

दि लेदर पोस्ट The Leather Post

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



Director, CSIR-CLRI Visits CLRI Regional Centre Kanpur



CSIR-CLRI FOUNDATION DAY CELEBRATIONS

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 द लेदर पोस्ट के अप्रैल 2026 अंक को साझा करते हुए खुशी हो रही है। सीएसआईआर-केन्द्रीय चर्म अनुसंधान संस्थान ने चर्म विज्ञान और प्रौद्योगिकी में उत्कृष्टता की अपनी विरासत को उजागर करते हुए वैज्ञानिक, शैक्षणिक और आउटरीच गतिविधियों की एक शृंखला के साथ अपना 79वां स्थापना दिवस मनाया। उत्सव के हिस्से के रूप में, उभरते शोधकर्ताओं के लिए एक मंच प्रदान करने के लिए युवा वैज्ञानिक सेमिनार का आयोजन किया गया था, और चेन्नई परिसर के साथ-साथ क्षेत्रीय केंद्रों में ओपन डे कार्यक्रम भी आयोजित किए गए थे।

जालंधर, कानपुर और कोलकाता में संस्थान की अनुसंधान सुविधाओं और तकनीकी नवाचारों का प्रदर्शन किया गया था। इन कार्यक्रमों ने छात्रों, शोधकर्ताओं, उद्योग प्रतिनिधियों और आम जनता को आकर्षित किया। सीएसआईआर स्मार्ट विलेज मिशन के तहत, ग्रामीण आजीविका और कौशल विकास को बढ़ावा देने के लिए चर्म और चर्म उत्पादों के निर्माण पर उद्यमिता कार्यक्रम आयोजित किए गए थे। सीएसआईआर-सीएलआरआई ने भविष्य के रंग और फैशन रुझानों में अंतर्दृष्टि प्रस्तुत करते हुए मॉडयूरोप शरद/शीत 2027/28 रंग सम्मेलन में भी भाग लिया। इस संस्करण से शुरू करते हुए, हम अपने हितधारकों को महत्वपूर्ण गुणवत्ता मानकों के बारे में सूचित रखने के लिए कैटर्स कॉलम पेश कर रहे हैं। इसके अतिरिक्त, निदेशक, सीएसआईआर-सीएलआरआई ने क्षेत्रीय केंद्र, कानपुर का दौरा किया और उद्योग के हितधारकों से भेंट की। उन्होंने चालू शोध, अवसंरचना और सहयोगात्मक पहलों की समीक्षा की और विभिन्न क्लस्टरों में नवाचार को बढ़ावा देने तथा अपने क्षेत्रीय केंद्रों को मजबूत करने के लिए संस्थान की प्रतिबद्धता की पुष्टि की।

Greetings!

We are pleased to share the April 2026 issue of The Leather Post. CSIR-Central Leather Research Institute celebrated its 79th Foundation Day with a series of scientific, academic, and outreach activities highlighting its legacy of excellence in leather science and technology. As part of the celebrations, Young Scientist Seminar was organized to provide a platform for emerging researchers, and Open Day programs were also held at the Chennai Campus, as well as at Regional Centres in Jalandhar, Kanpur, and Kolkata showcasing the institute's research facilities and technological innovations. The events attracted students, researchers, industry representatives, and members of the public. Under the CSIR SMART Village Mission, entrepreneurship programs on leather and leather products manufacturing were conducted to promote rural livelihoods and skill development. CSIR-CLRI also participated in the ModEurop Autumn/Winter 2027/28 Colour Conference, presenting insights into future colour and fashion trends. Beginning with this edition, we are introducing the CATERS Column to keep our stakeholders informed about critical quality standards. Additionally, the Director, CSIR-CLRI visited the Regional Centre, Kanpur and met industry stakeholders, to review ongoing research, infrastructure, and collaborative initiatives, reaffirming the institute's commitment to strengthen its Regional Centres and advancing innovation in various clusters.

Happy Reading!



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“More Less, Less More” – A Silica-Mimosa synergistic call for minimalism!

“Less from More” has been the premise of leather processing ever since concentrated industrial production of leather started. All resources in abundance regardless of their rarity or parity viz., water, chemicals, machinery and human capital has been the pre-requisite in this unsustainable encounter. To process 1 tonne (1,000 kg) of raw animal hides into finished leather, 50 m³ of water and 500 kg of (aqueous yes, but ending up as wastewaters) chemicals are required, yielding about a meagre 200 kg of finished leather. The remaining 800kg is distributed across solid waste, wastewaters, and moisture loss. From a value engineering perspective and considering the environmental costs, both the conventional process and the very output i.e., leather are not of great value! At this unenviable juncture, scientists at CSIR-CLRI address these challenges by developing a novel, low-water, chromium-free tanning approach. They synthesized a novel agent “*CimSil*” by neutralizing sodium metasilicate with hydrochloric acid to form colloidal silica, then masking it with trisodium citrate. The citrate prevents silanol condensation and gelation during pH changes, stabilizing the agent. CimSil serves a dual purpose — replacing the conventional salt-based pickling step and acting as a pretreatment aid that enables waterless vegetable (mimosa) tanning.

