

दि लेदर पोस्ट The Leather Post

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

National Technology Day 2026



GT Memorial Lecture 2026

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 मई 2026 अंक जारी किया गया है, जिसमें वैज्ञानिक उत्कृष्टता, प्रौद्योगिकी प्रसार और सामाजिक जिम्मेदारी के प्रति सीएसआईआर-सीएलआरआई की निरंतर प्रतिबद्धता पर प्रकाश डाला गया है। इस अवधि के दौरान, हमने जी. टी. स्मृति व्याख्यान 2026 का आयोजन किया और राष्ट्रीय प्रौद्योगिकी दिवस 2026 मनाया, जिससे नवाचार और ज्ञान साझा करने के प्रति हमारी निष्ठा की पुष्टि हुई। क्षेत्रीय केंद्रों को मजबूत करने और विभिन्न समूहों में नवाचार को आगे बढ़ाने के लिए निदेशक,

सीएसआईआर-सीएलआरआई ने क्षेत्रीय केंद्र, जालंधर का दौरा किया और उद्योग हितधारकों से भेंट की। इस दौरे के भाग के रूप में, स्वच्छ और संधारणीय विनिर्माण प्रथाओं को बढ़ावा देने के लिए "जालंधर में टैनरी के लिए संधारणीय चर्म प्रसंस्करण" पर एक कार्यशाला का आयोजन किया गया। स्वच्छता पखवाड़ा 2026 और "एक पेड़ माँ के नाम" वृक्षारोपण पहल के माध्यम से, हमने पर्यावरण प्रबंधन और सामुदायिक भागीदारी के प्रति अपनी प्रतिबद्धता को और मजबूत किया। मैं कानपुर और कोलकाता में अन्य क्षेत्रीय केंद्रों द्वारा किए गए प्रभावशाली आउटरीच और क्षमता-निर्माण गतिविधियों की भी सराहना करता हूँ, जो पूरे देश में सीएसआईआर-सीएलआरआई के वैज्ञानिक और तकनीकी योगदान को आगे बढ़ाना जारी रखते हैं। ये पहले मिलकर उत्कृष्टता, स्थिरता और सामाजिक प्रभाव के लिए हमारे अटूट प्रयास को दर्शाती हैं।

Greetings!

It is our pleasure to present the May 2026 issue of The Leather Post, highlighting CSIR-CLRI's continued commitment to scientific excellence, technology dissemination, and social responsibility. During this period, we organized the G.T. Memorial Lecture 2026 and celebrated National Technology Day 2026, reaffirming our dedication to innovation and knowledge sharing. To strengthen the regional centres and advancing innovation in various clusters, Director, CSIR-CLRI visited Regional Centre, Jalandhar and met industry stakeholders. As part of the visit, a workshop on "Sustainable Leather Processing for Tanneries in Jalandhar" was organized to promote cleaner and sustainable manufacturing practices. Through Swachhta Pakhwada 2026 and the "Ek Ped Maa Ke Naam" plantation initiative, we reinforced our commitment to environmental stewardship and community participation. I also appreciate the impactful outreach and capacity-building activities undertaken by other Regional Centres at Kanpur and Kolkata, which continue to extend CSIR-CLRI's scientific and technological contributions across the country. Together, these initiatives reflect our unwavering pursuit of excellence, sustainability, and societal impact.

Happy Reading!

No.	Description	Pg.
	<i>Technologies</i>	
1	Research in Focus : Publications	3
2	Publications from CSIR-CLRI	5
	<i>Institutional activities / Events</i>	
3	CATERS Column	6
4	GT Memorial Lecture 2026	7
5	National Technology Day 2026	8
6	Workshop on "Sustainable Leather Processing for Tanneries in Jalandhar"	9
7	Swachhta Pakhwada 2026	10
8	"Ek Ped Maa Ke Naam" - A Tree in the Name of Mother	13
9	Activities at CLRI Regional Centre, Kanpur	14
10	Visits	17

Enzymes de-hazard fleshings to be reborn! Enzyme (Re) production, perhaps?!

