this study researchers have evaluated the bio-colourant

produced by the fungus as a sustainable alternative for leather dyeing. The influence of different growth substrates on pigment production was systematically investigated to optimize color yield. The extracted pigment exhibited distinct antimicrobial activity against the tested microorganisms, as evidenced by clear inhibition zones, which may be attributed to the presence of bioactive functional groups identified through FTIR analysis. Furthermore, leather treated with the bio-colorant demonstrated a slight improvement in aesthetic and bulk properties, including enhanced softness and grain smoothness, without adversely affecting its mechanical strength. The absence of any significant deterioration in the physical properties of the leather highlights the suitability of this natural pigment as a sustainable and environmentally responsible alternative for post-tanning leather coloration, supporting its potential for industrial-scale applications.

Tamil Selvi Alagamuthu, Sivaranjani Venugopal and Yasmin Khambhaty

Harnessing Fungal Pigments: A Green Solution for Sustainable Leather Dyeing

Journal of the American Leather Chemists Association VOL. 121, 2026, 11-19



Peptide-based Hydrogel with Antifungal and Antibacterial Activities for 3D Cell Culture

Hydrogels are small "gelator" molecules that self-assemble into fiber networks with gel-like properties. Potential uses of hydrogels include diverse agricultural products, food additives, and drug delivery systems. Hydrogels are of intense recent interest in connection with biomedical applications ranging from 3-D cell cultures and stem cell differentiation to regenerative medicine, controlled drug delivery, and tissue engineering. For the synthesis of hydrogels, peptides are considered good candidates as they self-assemble to form hydrogel-based soft materials using various non-covalent interactions.

Peptide-based hydrogelators are endowed with numerous applications, including antimicrobial and anticancer properties. In the context of global healthcare challenges arising from the misuse, overuse, and casual administration of antibacterial drugs, new drug-resistant bacterial strains are emerging, which are almost untreatable by conventional antibiotics. There is an urgent need to discover new antibacterial and antifungal compounds that can destroy highly virulent, drug-resistant pathogens like *Enterococcus faecium*, *Staphylococcus aureus*, *Klebsiella pneumoniae*, *Acinetobacter baumannii*, *Pseudomonas aeruginosa* and *Enterobacter* species (the ESKAPE pathogens). CSIR-CLRI researchers, in collaboration with other institutes, sought to address antibacterial resistance by developing novel peptides with the ability to kill and eliminate these resistant strains. Novel peptides are highly biocompatible because they are the building blocks of proteins. Moreover, positively charged cationic amphiphilic peptides exhibit strong antibacterial and antifungal properties. This is because of their ability to bind to and interact with the membrane surface, and

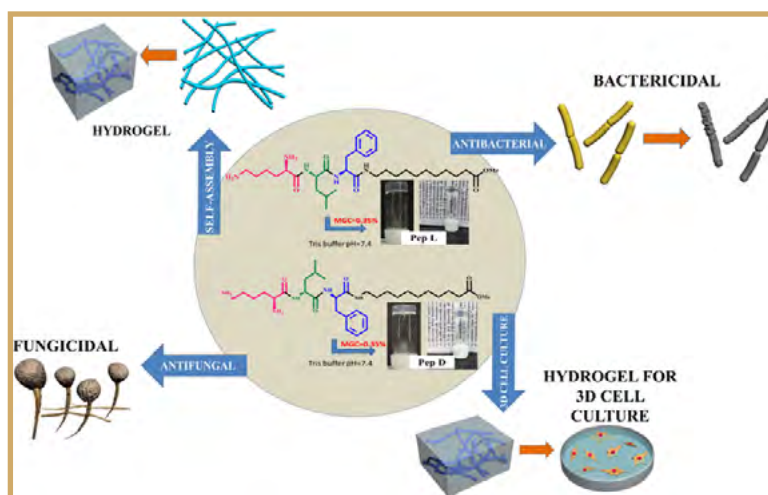
their lipophilic tails intercalate into the membrane.