Through preliminary trials, the optimal conditions were established: 10% process float for pretreatment, 0.25% CimSil (as SiO₂), and 20% mimosa tannins (by delimed pelt weight). The CimSil lowers substrate pH to ~4.5, near the collagen isoelectric point, masking reactive sites to prevent surface fixation and enabling uniform tannin penetration without water. The CimSil-pretreated waterless mimosa-tanned leather achieved a shrinkage temperature of 87°C, higher than conventional mimosa leather (81°C) — indicating synergistic cross-linking between silicates and phenolic tannins. The water contact angle improved to 85.3° (vs.

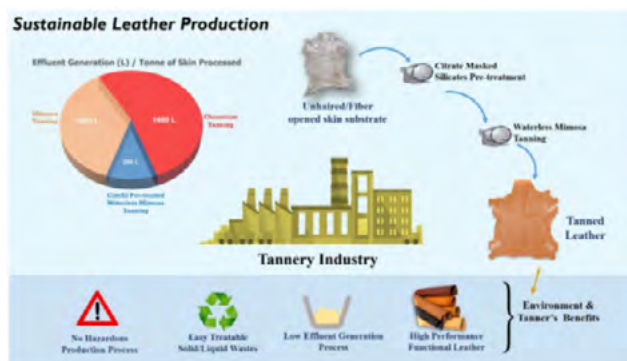
76.7° for mimosa-only), reflecting better hydrophobicity due to silicate coating over fibre bundles. Organoleptic scores were comparable to conventional leathers in fullness and softness. Air permeability also improved, as the CimSil agent opened fibre bundles for better tannin distribution.

The pollution reduction results were substantial. Most notably, effluent generation dropped by 80.06% versus chromium tanning and 71.08% versus vegetable tanning. Overall savings came from lower energy consumption, reduced effluent treatment volumes, and revenue from chromium-free leather scraps. The CimSil pretreatment system represents a breakthrough in sustainable leather processing. This technology doesn't just tweak tanning chemistry — it redefines the process. CimSil offers a pathway for tanneries to meet strict environmental regulations while staying profitable. It's a rare case where sustainability and industry economics align by staying true to the mantra: Getting more from less for more!

Pradeep Srinivasan, Gladstone Christopher Jayakumar & Balaraman Madhan

Pretreatment of skins with masked silicates for low-pollution emission tanning technology

Clean Technologies and Environmental Policy;
<https://doi.org/10.1007/s10098-025-03133-9>



Superacidic Precatalyst for Fischer Indole Synthesis

Indole-based heterocycles represent one of the most important structural units in organic and medicinal chemistry. They play a key role in natural products, pharmaceuticals, functional materials, and biologically active compounds. The demand for efficient and sustainable synthetic approaches toward structurally diverse indoles is an active area of research.

In this context, CSIR-CLRI research team reports the First application of superacidic ion-pair $[\text{Ph}_3\text{C}]^+[\text{B}(\text{C}_6\text{F}_5)_4]^-$ catalysis for the Fischer indole synthesis. It provides an efficient and practical strategy for the rapid construction of indole frameworks under mild reaction conditions. The highly active and selective ion-pair catalyst enables smooth conversion of a broad range of substrates. They include sterically hindered and electronically diverse aryl hydrazines and ketones, furnishing the corresponding indoles with high regioselectivity. This synthetic methodology also demonstrated excellent functional group tolerance and operational simplicity.

The synthetic utility of the developed protocol was further established through concise total syntheses of Paullone, ($\pm$)-Desbromoarborescidine A, Tjipanazole I, and Tjipanazole D. These syntheses have a broad scope for the ion-pair-catalysed Fischer indole strategy towards biologically significant heterocyclic frameworks. In addition, gram-scale synthesis was achieved without significant loss of efficiency, demonstrating the robustness, scalability, and practical applicability. This method offers rapid access to several indole-based heterocycles and can have broader utility in the preparation of advanced organic molecules relevant to pharmaceutical, material, leather, and allied chemical industries.