Tannery solid waste management remains one of the most pressing environmental challenges in leather manufacturing. Among the various solid wastes generated, fleshing waste — the fatty and proteinaceous material removed from raw hides during beam-house operations — is particularly problematic due to its high susceptibility to putrefaction. Globally, tanneries generate nearly 980,000 tonnes of fleshing waste annually, with India alone contributing around 89,900 tonnes. Researchers at CSIR-CLRI, Chennai, have developed a sustainable valorization pathway by converting this hazardous waste into a value-added fleshings extract (FE) that serves as an effective nitrogen source for industrial microbial enzyme production.

Limed fleshing waste was first delimed using ammonium chloride, then minced and subjected to enzymatic hydrolysis using protease from *Bacillus subtilis* MTCC 6537 at pH 8.5 and 40°C for 5 hours. After lipid removal via hexane extraction, the protein-rich hydrolysate was concentrated five-fold using rotary vacuum evaporation, raising the protein content from 31.76 mg/mL to 151.81 mg/mL. The concentrate was then spray dried to produce a stable powder form of the FE. The spray drying process was optimized using Response Surface Methodology (RSM) employing a Central Composite Rotatable Design (CCRD), with three independent variables — atomization pressure, feed flow rate, and inlet air temperature — each evaluated at five levels. The optimum conditions were identified as an inlet air temperature of 175°C, atomization pressure of 1 kg/cm², and feed flow rate of 2 mL/min, yielding a remarkable product recovery of 96.70% with a moisture content of just 4.33% and a protein content of 824.37 mg/g — significantly superior to most comparable hydrolysate spray drying studies reported in the literature.

The FE was evaluated as a replacement nitrogen source for the production of four industrially important enzymes. Protease activity from *B. subtilis* with 1.0%

FE (25.12 U/mL) matched that of soyabean meal, with 15.4% higher biomass. Urease activity from *Arthrobacter creatinolyticus* with 1.5% FE (17.93 U/mL) was equivalent to the meat extract. *Aspergillus niger* lipase with 1.5% FE (25.19 U/mL) was comparable to corn steep liquor. For *Cryptococcus* sp. lipase, a combination of 0.5% yeast extract with 1.0% FE yielded the best result (62.52 U/mL at 120 h), demonstrating a synergistic effect.

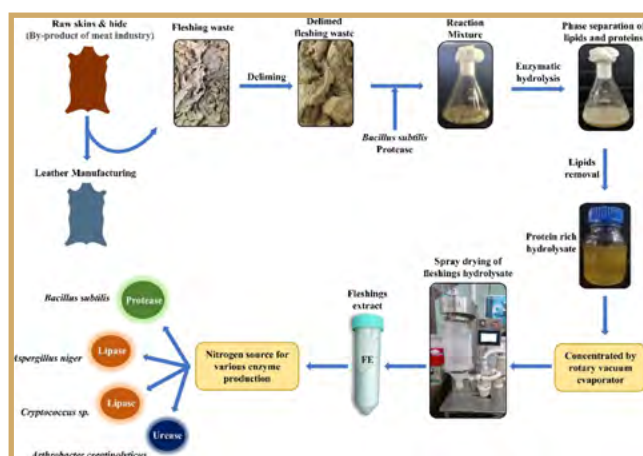
This work presents a compelling circular economy model: fleshing waste generates the protease used for its own hydrolysis! And the resulting extract replaces costly commercial nitrogen sources in fermentation media. The process is eco-friendly, economically feasible at industrial scale, and directly addresses the twin challenges of tannery waste disposal and high fermentation medium costs.