In this study, researchers have designed and synthesized, two amphiphilic peptides, each with an N-terminal lysine residue. These self-assembling peptide-based molecules form transparent hydrogels in Tris-HCl buffer at physiological pH. Transmission electron microscopic (TEM) images of the peptide hydrogels reveal a nanofibrillar network. Rheological studies reveal high storage moduli for these two enantiomeric peptide hydrogels, demonstrating high mechanical strength. These peptide hydrogels exhibit potential antibacterial properties against multidrug-resistant bacterial strains and antifungal activities. The gelators are cytocompatible with NIH 3T3 and HEK 293 cells. The peptide gelator containing D-amino acid residues displayed excellent proteolytic stability against chymotrypsin, pepsin, and proteinase K. The peptide-based hydrogels were successfully used as a suitable platform for 3-dimensional cell culture, pointing to future applications in regenerative medicine. Combined with their antimicrobial properties, they provide insights for the discovery of new peptide-based biomaterials in biomedicine.

Sagnik Banerjee, Sayani Halder, Supratim Bose, Sandipan Chatterjee, Valeria Castelletto, Ian W. Hamley, Deepak Kumar Sinha, Arindam Banerjee

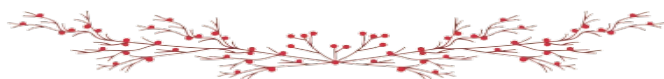
Lysine containing amphiphilic peptide-based non-cytotoxic soft materials with potential antifungal and antibacterial activities for 3D cell culture

Soft Matter (2026) 22 (20): 3662–3673
<https://doi.org/10.1039/d6sm00190d>



July 2026

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Technology Transfer to M/S. Kshetragna Agronym Private Ltd

CSIR-CLRI and CSIR-Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad, under the Speciality Chemicals Mission Project, jointly developed a technology on “*Development of castor oil-based anionic waterborne polyurethane dispersions for leather finishing applications*”. Dr P. Thanikaivelan, Director, CSIR-CLRI, handed over the technology document on 22 July 2026 to the client, M/S. Kshetragna Agronym Private Ltd.



DIRECTOR, CSIR-CLRI MEETS THE STUDENTS OF DIPLOMA IN LEATHER PROCESSING

Dr P. Thanikaivelan, Director, CSIR-CLRI, interacted with the newly admitted students of the Diploma in Leather Processing program (2026–2027 batch) on 16 July 2026. The Director welcomed the students and encouraged them to make the most of the academic and research opportunities available at CSIR-CLRI. The Diploma programme commenced on 1 July 2026, marking the beginning of a new academic session.

These are autonomous vocational programmes of

CSIR-CLRI that conform to the norms and standards of the National Council for Vocational Education and Training (NCVET) and its National Skill Qualifications Framework (NSQF) at Level 5. Dr Thanikaivelan also distributed learning kits comprising timeless workers' manuals, safety manuals, monographs of CSIR-CLRI and lab overcoats. Scientists and technical staff who mentor the students have also been present in the meeting



CATERS Column

This is a monthly informative feature in The Leather Post, designed to keep stakeholders in the leather and footwear industry up to date on critical quality standards. This feature will highlight upcoming regulations, updates on restricted substances, and region-specific compliance requirements. Stay ahead, be prepared, and be compliant to ensure your business meets evolving industry standards.

Ecodesign for Sustainable Products Regulation

On February 9, 2026, the European Commission adopted new measures under the Ecodesign for Sustainable Products Regulation (ESPR) aimed at preventing the destruction of unsold footwear, apparel, accessories, and other items. In Europe, 4-9% of unsold textiles are currently destroyed, contributing to 5.6 million tons of CO₂ emissions. The ban on destruction will apply to large companies starting on July 19, 2026, and to medium-sized companies from July 2030.

The ESPR came into effect in July 2024, replacing the 2009 Eco-Design Directive, which primarily focused on energy-related products. The new ESPR encompasses all physical products, including textiles, footwear, steel, furniture, chemicals, and more. A mandatory digital product passport (DPP) has been introduced to enhance supply chain transparency. Indian exporters must implement a DPP for every footwear model entering the European Union. Each footwear item will need to have a QR code that provides information on material origin, tanning chemicals, and the supply chain.

The footwear industry must transition from merely recycling excess stock or destroying unsold products to practices such as reuse, refurbishment, and remanufacturing. Additionally, the regulation requires a shift toward incorporating verified recycled content and avoiding substances of concern.

The Traditional Cobbler Will Be Needed

While a comprehensive list of product aspects to be reported in the DPP (Digital Product Passport) for footwear is still forthcoming, it is expected to include criteria such as durability, reliability, reusability, upgradability, repairability, and possibilities for maintenance and refurbishment during use. Looking back a few decades, we can see that Indian consumers prioritized repairability and maintenance options for their footwear.

The broader implications of this shift may include a ban on the destruction of unsold products, the introduction of the DPP, restrictions on substances that hinder circularity, and mandatory green procurement practices.