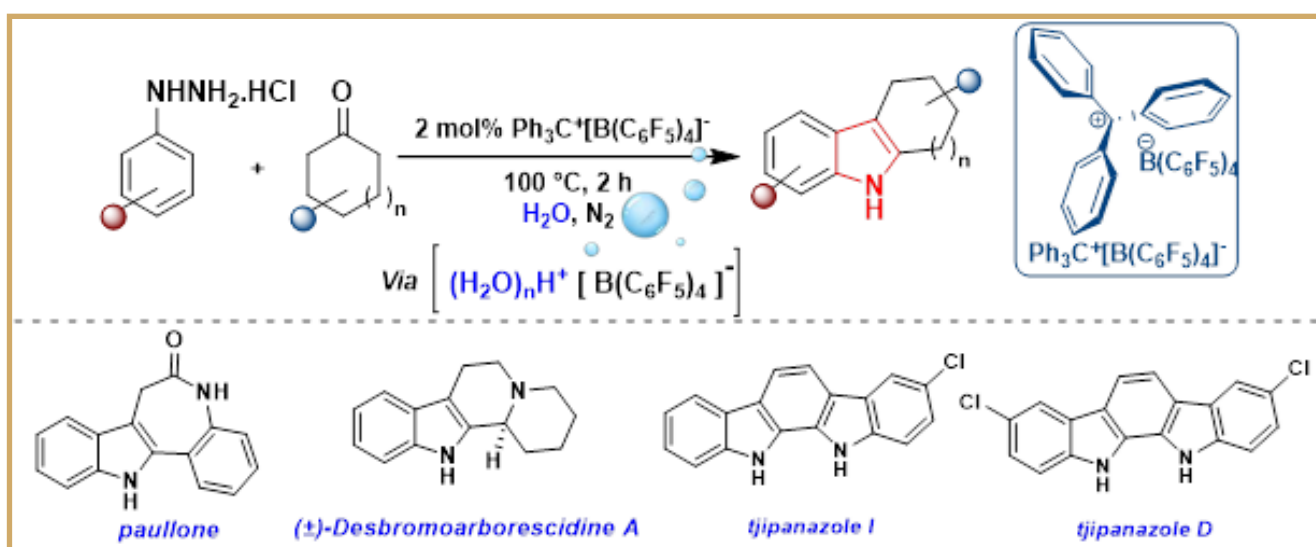
D, and Tjipanazole I. These syntheses have a broad scope for the ion-pair-catalysed Fischer indole strategy towards biologically significant heterocyclic frameworks. In addition, gram-scale synthesis was achieved without significant loss of efficiency, demonstrating the robustness, scalability, and practical applicability. This method offers rapid access to several indole-based heterocycles and can have broader utility in the preparation of advanced organic molecules relevant to pharmaceutical, material, leather, and allied chemical industries.

Pooja Sivaganesan, Chibisree Elanchezhian, Diksha Bansal, Mrinal Kanti Das and Saikat Chaudhuri

An ion-pair as a superacidic precatalyst for the synthesis of indole alkaloids: a novel entry into the Fischer indole synthesis,

Green Chem., 2026,28,424–432

DOI: 10.1039/d5gc04707b



April 2026

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2	F. Singh, "Redox-Guided Metabolic Control in Cancer: Integration of the Reactive Oxygen Species-AMP-Activated Protein Kinase-Sirtuin Axis in Tumour Adaptation and Therapy," <i>Journal of Biochemical and Molecular Toxicology</i> , vol. 40, no. 5, p. e70851, 2026, doi: 10.1002/jbt.70851.
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Agreement Signed

CSIR-CLRI entered into a Consultancy Agreement with M/s. Qualus India Pvt Ltd., Ranipet and with M/s. Sara Leather Industries in connection with “*Evaluation of the Use of the Sferes Beads in the retanning process of leather manufacturing*” on 8 April 2026.

Sferes technology, a patented system developed by Qualus, enhances the retanning process in leather production. In this process, small polymer balls replace some of the water used in the retanning process, which improves the chemical delivery and reduces

the amount of water and chemicals required. This technology has shown significant water savings of up to 40% and chemical reductions of 10% to 20% during retanning, making it a sustainable solution for leather tanneries. It is expected that the tanneries using this technology need to ensure minor modifications to their existing drums to start their leather production.

Under this agreement, CSIR-CLRI will extensively study and evaluate the adoption of Sferes Beads in the retanning process of leather manufacturing.



CATERS Column

Introducing an informative new monthly feature in The Leather Post, designed to keep stakeholders in the leather and footwear industry informed about 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. For more information, contact clricaters@clri.res.in

The REACH candidate list is typically revised biannually, with updates issued in January and July. Additionally, a new practice has emerged, allowing for a few substances to be added in November. Notably, three new substances have been added to the list between November and February, with current applicability limited to EU. With this addition total number of SVHC is now 253.

The newly added substances are:

Substance Added	CAS Number	Potential Application/ presence segment
1,1'-(ethane-1,2 diyl)bis[pentabromobenzene] (DBDPE)	84852-53-9	In adhesives, sealants, and coatings, including for leather. Used in the polymer industry as a flame retardant.
n-hexane	110-54-3	Solvent for adhesives used in footwear and furniture. Also used as a cleaning agent in leather and textiles.
4,4'-[2,2,2-trifluoro-1 (trifluoromethyl)ethylidene]diphenol (bisphenol AF) and its salts		Used in the manufacture of polymers such as polyimides, polyamides, etc., with potential application in leather processing.

Some Facts for Understanding

- ◆ The EU has banned the destruction of unsold footwear. Every year, about 4-9% of footwear remains unsold, and its destruction leads to 5.6 million tons of CO2 emissions.
- ◆ Bio-based need not be biodegradable, particularly within time periods described in several standards. It is therefore vital to use the terms correctly. In yet another sense, organic carbon refers to that from plants/ animals that were recently alive, including fossils of organisms that lived in the distant past. On the contrary, inorganic carbon originates from non-living things such as ores and minerals.