Parthasarathy Baskaran Sujiritha, Krishna Prashanth Mekala Ramesh, Ramkumar Mannankatti, Vijan Lal Vikash, Ganesan Ponesakki & Numbi Ramudu Kamini

Valorization of tannery fleshing waste into nitrogen source for sustainable production of microbial enzymes

Springer Nature Link, 3 Biotech, Vol 16, Num 68 (2026)

<https://doi.org/10.1007/s13205-025-04684-w>



Microbial Bioremediation of Heavy Metals and Enzymatic Degradation of Leather Waste

The leather industry generates a huge amount of solid, liquid, and gaseous wastes while processing raw animal hides/skins into durable leather. Unused hides/skins and excess chemicals cause high organic load, phenolics, tannins, and heavy metals. The untreated effluent reduces the water quality and oxygen levels and adversely impacts the environment. Heavy metals, unlike organic pollutants, are non-biodegradable and remain in the environment. Their removal through conventional chemical or physical methods is fraught with difficulty.

Microbial bioremediation offers a sustainable, cost-effective, and eco-friendly way for mitigating heavy metal pollution. Researchers employ microorganisms that are naturally resistant and adapted to the ecological niche to remove heavy metals like Cd, Cr, Cu, Fe, Ni, Pb, and Zn from tannery waste. Microbes from tannery effluent can tolerate and utilise hazardous chemicals by expelling metal ions from the cell and converting heavy metals into less toxic forms. Microbes from extreme environments, like tannery effluent, produce enzymes that can be utilized for a wide range of applications, from industrial manufacturing to environmental management. These enzymes typically include keratinases, proteases, and lipases, which can degrade protein and fat from leather wastes. Researchers from CSIR-CLRI explored the multifaceted abilities of bacteria from tannery effluents for their tolerance to heavy metals and resistance

to antibiotics. Further, the researchers studied their potential to produce extracellular enzymes for breaking down complex organic components found in leather waste, including collagen, keratin, fats, etc. By combining bioremediation with enzymatic degradation, researchers were aiming at resolving both heavy metal pollution and leather waste management.

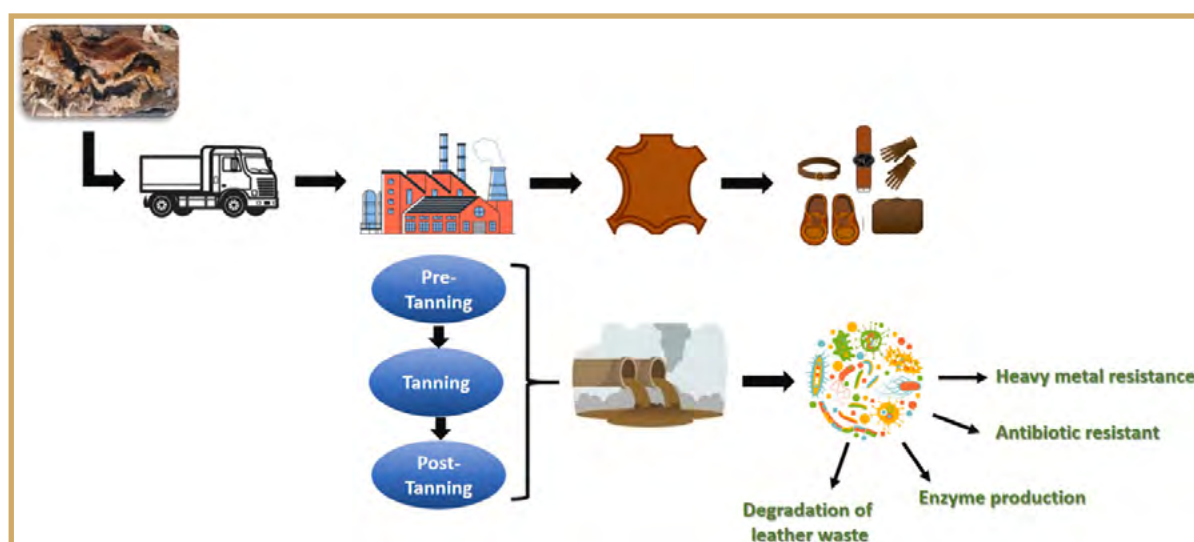
Researchers in this study identified bacterial strains that were found to produce extracellular enzymes such as proteases, amylase, and lipases, which may have potential application in enzyme-assisted leather processing and waste treatment. Certain isolates also showed the ability to biodegrade leather, indicating their possible role in environmentally friendly waste management solutions. Further research on optimizing culture conditions, scaling up the degradation process, and evaluating the environmental safety of the by-products will conclusively establish the role of the isolated microorganisms in bioremediation of heavy metals and enzymatic degradation of leather waste.