How Can We Help?

Please email your questions or doubts regarding various regulations, test methods, test report interpretations, etc. As a testing personal, if you wish to upgrade your testing skills, contact us for training.

For more information : caters.clri@csir.res.in

Paediatric Awareness Program

CSIR-CLRI successfully organised a Paediatric Awareness Program for its employees on 3 July 2026 at the CLRI Campus. Dr Padmapriya Ekambaram, Senior Consultant – Newborn Care & General Paediatrics, Rainbow Children's Hospital, Chennai, delivered a detailed and interactive presentation. The Program focused on essential aspects of child health, newborn care, preventive healthcare, early

identification of childhood illnesses, vaccination, nutrition, and parenting practices. The interactive session enabled employees to gain valuable insights into how to ensure the healthy growth and well-being of children while addressing common concerns faced by parents. CSIR-CLRI remains committed to promoting the health and well-being of its employees through such informative awareness initiatives.



Training Program on “*Leather Goods Making*” in Kusunpur Village, Odisha

CSIR-CLRI, under the aegis of CSIR-SMART Village initiative and with the active support of the local community, successfully launched a two-week training programme on “*Leather Goods Making*” on 13 July 2026 in Kusunpur Village, Odisha.

The programme brought together 28 women from Kusunpur and nearby villages, creating opportunities for skill development and economic empowerment.

During the two-week programme, participants will receive intensive hands-on training in leather goods manufacturing. The initiative aims to equip rural women with market-relevant skills, enabling them to become self-reliant, explore entrepreneurial opportunities, and enhance their income-generating potential, thereby contributing to sustainable livelihoods and community development.



IN YAS Special Author Workshop on Research Publishing

The Indian National Young Academy of Science (IN YAS), in collaboration with CSIR–CLRI, organised a special Author Workshop titled “*Mastering Research Publishing: Insights from the Editor’s Desk*” on 16 July 2026 at the CARE Seminar Hall, CSIR-CLRI, Chennai. The workshop featured Dr Rohini Kitture, Deputy Editor at Wiley (Small and Physical Sciences Portfolio), as the keynote speaker. The session brought together scientists, faculty members, postdoctoral fellows, research scholars, and students from CSIR-CLRI and other institutions, with additional participants joining virtually through Microsoft Teams.

During the interactive session, Dr .Kitture shared valuable insights into the scientific publishing ecosystem, including strategies for selecting appropriate Wiley journals, understanding the editorial

assessment and peer-review process, avoiding common reasons for desk rejection, and enhancing the visibility and impact of research publications. Drawing upon her editorial experience, she provided practical guidance on manuscript preparation, publication ethics, and effective communication of scientific research.

The workshop concluded with an engaging question-and-answer session, where participants discussed various aspects of academic publishing and received expert advice on improving their publication strategies. The event was highly appreciated by the attendees and served as an excellent platform for strengthening awareness of best practices in scholarly publishing among early-career researchers and established scientists alike.



IN YAS Research Lecture on **Supramolecular Chemistry for Sustainable Technologies**

The 7th IN YAS Research Lecture, jointly organised by the Indian National Young Academy of Sciences (IN YAS) and CSIR–CLRI, was held on 23 July 2026 at the CARE Seminar Hall, CSIR–CLRI. The lecture was delivered by Dr Shilpi Kushwaha, Scientist D, CSIR–Central Salt and Marine Chemicals Research Institute (CSIR–CSMCRI), Bhavnagar, on the topic “*Molecular Precision through Supramolecular Chemistry for Resource, Water, and Energy Security.*”

In her insightful lecture, Dr Kushwaha highlighted how advances in supramolecular chemistry, porous materials, membrane science, and catalytic systems are enabling the design of functional materials with molecular-level precision to address pressing

challenges in resource recovery, water purification, and clean energy generation. She emphasised the role of molecular engineering in developing sustainable technologies for critical mineral recovery, selective molecular separations, wastewater remediation, and renewable energy conversion, thereby contributing to resilient and resource-efficient industrial ecosystems. The lecture attracted enthusiastic participation from scientists, research scholars, and students, promoting engaging discussions on the transformative role of chemistry in achieving sustainable development goals. The session served as an excellent platform for knowledge exchange and inspired young researchers to pursue innovative research at the interface of chemistry, materials science, and engineering.