How Can We Help?

Please email your questions or doubts regarding various regulations, test methods, test report interpretations etc., to

clricaters@clri.res.in

CSIR-CLRI's Chrome Melamine Syntan is a novel, formaldehyde-free synthetic tanning agent—designed for safer, high-performance leather processing. This novel syntan has been commercialized with the Technology Readiness Level (TRL-9). The Technology represents the highest stage of technology maturity, signifying that the actual system has been completely proven in its final operational environment and is already commercialised.



CHROME MELAMINE SYNTAN: NOVEL SYNTHETIC TANNING AGENT



VALUE PROPOSITION

First of its kind formaldehyde free chromium-melamine complex developed as a tanning and re-tanning agent for leather processing



TECHNICAL HIGHLIGHTS

- Product replaces petroleum byproducts and formaldehyde in chromium (III) based filling type syntans
- Molecular weight tuned in such a way to fill the loose structure of belly region in Indian Cattle hides
- Product is free of volatile organic chemicals and in compliance to REACH regulations
- Provides additional binding sites for dyes, fatliquor and other synthetic tanning agents



ADVANTAGES

- Enables rechroming and filling of looser portions like belly
- Formaldehyde-free, safer alternative to conventional products
- Improves fixation of chromium and dyes for better leather quality
- Overall quality enhancement and better cutting value



APPLICATIONS

- Metal ion based synthetic tanning agent
- Leather retanning agent, especially in the rechroming stage of leather processing



STATUS

- TRL-9
- Already Commercialised

CONTACT

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- 91-44-24912150
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INTERESTED IN PARTNERING WITH US?

Climate Change Awareness Lecture at CSIR-CLRI

CSIR-CLRI organised the climate change awareness lecture on the topic “*Consumption Par Charcha: Live Within Earth's Limits*” at Triple Helix Auditorium, CSIR-CLRI, Chennai, on 2 April 2026. The talk was delivered by Prof. Chetan Singh Solanki, Founder of the Energy Swaraj Foundation, as part of his Energy Swaraj Yatra to Chennai, “*The Soul of South India*,” which aims to create awareness about sustainable living and resource conservation.

During the talk, Dr Solanki discussed various strategies to reduce energy and resource consumption among individuals to tackle climate change. He elaborated on the principles of Learn, Adopt, and Spread, emphasising that the Earth is finite and, therefore, individual consumption must also be finite.



Staff members from CSIR-CLRI and school students from Kendriya Vidyalaya CLRI participated in the Program.





CSIR-CLRI FOUNDATION DAY CELEBRATIONS

Celebrating excellence in research, innovation, and scientific achievements, CSIR-CLRI proudly celebrated its 79th Foundation Day at the Triple Helix Auditorium, CSIR-CLRI, Adyar, Chennai, on 24 April 2026.

The celebration highlighted the institute's remarkable journey in scientific research, innovation, leather technology, sustainability, and national development. The event brought together distinguished guests, staff members, researchers, students, and well-wishers to commemorate nearly eight decades of excellence.

Award of Appreciation Certificate for the Financial Year 2025–26 were presented to staff and students during the 79th CSIR-CLRI Foundation Day. Researchers who have published in high Impact Factor journals and those with patents filed / granted are given the certificates.

Important collaborations were strengthened through the exchange of MoUs, reflecting CSIR-CLRI's commitment to industry-academia partnerships.

Dr P Thanikaivelan, Director, CSIR-CLRI, spoke on the occasion and welcomed the guests. Exchange of Memorandum of Understanding (MoU) between Vels Group of Institutions and CSIR-CLRI to foster collaboration in academic, research and innovation initiatives.

The MoU exchange was followed by addresses from the Guests of Honour, Dr Preethaa Ganesh, Vice-President, Vels Group of Institutions, and Dr T. Sasipraba, Vice-Chancellor, Vels Institute of Science, Technology & Advanced Studies (VISTAS), who highlighted the importance of industry-academia partnerships in advancing research excellence, innovation, and future-ready education.



The celebration also featured the prestigious B.M. Das Memorial Lecture by Dr D Srinivasa Reddy, Director, CSIR-Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad, on the “*Efforts in Drug Discovery through Natural Products and Process Development with Low Carbon Footprint.*”

With a legacy of innovation and a vision for the future, CSIR-CLRI continues to lead in advanced research, technology development, and societal impact.

CSIR-CLRI made significant strides in intellectual property generation, thus underscoring its commitment to innovation and knowledge creation. For the financial year 2025-2026, the institute filed a total of 07 Indian patents and 02 International Patents, reflecting its strong focus on developing novel technologies and



processes with potential industrial applications. In addition, 05 copyrights registered, highlighting its contributions to creative and knowledge-based outputs. These achievements demonstrated CSIR-CLRI's continued efforts to strengthen its research impact and enhance its role as a leading institute in science, technology, and innovation for the leather and allied sectors. The brochure, namely “*Leather & Leather Products from Fish Skin*”, was released,



which exemplifies the valorisation of discarded fish by-products for making high-value products.