Sivarajani Venugopal, Yasmin Khambhaty

Resistance and functional profiling of tannery effluent bacterial communities

Journal of Environmental Management, Vol. 405, 1 April 2026, 129688

<https://doi.org/10.1016/j.jenvman.2026.129688>



May 2026

1	A. Nalladiyil, V. A. Mozhiarasi, D. Weichgrebe, and G. L. S. Babu, "Enhancing methane recovery from food waste using walnut shell biochar and garbage enzymes," <i>Renewable Energy</i> , vol. 263, 2026, doi: 10.1016/j.renene.2026.125445.
2	S. Ravi, J. S. Krishna, and D. Samanta, "Sustainable Functionalization of Natural Rubber via Click Reaction for Improved Thermal and Chemical Resistance with Biodegradability," <i>Journal of Applied Polymer Science</i> , vol. 143, no. 18, 2026, doi: 10.1002/app.70609.
3	S. Kumar, K. R. A. Maurya, and M. Dixit, "Unravelling the Catalytic Activity of Dual-Metal Doped N6-Graphene for Sulfur Reduction via Machine Learning-Accelerated First-Principles Calculations," <i>Small</i> , vol. 22, no. 26, 2026, doi: 10.1002/smll.202514877.
4	S. Mandal, P. Singh, M. D. Biswakarma, R. Kumari, M. Karlsen, M. Ettar, M. Dixit, and A. J. Bhattacharyya, "Zn-Ion Storage in an Anode-Protected High-Performance Aqueous Organic Zinc Ion Battery," <i>Small</i> , vol. 22, no. 28, 2026, doi: 10.1002/smll.202600014.
5	K. Arasu, A. Balakrishnan, U. Kannan, T. Vembuli, and K. Vinoth, "Exploring industrial effluent-derived bacterial isolate for enhanced biodegradation of bisphenol-A," <i>Environmental Technology</i> , vol. 47, no. 12, pp. 1961–1976, 2026, doi: 10.1080/09593330.2026.2648627.
6	D. Saha, P. Singh, A. Das, H. V. S. R. M. Koppiseti, R. Reddy, D. B. Dixit, M. Mukhopadhyay, and A. V. A., "A High-Capacity K-Rich Fe-Based Polyanion Cathode Material for K-Ion Batteries: Structure, Phase Evolution, and Electrochemical Behavior," <i>ACS Applied Energy Materials</i> , vol. 9, no. 9, pp. 5647–5662, 2026, doi: 10.1021/acsaem.6c00167.
7	P. Vikhyat, R. Meena, N. Biswas, A. Ramseena, P. Mahato, B. Roy, S. Ghosh, and S. Mistry, "Metal-Organic Nanotube (MONT) as a Photocatalyst for the Visible-Light-Driven Selective Dye Degradation," <i>Inorganic Chemistry</i> , vol. 65, no. 18, pp. 9887–9899, 2026, doi: 10.1021/acs.inorgchem.6c00136.



Editor-in-Chief: **Dr P Thanikaivelan, Director, CSIR-CLRI**

Editor : **G Chandrasekar**

Editorial Team: **Dr R Srinivasan, Dr S Swarnalatha, M Vinodh Kumar, V Karthik**

Design : **G Sathiamoorthy**

Editorial Assistance : **K Thangarasu**

Visit: **<https://clri.org>** for the digital version of **The LEATHER POST**

For Feedback and Comments: Editor, The Leather Post; email: chandrag@clri.res.in

CATERS Column

This is a monthly informative feature in Leatherpost, 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.

Shock Absorption

The context of walking has changed. We now walk more on hard man-made surfaces. In the context of walking, the force that is applied to the foot in the heel strike (shock) portion of the gait is known as Shock. When the shock force is high, damage to soft tissue can be severe, leading to long-term injury. The falling mass shock absorption test assesses the shock absorption and energy return of footwear components underfoot. Softer underfoot materials are added to increase shock absorption but may compromise the durability and stability of footwear. The complexity is even higher when the material must be sustainable (for more information, refer to SATRA Bulletin, July/August 2026 issue).