82nd Research Council (RC) Meeting of CSIR-CLRI

The 82nd Research Council (RC) Meeting of CSIR-CLRI, held on 21 July 2026 at CSIR-CLRI, was chaired by Shri R K Jalan and attended by members of the RC. Dr P Thanikaivelan, Director, CSIR-CLRI, welcomed the members and presented the Institute's performance, ongoing projects and strategic initiatives. During the introductory remarks, the RC members emphasized aligning CSIR-CLRI research with CSIR's vision by expanding beyond

traditional leather processing and applications. They recommended strengthening research in non-leather footwear, footwear comfort, AI- and sensor-embedded products, semi-continuous processing, zero-waste footwear making, MSME-driven innovation and product leadership, and application-oriented research to enhance industrial relevance and societal impact. The Research Group leaders presented the work carried out under the respective theme projects.



Executive Training for M/s. Avanti Leathers

Under the aegis of CSIR-Integrated Skill Initiative, two executives of M/s. Avanti Leathers were deputed for training at CSIR-CLRI in the areas of finishing techniques, colour matching and assortment/grading of leathers. Apart from expert knowledge-sharing sessions within CSIR-CLRI, significant outbound learning sessions were planned to expose the trainees to the trends of the trade. In this endeavour, the complementary roles were played by its technology allies M/s. Smit & Zoon, M/s. P A Footwear's Tannery and M/s Potissimus Arrow Shoes, all in Ranipet.

Dr P Thanikaivelan, Director, CSIR-CLRI, graced the valedictory Program and interacted with the trainees about their 4-week learning schedule and its usefulness in their workplace on July 31, 2026. During the event, executive trainees from M/s. Avanti Leathers, scientists, and technical staff who were part of the programme were present. The unwavering commitment of CSIR-CLRI to this niche training segment keeps attracting stakeholders of established leather firms and budding entrepreneurs since decades.



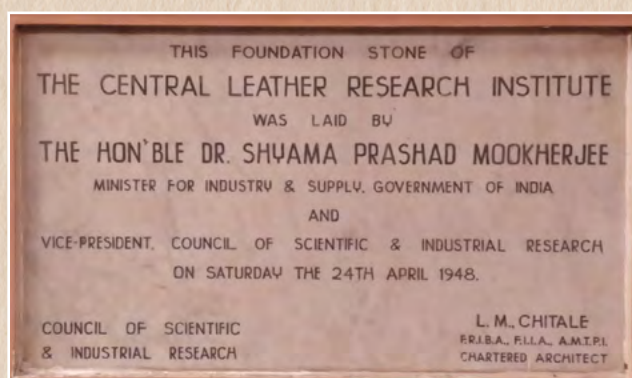
125th Birth Anniversary of Dr Shyama Prashad Mookherjee

Respected Shri Piyush Goyal Ji, Hon'ble Minister of Commerce & Industry, Government of India, today praised the great sacrifice of our Hon'ble Dr Shyama Prashad Mookherjee, the then Minister for Industry & Supply, Government of India, during the export excellence award for top exporters of the leather industry, organised by Council for Leather Exports (CLE), India.

It is a matter of immense pride, deep gratitude, and honour for our entire leather and footwear industry to remember that the foundation stone of the Central

Leather Research Institute (CLRI), Chennai, was laid on 24 April 1948 by the Hon'ble Dr Shyama Prashad Mookherjee, the then Minister for Industry & Supply, Government of India, and Vice-President of the Council of Scientific & Industrial Research.

His vision and contribution laid the foundation for an institution that has served and strengthened our industry and our nation for nearly eight decades. We remember this historic legacy with profound respect and gratitude.



Awards & Recognition

Best Oral Presentation Award

Ms Priti Singh, Research Scholar at CSIR-CLRI, received the Best Oral Presentation Award at the International Conference on Energy Conversion and Storage (IECS 2026), hosted by IIT Madras on 17 July, 2026. Ms. Priti Singh is working on the research areas Computational electrochemistry Na/Li ion batteries under the guidance of research supervisor, Dr. Mudit Dixit (Scientist D, Advanced Materials Lab).



Skill Development Training Program in Leather Goods Manufacturing

CSIR-CLRI Regional Centre, Jalandhar successfully conducted a four-week “*Skill Development Training Program in Leather Goods Manufacturing*” for 14 students of the Fashion Design Department, HMV College, Jalandhar, Punjab on 8 July, 2016. The students received both theoretical and practical training in basic drawing, design development, pattern cutting, and leather goods manufacturing. They learned to make a variety of products, from small accessories to higher-value leather goods.