Open Day at CSIR-CLRI

As part of the 79th CSIR-CLRI Foundation Day Celebrations, a series of outreach and Open Day programmes were organised for school and



college students as well as the general public to promote awareness of the Institute's research and academic activities. During this period, more than 400 participants, including students and faculty from various institutions, visited the Institute. The visitors explored key research areas, including leather processing technologies, leather products and accessories, polymer and bio-based materials, environmental engineering, and wastewater treatment methods. Participants had the opportunity to interact with scientists and technical experts, gaining practical insights into ongoing research and laboratory facilities. The visit successfully created awareness about interdisciplinary applications, including the role of data science, biotechnology, and engineering in leather research. Overall, the students found the visit highly informative and enriching for their academic learning and future career development. The Program ended with the proposal of thanks by Mr K.M. Sridhar, Sr. Controller of Administration, CSIR-CLRI.







CLRI Regional Centre, Jalandhar organised an open day as part of the 79 Foundation Day celebrations of CSIR-CLRI on 24 April 2026. and the centre organized various science dissemination programmes for participants from tanneries, as well as students and teaching staff of Kendriya Vidyalaya No. 3 Jalandhar Cantt.

Scientists and technical staff delivered engaging presentations and demonstrations on advanced scientific instruments, analytic technics, leather, leather products, and footwear manufacturing.

OPEN DAY

for Schools, Colleges,
and Industries



As part of the CSIR-CLRI 79th Foundation Day celebrations, the CLRI Regional Centre, Kanpur, organized an “Open Day” for schools, colleges, and industries on 24 April 2026. Students and faculty members from the Government Leather Institute (GLI), Kanpur, visited the Centre and actively participated in the programme. Scientists of the Regional Centre delivered a presentation highlighting current trends in leather processing. Further, an industry visit was facilitated to provide students with first hand exposure to the leather processing environment.

OPEN DAY

for Schools, Colleges,
and Industries



OPEN DAY

for Schools, Colleges,
and Industries

As part of the 79th Foundation Day celebrations of CSIR-CLRI, the CLRI Regional Centre, Kolkata conducted a presentation session by young researchers on 24 April 2026. The programme provided a platform for emerging scientists to present their research work, share innovative ideas, and demonstrate their scientific contributions. The event highlighted the importance of encouraging young talent and promoting a vibrant research culture within the institute.



Birth Anniversary Celebration of Dr B. R. Ambedkar

On the occasion of the birth anniversary of Babasaheb Dr B. R. Ambedkar, the Chief Architect of the Indian Constitution, the Director, CSIR-CLRI, garlanded the portrait of Dr Ambedkar at the CLRI Main Building Reception on 14 April 2026.

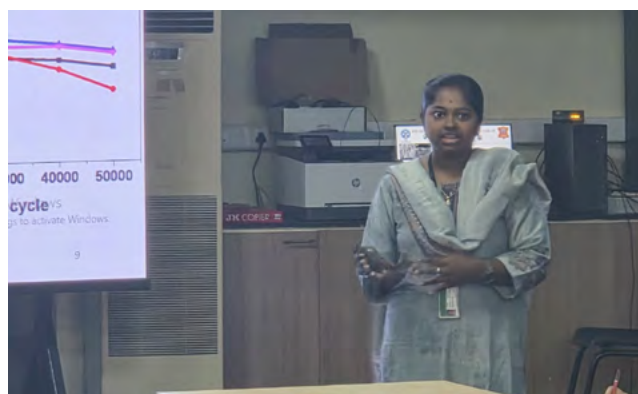
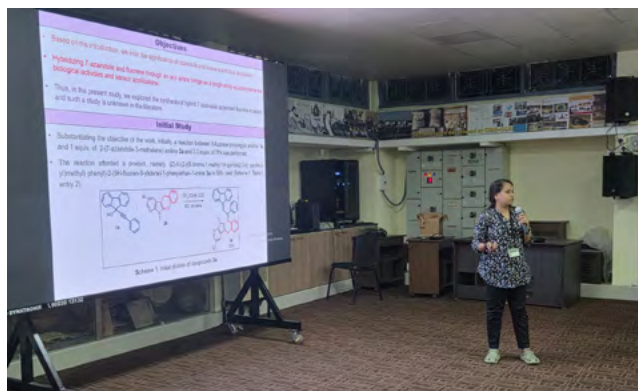
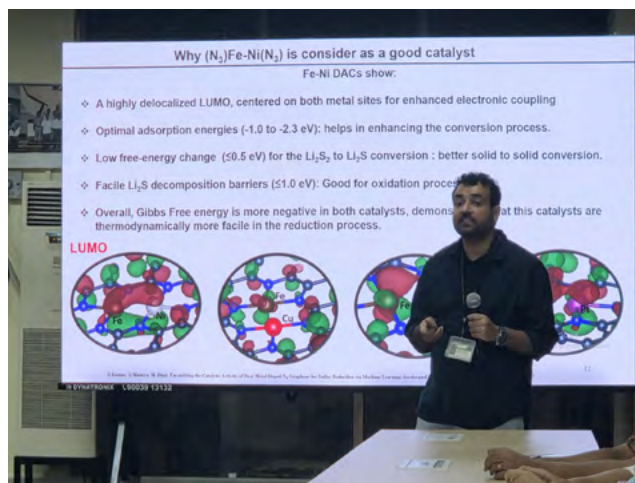
Staff members of CSIR-CLRI paid floral tribute, remembering his invaluable contributions to social justice, equality, and nation-building.