New Addition to REACH Annex XVII

Dinitrotoluene (DNT), which is often used along with Dibutyl phthalate (DBP) as a plasticiser in polyurethane. Starting 10 May 2027, the permissible limit for DNT is 0.1% in articles for professional use, including footwear.

Several chemicals commonly found in flame retardants used in textiles, paper, leather etc., such as 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol (TBBPA), 2,2-bis(bromomethyl)propane-1,3-diol (BMP), 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBN-PA), and 2,3-dibromo-1-propanol (2,3-DBPA) are now part of Substances of Very High Concern (SVHC) under REACH UK. Also found in the addition are Reactive Brown 51 and Tris(2-methoxyethoxy)vinylsilane used in leather industry.

ISO standards Relevant to Product Carbon Footprint

- Product Carbon Footprint – ISO 14067:2018 (methodology) and ISO 14064-3:2019 (for verification)
- Lifecycle Assessment – ISO 14040: 2006 (methodology) and ISO 14071:2024 (for verification)

How Can We Help?

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

caters.clri@csir.res.in

GT Memorial Lecture 2026



CSIR-CLRI, in association with LERIG Trust organized the Dr GT Memorial Lecture 2026, the third in the series, on 7 May 2026 at Triple Helix Auditorium at CLRI

Campus, Chennai. The purpose of organizing this lecture series every year is both to recognize the contributions of Dr GT, as he is fondly called, and to inspire young researchers on the new vistas in the field of research and development. Dr G Thyagarajan had the distinction of heading three national laboratories of CSIR-IICT, Hyderabad, CSIR-NEIST, Jorhat, Assam, CSIR-CLRI, Chennai.

It was a fitting tribute to the memory and legacy of Dr Thyagarajan that the memorial lecture for 2026 was delivered by Prof. M. Lakshmi Kantam, Former Director of the CSIR-Indian Institute of Chemical Technology (CSIR-IICT), Hyderabad. Prof Lakshmi Kantam is currently, Dr. B. P. Godrej Distinguished Professor of Green Chemistry & Sustainability & Engineering, J.C. Bose National Fellow (SERB-DST), The topic of memorial lecture was on the topic: *"Design and Development of Catalysts for Sustainable Chemical Industry"*

In the lecture, Dr Lakshmi Kantam recalled her interactions with stalwarts in the field of chemical



sciences, like Dr G Thyagarajan and Dr R. A. Mashelkar. She also fondly remembered her association with the University Institute of Chemical Technology (UICet), Mumbai, formerly University Department of Chemical Technology (UDCT). Speaking on developing sustainable chemical industry, she highlighted advances in catalyst design, sustainable chemical processes, and green technologies. The objective is to promote environmentally responsible technologies in the areas of agrochemicals, pharmaceuticals, and the development of advanced materials for use in the energy sector.



National Technology Day 2026

CSIR-CLRI celebrated National Technology Day 2026 on 11 May 2026 at the Triple Helix Auditorium, Chennai. National Technology Day is commemorated every year to mark the significant milestone in the history of India's technological innovations as India successfully tested nuclear explosions in Pokhran on 11 May, 1998. On this day, the nation remembers and honours the architects of such innovations. The theme for this year, being "*Responsible Innovation for Inclusive Growth*", the emphasis is on the importance of developing technologies that are equitable, sustainable and accessible to all.

At CSIR-CLRI, the event featured an inspiring and thought-provoking lecture by Prof. V. Kamakoti, Director, Indian Institute of Technology Madras, on the theme: "*Towards Viksit Bharat 2047 – A Path to Technology Superpower*".

importance of Swadeshi technologies, self-reliance, and innovation-driven growth in shaping India into a global technology leader. He highlighted how indigenous research, locally developed technologies, and strong academia-industry collaboration can accelerate the vision of Aatmanirbhar Bharat



and contribute towards building a technologically empowered nation. He also spoke about leveraging AI and digital technologies to improve education, healthcare, agriculture, rural entrepreneurship, and sustainable living in villages, ensuring inclusive growth across the country.