Activities at Regional Centre, Kanpur

Summer Training Program

The CLRI Regional Centre, Kanpur, conducted a one-month summer training Program for five girl students of Diploma in Leather Technology – Tanning from the Government. Leather Institute, Kanpur, Uttar Pradesh. The Program concluded on 28 July 2026.



CSIR-CLRI Annual Skill Training Calendar 2026-27

The CSIR-CLRI Annual Skill Training Calendar for Financial Year 2026–27 was released on 20 July 2026.

CSIR-CLRI Annual Training Calendar 2026–27							
(Month-wise schedule from May 2026 to March 2027)							
S.No.	Course Title	Dates	Program	Duration	Course Fee-offline	Course Fee-online	
Jul-26							
1	ToT: Leather Posttanning and Finishing for the Industry Personnel	01.07.2026-10.07.2026	Diploma PG Diploma ETP	2 weeks-TSP			
2	Diploma in Footwear Manufacture and Design	01.07.2026-30.06.2027		12 months	40000		
3	Machine Operations – Footwear	01.07.2026-31.07.2026		1 month	25000		
4	Post Graduate Diploma in Footwear Technology	01.07.2026-31.12.2027		18 months	75000		
5	Quality control orders	01.07.2026-31.07.2026		1 month	40000		
6	Physical testing as per quality control orders	01.07.2026-15.07.2026		2 weeks	10000		
7	Basics of TEM & SEM and their application in science	06.07.2026-10.07.2026		5 days	5000		
8	ToT: Leather Processing and Product Manufacturing for the Industry Personnel	06.07.2026-17.07.2026		2 weeks-TSP			
9	Basics of Mass Spectroscopy and its Applications in Science and Technology	08.07.2026-12.07.2026		5 days	5000		
10	Basics of Microscopy and spectroscopy	13.07.2026-17.07.2026		5 days	5000		
11	Chemical testing as per quality control orders	15.07.2026-31.07.2026		2 weeks	20000		
12	Costing for footwear	20.07.2026-24.07.2026		5 days	5000		
13	ToT: Leather Processing and Product Manufacturing for the Industry Personnel	27.07.2026-07.08.2026		2 weeks-TSP			
14	Occupational Health and Safety	01.07.2026-31.07.2026		ETP	1 month	25000	
Aug-26							
1	Need for calibration of Internal equipments	03.08.2026	ETP	1 day	1000		
2	Value addition and solid waste management from tannery & CETP	03.08.2026-07.08.2026		5 days	5000		
3	Design for footwear	03.08.2026-07.08.2026		5 days	5000		
4	Total Quality Management for Footwear Production	03.08.2026-14.08.2026		2 weeks	10000		
5	Logistics and Resource Management for Leather and Leather Products	03.08.2026-14.08.2026		2 weeks	10000		
6	Calibration of Internal Equipments	04.08.2026-07.08.2026		4 days	4000		
7	Orientation to Leather Manufacture to design professionals	05.08.2026-06.08.2026		2 days	2000		
8	Basic training on combination products for craft sector, Tamil nadu	17.08.2026-21.08.2026		5 days	5000		
9	Application of statistics using R Programming	20.08.2026		1 days	1000		
10	Orientation to Leather Manufacture to design professionals	26.08.2026-27.08.2026		2 days	2000		
11	Waste Management	01.08.2026-31.08.2026		1 month	25000		
Sep-26							
1	Value addition and solid waste management from tannery & CETP	07.09.2026-11.09.2026	Diploma PG Diploma ETP	5 days	5000		
2	Application in Bioinformatics: Sequence and Structural perspective	09.09.2026		1 day	1000		
3	Industrial Engineering for footwear factory	21.09.2026-25.09.2026		5 days	5000		
4	Basic training on leather goods design and manufacturing, Delhi	17.09.2026-18.09.2026		2 days	2000		
5	Industrial Engineering for footwear factory	21.09.2026-25.09.2026		5 days	5000		
6	Transformation of Industry 4.0 in footwear sector	01.09.2026-11.09.2026		2 weeks	10000		
7	Training programme in GAIT ANALYSIS	01.09.2026-30.10.2026		ETP	1 month	25000	
8	Polymers and compounding techniques	14.09.2026-18.09.2026		5 days	5000		
9	Diploma in Leather Processing	01.09.2026-31.08.2027		12 month	40000		
10	Post Graduate Diploma in Leather Technology	01.09.2026-28.02.2028		18 month	75000		
11	Orientation Programme in Leather and Products Manufacture	01.09.2026-30.09.2026		1 month	25000		
12	Wastewater analysis for industry personnel	07.09.2026-11.09.2026		ETP	5 days	5000	