Young Scientist Seminar :

79th CSIR-CLRI Foundation Day

On the occasion of the 79th CSIR-CLRI Foundation Day, a Young Scientist seminar was organised on 24 April, 2026, in the areas of Chemical Science, Biological Science and Engineering Science, including Leather Science. Abstracts were submitted by 13 young researchers who are JRF/SRF/Project Associates (8 Abstracts in Chemical Science, 3 in Biological Science and 2 in Engineering Science).



Honouring Dr. P. Shanmugam, Scientist G, CSIR-CLRI

CSIR-CLRI organized a Science Seminar on 27 April 2026 at the Triple Helix Auditorium, CSIR-CLRI, Chennai in honour of Dr. P. Shanmugam, Scientist G & Head – Organic & Bioorganic Chemistry Division on the occasion of his superannuation, recognizing his contributions to scientific research and academic excellence.

The seminar brought together distinguished scientists, academicians, researchers, scholars, and students from reputed institutions across India. The event commenced with a welcome address by Dr. P. Thanikaivelan, Director, CSIR-CLRI appreciated the remarkable service and scientific achievements of Dr. P. Shanmugam during his tenure at CSIR-CLRI.

The programme featured a series of insightful technical lectures by eminent speakers from various institutions. Dr. D. Srinivasa Reddy, Director, CSIR- ICT, Hyderabad delivered a lecture on **Total Synthesis of Natural Products**. Prof. Dr. Pazhamalai Anbarasan, Department of Chemistry, Indian Institute of Technology Madras spoke on **Chiral Rh(III)-Catalyzed Asymmetric C-H Bond Functionalizations**, while Prof. Dr. Bhisma Kumar Patel, Department of Chemistry, Indian Institute of Technology Guwahati presented on **Sustainable Synthesis through Radical Reactivity**.

Dr. Bhisma Kumar Patel, Department of Chemistry, Indian Institute of Technology Guwahati presented on sustainable synthesis through radical reactivity.

Further sessions included Dr. Jubi John, Scientist-E, Chemical Science Division, CSIR-NIIST Thiruvananthapuram discussing Annulation Chemistry as a Gateway to Novel Heteroacenes, Dr. Baby

Viswambharan, Assistant Professor, Department of Chemistry National Institute of Technology, Trichy spoke on Oxidative N-terminus Functionalization of Amino Acids and Peptides for Therapeutic Applications, Dr. Suchithra Madhavan V, Former Women Scientist, ISER-Bhopal on Distal C-H Functionalization of Ferrocene, and Dr. Supriya Rej, Ramanujan Faculty, Department of Chemistry, IIT Dharwad on Vinylsilanes as Ethylene Surrogates in Organic Synthesis.

The event concluded with felicitation by representatives of CSIR-CLRI, followed by remarks



from Dr. P. Shanmugam, Scientist G & Head – Organic & Bio Organic Chemistry. Dr Shanmugam expressed gratitude to colleagues, collaborators, students, and the institute for their continuous support throughout his distinguished career.

The seminar served as a vibrant platform for knowledge sharing, scientific interaction, and celebrating the legacy of a dedicated scientist whose work has significantly contributed to the field of Synthetic Organic Chemistry.



“Awareness for Life Wellness” Program at CSIR-CLRI

CSIR-CLRI conducts a series of health awareness program by an eminent physician for the benefit of staff and students. The 3rd session of the “Awareness for Life Wellness” series was organised at CSIR-CLRI on 30 April 2026.

The session, organized in collaboration with Dr. Reddy’s Foundation for Health Education (DRFHE), focused on the topic: “Stay Strong as You Age: Diabetes, Muscle Health and Early Frailty Signals.”

During the session Dr. Ranjith Pratap, General Physician, shared valuable insights on maintaining health and well-being with age, emphasizing diabetes management, muscle strength, and early detection of frailty.

Employees, research scholars, and staff actively participated in the session, making it an engaging and informative program aimed at promoting a healthier workplace.



Awareness and Empowerment Session for Contractual Staff at CSIR-CLRI

A dedicated awareness and empowerment session for contractual and cleaning staff was organised at CSIR-CLRI on 30 April 2026 at the Triple Helix Auditorium. The session was conducted by Mrs Rama Haran, a Certified Prevention of Sexual Harassment (POSH) Trainer, focusing on raising awareness and empowering staff with essential knowledge on workplace dignity and safety. During the session, the staff were trained to identify, respond, report and prevent sexual harassment practices in the workplace.