During the event Certificates of Appreciation for successful technology transfer were distributed by the Chief Guest, recognizing efforts in translating research into societal and industrial applications.



workshop on “Sustainable Leather Processing for Tanneries in Jalandhar”

A one-day workshop on “Sustainable Leather Processing for Tanneries in Jalandhar” was organised by CLRI Regional Centre, Jalandhar, on 14 May 2026. The workshop was organised as part of the National Technology Day Celebrations 2026. Senior representatives from the leather and allied industries, along with participants from various educational institutions, participated in the event.

Dr P Thanikaivelan, Director, CSIR-CLRI, spoke on the occasion. Senior Scientists made technical presentations to emphasize the effective utilization of tannery solid waste, sustainable leather processing practices for a cleaner and greener future, followed by a technology demonstration on the preparation

of various types of high-value Protein Syntans from leather chrome shaving waste. The participants have



expressed overwhelming appreciation for the workshop.



Swachhta Pakhwada 2026

CSIR-CLRI observed the 'Swachhata Pakhwada' 2026, a fortnight event from 1 May 2026 to 15 May 2026 across the CLRI Campus and its Regional Centres.

A series of cleanliness activities and awareness programmes were organised as part of the Swachhata Pakhwada campaign. This annual programme aims to emphasis and reaffirm the Nations's commitment towards cleanliness, hygiene, and environmental sustainability. Dr P Thanikaivelan, Director, CSIR-CLRI, administered the Swachhta Pledge to the staff

and scholars of the Institute. Swachhta Pledge is a commitment to actively participate in cleanliness initiatives, dedicating time and effort to maintain a clean India under the Swachh Bharat Mission.

Marking the occasion, Director, CSIR-CLRI also planted a tree, symbolizing the institute's dedication to cleanliness, environmental protection, and a pollution-free future. These initiatives affirm CSIR-CLRI's continued dedication to promoting the vision of a cleaner, greener India.



Some of the cleanliness activities organised at CSIR-CLRI during Swachhata Pakhwada 2026 are:

Cleanliness drive at CSIR-CLRI Creche Campus on 7 May 2026



Cleaning activity at KV CLRI and STAFF Quarters

Cleanliness drive at PM Shri Kendriya Vidyalaya CLRI, Adyar, Chennai on 14 May, 2026.



Deep cleaning drive of laboratories and workplaces





“Ek Ped Maa Ke Naam” - A Tree in the Name of Mother

The tree plantation drive under the theme “*Ek Ped Maa Ke Naam*” was organized at the CSIR-CLRI campus on 7 May 2026. Dr. P Thanikaivelan, Director, CSIR-CLRI, planted a tree sapling and initiated the plantation drive at the CLRI Campus. The symbolic observance of ‘*Ek Ped Maa Ke Naam*’ is a noble act of planting a tree in the name of one’s mother. This simple act honours the role of mothers in nurturing life and also contributes to the health of the planet. It emphasizes the life-sustaining role of trees, and just like a mother, in providing sustenance, protection, and a future for

the next generation. Through this initiative, participants can create a lasting memory, planting a tree as a living tribute to their mothers, while also addressing the pressing need for environmental preservation.

Planting of tree saplings at CLRI Campus by the Staff members of CSIR-CLRI as part of the Swachhata Pakhwada 2026 activities under the theme of “*Ek Ped Maa Ke Naam* (A Tree in the Name of Mother)” was organized on 12 - 13 May, 2026 at the CLRI Campus.



Activities at **CLRI Regional Centre, Kanpur**

As part of *Swachhata Pakhwada 2026*, a cleanliness drive was conducted at the CLRI Regional Centre, Kanpur, on 20 May, 2026.