CSIR-CLRI Annual Training Calendar 2026–27						
(Month-wise schedule from May 2026 to March 2027)						
S.No.	Course Title	Dates	Program	Duration	Course Fee-offline	Course Fee-online
Oct-26						
1	Training on Ethnic textile & combination handbags and accessories, Manipur	12.10.2026-16.10.2026	ETP	5 days	5000	
2	Production planning in footwear manufacturing	05.10.2026-16.10.2026		2 weeks	10000	
3	Safety footwear	05.10.2026-16.10.2026		2 weeks	10000	
4	Sports good	01.10.2026-31.10.2026		1 month	25000	
Nov-26						
1	Design Innovation: Techniques and approaches	25.11.2026-27.11.2026	ETP	3 days	3000	
2	Design for footwear	02.11.2026-06.11.2026		5 days	5000	
3	Organizational Behaviour and HRM for Leather Production	01.11.2026-30.11.2026		1 month	25000	
Dec-26						
1	LEAN Manufacturing in footwear	07.12.2026-11.12.2026		5 days	5000	
2	Statistics for Biomechanics	18.12.2026		1 day	1000	
Jan-27						
1	Leather mark	04.01.2027-05.01.2027		2 days	2000	
2	Different sustainability certification for leather sector	06.01.2027-08.01.2027		3 days	3000	
3	Customer Relationship Management for Leather/LEATHERPRODUCTS Brands	18.01.2027-23.01.2027		2 weeks	10000	
4	Testing of slippers, sandals and hawai chappels	04.01.2027-15.01.2027		2 weeks	10000	
5	Advanced wastewater treatment system	25.01.2027-05.02.2027		2 weeks	10000	
Feb-27						
1	Design for footwear	01.02.2027-05.02.2027	ETP	5 days	5000	
2	Short Term Executive Skill Development Program in Leather/Non Leather Footwear Manufacture	01.02.2027-28.02.2027		1 month	25000	
3	Quality and Visual Inspection of material for footwear and products	08.02.2027-20.02.2027		2 weeks	10000	
Mar-27						
1	Transformation of Industry 4.0 in footwear sector	01.03.2027-12.03.2027		2 weeks	10000	
2	Training programme in Therapeutic footwear	01.03.2027-13.03.2027		2 weeks	10000	

Note: A registration kit, lunch/refreshments and certificates would be provided

For registration and further queries, pls contact

**Nodal/Co-Nodal Officer,
CSIR Integrated Skill Initiatives, CSIR-CLRI**

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CSIR-CLRI at Seafood Expo Bharat 2026

A CSIR-CLRI team participated in Seafood Expo Bharat 2026, held on 4 July, 2026. During the event, the CSIR-CLRI team, consisting of Dr (Smt) Malathy Jawahar, Scientist-G and Dr M Sathish, Scientist-D, had a productive discussion with Shri P. Jawahar, IAS, Chairman, Marine Products Export Development Authority (MPEDA), and his team. The discussion focused on strengthening collaboration between CSIR-CLRI and MPEDA to promote the conversion of fish skin, into high-value leather products, creating new export opportunities, supporting sustainable value addition, and fostering entrepreneurship in the seafood sector.



Invited Talk by Dr. M. Sathish, at Seafood Expo Bharat 2026

Dr. M. Sathish, Scientist, CSIR-CLRI, Regional Centre, Kolkata, delivered an invited talk at Seafood Expo Bharat 2026, organized on 4 July, 2026, by the Marine Products Export Development Authority (MPEDA), Ministry of Commerce & Industry, Govt. of India, in Chennai.

The talk highlighted the potential of converting fish skin, into high-value fish leather/products, creating sustainable business opportunities through circular economy principles. Dr. Sathish also showcased the technology, training, and handholding support provided by CSIR-CLRI to entrepreneurs, start-ups, MSMEs, and industry stakeholders for developing and commercializing premium fish leather products.