Felicitation for the Executive Director, CLE

Dr P. Thanigaivelan, Director, CSIR-CLRI, participated in the felicitation event organised on 2 April 2026 for Shri R. Selvam, IAS, on the occasion of the completion of his tenure as Executive Director, Council for Leather Exports (CLE). Organised by the Leather & Footwear Industry of CLE Southern Region, Shri M. Abdul Wahab, Regional Chairman (South), CLE. Former Chairmen Shri M. Rafeeqe Ahmed and Shri P.R.Aqeel Ahmed, Former Regional Chairman (South) Shri Israr Ahmed, and industry members participated and felicitated Shri Selvam for his contributions during his term as the Executive Director of CLE.



CSIR SMART Village Mission: Entrepreneurship in Leather & Products Making

The Council of Scientific and Industrial Research (CSIR), Ministry of Science and Technology, Government of India, has launched a Mission Mode Project on “*SMART VILLAGE*”, aligned with the Prime Minister’s vision of “*Viksit Bharat @ 2047*.”

On the basis of a detailed need assessment survey, suitable technologies were identified for deployment under the CSIR SMART Village Mission in Sawaipura Village, Pali District, Rajasthan. Under the CSIR SMART Village initiative, CSIR-CLRI Scientist and research team, consisting of Dr M Sathish and Shri Amit Kumar Prajapathi, conducted an awareness programme on 30 April 2026 for the villagers of Sawaipura and trained them in pursuing entrepreneurship in leather and product-making.

During the Program, certificates were awarded to trainees upon the successful completion of the “*Introductory Training Program on Leather Goods Making*,” which focused on combination products crafted using chicken-feet leather and ethnic fabrics.



National Seminar on “Sustainable Climate Action: Scientific Insights, Technological Solutions and Social Transformation”

Dr. S. V. Srinivasan, Scientist – G & Head, Environmental Engineering Department, inaugurated the National Seminar on “*Sustainable Climate Action: Scientific Insights, Technological Solutions and Social Transformation (SUCLAC)*,” organised by the Department of Civil Engineering, Hindusthan College of Engineering and Technology, Coimbatore, sponsored by the Ministry of Earth Sciences (MoES), Govt. of India. He also delivered the inaugural address on “*Sustainable Waste Management – Case Studies*” on 21st April 2026 in this National Seminar.



The National Event On “Transformation of Tribal Lives Through Science and Technological Inventions – Preserving Language, Faith and Culture”

CLRI Regional Centre, Kolkata, participated in the national event on “*Transformation of Tribal Lives through Science and Technological Inventions – Preserving Language, Faith and Culture*”, organized by DST-SEED and NECTAR on 12-13 April 2026 at Bharath Mandapam, New Delhi. The program has been graced by the Hon'ble Vice President of India, C.P. Radhakrishnan. The team showcased the technologies developed under the project supported by the DST-SEED, Govt. of India. The leading institutions, stakeholders, government agencies, and entrepreneurs from the North-East Region have interacted with the CLRI team to explore possible collaborations to transform tribal lives through science and technology.



MODEUROP

Autumn/Winter 2027/28

CSIR-CLRI presented Leather/colour proposal from Indian Tanners/Companies in the Fashion Trend Pool colour circle meeting: Autumn / Winter 2027/28 season which was held during 19 – 21 of April 2026, Dunkerque, Paris.

Based on the colour selection, the Colour Card for the season AW27/28 will be released in the month of May 2026.

To avail, please write to director.clri@csir.res.in and spdc.clri@csir.res.in



Visit of Students from VIT, Vellore

About 132 students and 6 faculty members from the M.Sc. Data Science Program, Department of Mathematics, VIT, Vellore, visited CSIR–CLRI on 1 April 2026 as part of an educational tour. During the visit, the participants interacted with scientists and gained insights into various aspects of leather processing, environmental engineering, and skill and training opportunities. The session also highlighted the role of data science and computer applications in leather research, along with skill development initiatives and emerging business opportunities in the leather sector.



Visit of B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai

About 60 B. Pharm students, accompanied by two faculty members from the Crescent School of Pharmacy, B.S. Abdur Rahman Crescent Institute of Science and Technology, Chennai, visited CSIR–CLRI on 8 April 2026 for an academic and research-oriented Program.

During the visit, scientists and technical staff provided demonstrations and in-depth explanations of various research and laboratory facilities. These included leather processing technologies, applications of bioinformatics and biotechnology, healthcare and collagen research, and skill development and training opportunities in leather science and related fields. The students found the visit highly informative and enriching, noting that the exposure would significantly contribute to their academic learning and future professional development.



Director, CSIR-CLRI Visits CLRI Regional Centre Kanpur

The Director, CSIR-CLRI, visited Kanpur during 9-10 April, 2026. During the visit, he had an engaging discussion with the members of the leather industry in the Central Region to understand their requirements and expectations from CSIR-CLRI. He also met with senior officials of the Directorate of Industries, Kanpur, to discuss the initiatives being undertaken by the Government of Uttar Pradesh to strengthen and improve the leather sector.