CSIR-SMART VILLAGE PROJECT



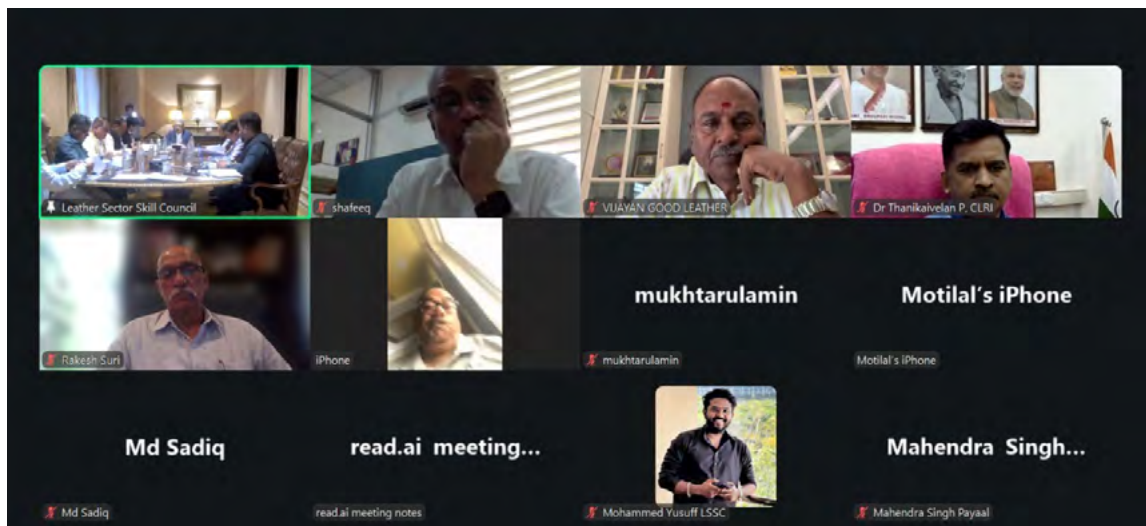
CSIR-CLRI team met Shri Ravi Veer Choudhary, Assistant Director, Office of the Development Commissioner (Handicrafts), Jodhpur, Rajasthan, Ministry of Textiles, Government of India, on 3 May 2026, and briefed the CSIR-SMART village initiative at Swaipura Village, Rajasthan. The meeting focused on recognizing Swaipura village as an artisan cluster, onboarding CSIR-CLRI trainees in upcoming handicrafts programs & trade fairs, and strengthening market linkages for artisans.

CSIR-CLRI at The Leather Sector Skill Council (LSSC)

Dr P Thanikaivelan, Director, CSIR-CLRI, participated in the 37th Governing Council Meeting of the Leather Sector Skill Council (LSSC) held on 5 April 2026 at New Delhi.

Review of Council activities and operations from January to April 2026 was undertaken, along with important strategic discussions for the sector's growth.

Shri Sanjay Leekha, Chairman, LSSC, Shri Atul Kumar Mishra, Interim CEO, LSSC, Shri Mahendra Singh Payal, Chief Program Officer, National Skill Development Corporation (NSDC), and Md Sadiq, Former Chief Scientist, CSIR-CLRI, also participated in the meeting.



Invited Lecture by Dr. D Suresh Kumar at FDDI, Chennai

Dr. D Suresh Kumar, Scientist - D, SPDDC, CSIR-CLRI, to the students of the 2nd and 3rd year B. Des. Footwear Design and Production Department of FDDI, Chennai on 7 May 2026. In his lecture, the importance of colour and trend forecasting in footwear and leather products industry was emphasised. The guest lecture provided valuable insights into the significance of colour theory and trend forecasting in footwear and leather products sector.



Stakeholders' Workshop:

"Carbon Footprint Assessment and Mitigation Strategy"

CLRI Regional Centre, Kanpur, participated in a stakeholders' workshop on "*Carbon Footprint Assessment and Mitigation Strategy for Kanpur (Uttar Pradesh) Leather Cluster*," conducted by Green Tree Global on 20 May 2026. This meet was sponsored by Small Industries Development Bank of India (SIDBI) under its green finance initiatives. Shri Abhinandan Kumar, Scientist-In-Charge, CLRI Regional Centre Kanpur, presented his views at the meet on CBAM and its potential impact on the leather sector. In his presentation, he emphasised the cost competitiveness, indirect carbon exposure and compliance readiness for EU Export.