DR P. THANIKAIVELAN, DIRECTOR, CSIR-CLRI, VISITS GRIMCO, GANDHINAGAR

Dr P. Thanikaivelan, Director, CSIR-CLRI, accompanied by Dr K. Krishnaraj, Scientist G, visited the Gujarat Rural Industries Marketing Corporation Limited (GRIMCO), Gandhinagar, on 8 July 2026. The CSIR-CLRI team interacted with Dr Anil K. Prajapati, GAS, Managing Director, and Mrs Khyati Nair, Company Secretary. CSIR-CLRI and GRIMCO explored collaborative opportunities and upcoming projects aimed at promoting sustainable technologies and rural industrial development. The delegation also met Mr. Pratik Dadhania of Aamati Green Private Limited, Ahmedabad, a technology licensee of CSIR-CLRI, to

review the progress of vegan leather production based on CSIR-CLRI technology. As part of the visit, the team reviewed the ongoing research activities and upcoming vegan leather facilities at CSIR-CLRI Regional Centre, Ahmedabad. Dr. K. Srinivasan, Scientist F & Scientist-in-Charge, Regional Centre, Ahmedabad, and Mr. S Goldking Chandhran, Technician, CSIR-CLRI also accompanied the Director during the visit. The visit reaffirmed CSIR-CLRI's commitment to fostering industry partnerships, accelerating sustainable material innovations, and translating research into impactful technologies for society.



Shri Niketan Matric Higher Secondary School, Thiruvallur District, visited the CSIR-CLRI

As part of the Jigyasa Program, 195 students and 10 teachers from Shri Niketan Matric Higher Secondary School, Thiruvallur District, Tamil Nadu visited the CSIR-CLRI Lab on 3 July 2026 and interacted with scientists from different disciplines. The students were briefed on the leather-making process and R&D activities in the chemical, biological, and engineering sciences. As part of the laboratory tour, the students visited several research facilities, including the Environmental Science and Engineering Laboratories, Experimental Tannery, and the Biochemistry and Biotechnology Division. Scientists provided glimpse of ongoing research activities and gave a demo of modern analytical instruments. The interactive sessions provided the students with valuable insights into scientific research, laboratory practices, and career opportunities in science and technology, fostering curiosity and encouraging them to pursue scientific learning.



Vidhya Sagar Women's College, Chengalpattu District, Visit CSIR-CLRI

About 39 students pursuing a M.Sc. in Chemistry, along with 2 faculty members from Vidhya Sagar Women's College in Chengalpattu District, visited CSIR-CLRI on 17 July 2026. During their visit, the students attended expert talks on leather applications and manufacturing. A special talk on the role of metals in sustaining life and career opportunities was organised. Following these presentations, participants were guided on visits to key research laboratories. This visit provided attendees with first-hand exposure to CSIR-CLRI's research facilities, scientific activities, and various career opportunities in science and technology.



SEED Academy, Chennai, visit CSIR-CLRI

As part of the JIGYASA Program, about 52 students and 6 teachers from SEED Academy, Chennai, visited the CSIR-CLRI on 22 July 2026 and interacted with scientists from different disciplines. After an introductory session on the leather manufacturing process, the students were introduced to the diverse research and development activities carried out at the institute across the chemical, biological, and engineering sciences. During the laboratory tour, the students visited key research facilities, including the Environmental Science and Engineering Laboratories, the Tannery, and the Biochemistry and Biotechnology Division. Scientists showcased ongoing research projects and demonstrated advanced analytical instruments, providing students with first-hand exposure to modern scientific practices. The interactive sessions offered valuable insights into laboratory operations and career opportunities in science and technology, inspiring curiosity and motivating students to pursue scientific endeavours.



Vel Tech University visit CSIR-CLRI

As part of CSIR-CLRI's commitment to nurturing industry-ready talent under the CSIR Integrated Skill Initiatives, CSIR-CLRI, an Industrial Visit Programme for B.Tech. (Biotechnology & Biomedical Engineering) 120 students of Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology (Vel Tech University) was organised on 24 July 2026.

The programme is designed to bridge the gap between academic learning and industrial practice by providing students with hands-on exposure to leather processing, biomaterials, biotechnology, environmental technologies, and applied research. Through expert lectures, a screening of the CSIR-CLRI research film, and guided laboratory visits, participants will gain practical insights into advanced technologies, sustainable manufacturing practices, and interdisciplinary applications of biotechnology in the leather sector.

By connecting students with CSIR-CLRI's state-of-the-art research facilities and scientific expertise, the programme aims to enhance technical competencies, foster innovation, and strengthen employability, while creating awareness of career opportunities in the leather, biomaterials, and allied industries.