Earlier, the Director interacted with all staff members of the CLRI Regional Centre, Kanpur and reviewed the Centre's ongoing activities and projects.



Students of R.M.K. Patahasala, Gummidipoondi, Visit CSIR-CLRI

As part of the JIGYASA initiative, 105 students and 15 teachers from R.M.K. Patahasala, Gummidipoondi, visited the CSIR-CLRI on 21 April 2026.

The visit was organized to provide students with exposure to the Institute's ongoing research activities and to stimulate early interest in scientific research. During the program, students interacted with scientists and research scholars who introduced and demonstrated key research domains, including various types of leather and leather products, leather-like materials, polymer-based technologies, and wastewater effluent treatment processes.

The students displayed notable enthusiasm and curiosity throughout the visit, making the outreach activity engaging, informative, and highly impactful.



Milton International School, Kelambakkam and Saveetha Institute of Medical and Technical Sciences, Saveetha School of Engineering, Chennai, Visit CSIR-CLRI

An Open Day visit was organised at CSIR-CLRI as part of the week-long CSIR-CLRI Foundation Day celebrations to benefit students. On 16 April 2026, around 15 students from Classes 9 and 12, along with two teachers from Milton International School, Kelambakkam, and 47 B.Tech Bioinformatics students from Saveetha Institute of Medical and Technical Sciences, Saveetha School of Engineering, Chennai, visited the CSIR-CLRI campus.

During the visit, students explored leather processing technologies, learned about the development of various leather products, and gained insights into skill development initiatives, training programs, and career opportunities in the leather industry, as well as in biochemistry, biotechnology, and polymer chemistry. The visit aimed to create awareness and spark interest among students in science and the leather sector.



Sowbarnika School of Fashion & Costume (SSFC), Perugudi, Chennai, Visit CSIR-CLRI

On 21 April 2026, seven Diploma students of Fashion Technology, accompanied by two faculty members from Sowbarnika School of Fashion & Costume (SSFC), Perugudi, Chennai, visited CSIR-CLRI. During their visit, they explored leather processing, leather products, and the leather accessories. The students expressed their happiness, as the visit was well aligned with their Fashion Technology academic program.



National Research Development Corporation (NRDC) Visit CSIR-CLRI

The National Research Development Corporation (NRDC) team, comprising Shri Amit Rastogi, CMD, NRDC, Shri N G Lakshminarayan, DGM, NRDC, Dr Bhavya Manjeera, Dy. Manager, NRDC visited CSIR-CLRI on 24 April 2026, to discuss the translation and commercialization prospects of specialty chemicals developed for upholstery applications under the CSIR's Specialty Chemicals Mission project.

Dr Kannan Srinivasan, Outstanding Scientist of CSIR and the Mission Director steered this meeting, adding valuable insights to the discussions. The interaction with the scientists focused on market demand, forming industrial partnerships, and establishing robust commercialization strategies for the indigenous technologies. The visit ended positively, with a shared commitment to fast-tracking the commercialization process for these specialty chemicals.

The NRDC team also visited the dissemination centre and the various technologies of the institute was showcased to them. Prior to the meeting, Dr Kannan visited the laboratories and discussed in detail with the scientists about the progress of the specialty chemicals development.



Happy Retirement



Dr. P. Shanmugam
Scientist 'G' & Head
Organic & Bioorganic Chemistry Lab



Shri D Kennedy
Sr. Technician (3)
Engineering Services

The Director and Staff wish them a happy and healthy retired life

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:

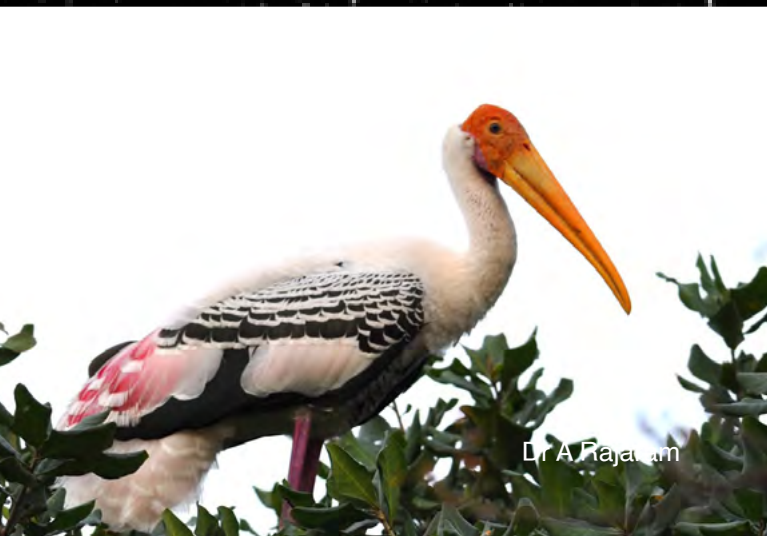
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