At the event, the "*CLI-Mate: Carbon Footprint Assessment Tool for Leather Industry*" developed by CSIR-CLRI was also introduced.



Director, CSIR-CLRI visits CETP at Jalandhar

Dr P Thanikaivelan, Director, CSIR-CLRI, on 14 May 2026 visited the 5 Million Litres per Day (MLD) Common Effluent Treatment Plant (CETP) at Jalandhar, Punjab. During his visit, he reviewed the status of the upgradation works at CLRI, Regional Centre Jalandhar, Punjab. He also visited some renowned Sports Goods Industries in the Jalandhar Sports Goods Cluster to understand the various types of sports goods, the usage of leather in these products, and the need for possible technical and R&D support from CSIR-CLRI.



Visit to Traditional Vegetable-tanning and Leather Product-making Groups, Rajasthan

CSIR-CLRI team visited traditional vegetable-tanning and leather product-making groups across Rajasthan, including Pradap Nagar, Bhadwasiya, Bhopalgarh, and Jawaja on 2 May 2026. During the visits, the team engaged with artisans and conducted a comprehensive survey. The primary objective of this activity was to raise awareness of the CSIR-SMART Village project, support the development of a sustainable raw material supply chain, and foster network development among stakeholders.



Visit to Dr. Ambedkar Leather Industrial Co-Operative Society Ltd., Odisha

Dr. M. Sathish, Scientist - D CSIR-CLRI RC Kolkata, visited Dr. Ambedkar Leather Industrial Co-Operative Society Ltd., Jeypore, Odisha, on 11 May 2026 to conduct a survey for a need assessment study. The society engages more than 500 tribal artisans, predominantly women, who collect hides, bones, horns, and other materials from fallen animals. The objective of the feasibility study is to explore technological interventions for value addition to the raw materials collected from fallen animals.



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:

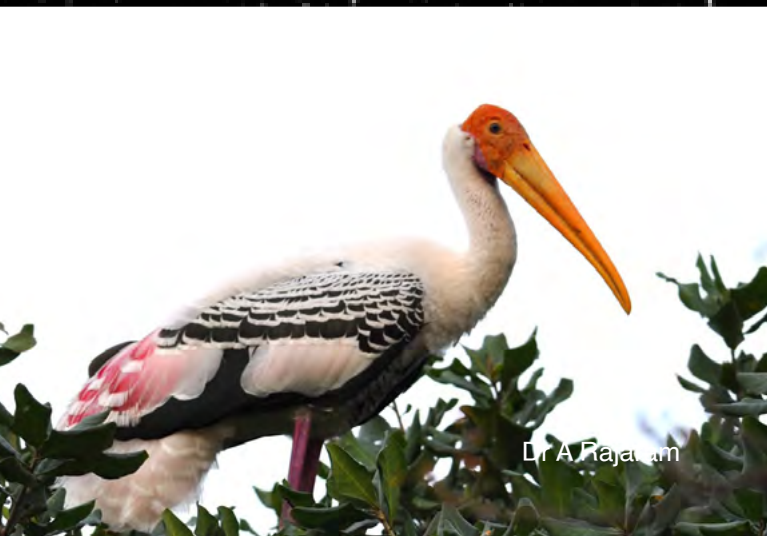
Website : <https://clri.org/training.aspx>

Chennai : +91 44 24437109 / chord@clri.res.in ; Kolkata : +91 33 23292381 / clrikol@clri.res.in ;

Jalandhar : +91 18 12651306 / clrijal@clri.res.in ;

Kanpur : +91 512 2986936 / clrikpr@clri.res.in ; Ahmedabad : +91 79 25840352 / clriahd@clri.res.in





CAMPUS *life* @ *CSTR-CLRI*





CSIR-CLRI



Striving for Excellence and
Global Leadership in Leather Technology

<https://clri.org>