Empowering students through experiential learning, industry exposure, and skill development for the future workforce.



CSIR JIGYASA – Student Scientist Connect @ CSIR-CLRI

Vivekananda Vidyalaya Matriculation Higher Secondary School, Arakkonam, visit CSIR-CLRI

As part of the JIGYASA – Student Scientist Connect Programme, 125 Class XII students and 6 teachers from Vivekananda Vidyalaya Matriculation Higher Secondary School, Arakkonam, visited CSIR-CLRI on 30 July 2026 for an enriching scientific learning experience.

The programme commenced with an introductory session by Dr. A Tamilselvi, Scientist–G with an overview of CSIR and highlighted the diverse opportunities available to students in science, technology, and research. This was followed by a series of engaging technical talks. Dr. P. Thanikaivelan, Director, CSIR-CLRI, in his message highlighted the importance of research and innovation in addressing societal and industrial challenges and emphasized the role of young minds in shaping a sustainable future through science. Dr. Aravindhana, Scientist - F introduced the students to the leather manufacturing process and its significance, Dr. S. Easwaramoorthi, Scientist - F presented the various JIGYASA initiatives and research activities in the chemical sciences. Dr. P. Ganesan, Scientist -

E shared insights into the institute's research in the biological sciences. The students were also fascinated by a live demonstration of the Magnetic Levitation experiment conducted by Dr. Nitin P. Lobo, Scientist - D.

The students then visited several state-of-the-art research facilities across the institute, including the Environmental Science & Engineering Laboratories, Tannery, and the Biochemistry & Biotechnology Division. During the laboratory visits, scientists demonstrated ongoing research and advanced analytical instruments, offering students a first-hand glimpse into multidisciplinary research in the chemical, biological, and engineering sciences.

The interactive sessions provided valuable exposure to modern laboratory practices, scientific research, and career opportunities in science and technology. The visit sparked curiosity, strengthened the scientific temper, and inspired students to explore future careers in research and innovation.



CSIR-Central Leather Research Institute



(CSIR Integrated Skill Initiative Training Programme)

CSIR-CLRI announces the commencement of the following placement oriented courses

Leather Processing

- ◆ Post Graduate Diploma Programme in Leather Technology
- ◆ Diploma in Leather Processing
- ◆ Short Term Executive Skill Development Programme in Leather Processing
- ◆ Integrated Skill Development on Quality Control Methods in Leather Manufacture
- ◆ Computerized colour Matching for Leather manufacturing

Leather and Leather products

- ◆ Post Graduate Diploma Programme in Leather Products Technology
- ◆ Quality and Visual Inspection of Leather and Leather Products
- ◆ Skill Training Programme in Leather and Leather-like materials for Emerging Entrepreneurs
- ◆ Short Term Executive Skill Development Programme in Leather Upholstery Manufacture
- ◆ Course in Fashion Design and Development for Leather Lifestyle Products

Leather Goods and Garments

- ◆ Diploma in Leather Goods Manufacture
- ◆ Short Term Executive Skill Development Programme in Leather Goods Manufacture
- ◆ Training Programme in Leather Goods Design (Manual and CAD)
- ◆ Diploma in Leather Garment Manufacture
- ◆ Short Term Executive Skill Development Programme in Leather Garments manufacture
- ◆ CAD for Garments

Allied Science courses

- ◆ Bioinformatics Associate/Analyst
- ◆ Quality Control Chemist – Microbiology
- ◆ QA Chemist Equipment Validation - Life Sciences
- ◆ NuclearMagneticResonance (NMR) Spectroscopy Analyst
- ◆ Quality Assurance Chemist
- ◆ Leather Biotechnologist
- ◆ Enzyme Technologist
- ◆ Structural Analytical Technologist
- ◆ rDNA Technologist

Leather Allied Sectors

- ◆ Short Term Executive Training Programme on Occupational Health and Safety for Leather and Allied (Product) Industries
- ◆ Short Term Executive Training Programme on Testing and Calibration for Leather Sector
- ◆ Repair, restore and maintenance of leather products
- ◆ Short Term Executive Training Programme on Waste Management for

Footwear

- ◆ Diploma in Footwear Manufacture
- ◆ Short Term Executive Skill Development Programme in Footwear manufacture
- ◆ Training programme in GAIT Analysis
- ◆ CAD for Footwear

Please visit <https://clri.org/training.aspx> for online / offline submission of duly filled in application

For more info:

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Sathya U



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Dr A Rajaram



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