

The Leather Post

"News that you can use"

CSIR-Central Leather Research Institute



'CSIR-CLRI FORSEES TO BE THE GLOBAL HUB THAT WOULD TRANSFORM THE INDIAN LEATHER INDUSTRY INTO ONE, WHICH IS TECHNOLOGY AND INNOVATION DRIVEN, THUS STEERING INDIA TO BE THE GLOBAL LEADER IN LEATHER.'

3 6 5

Dr B Chandrasekaran, Director, CSIR-CLRI
"One-year of successful completion in Office as Director, CSIR-CLRI"

One Revolution



Dr B Chandrasekaran,
Director, CSIR-CLRI

Dear Doyens and Members of the Indian Leather Fraternity; Mentors and Teachers, Colleagues and Friends!

It gives us great pleasure in sending you our February 2017 edition of The LEATHER POST.

As you read this edition of The Leather Post, I would have completed one revolution as Director of CSIR-CLRI for which I remain indebted to all of you for your unstinted support and kind co-operation. A remarkable journey together!

We witnessed a number of events associated with INDIA LEATHER WEEK 2017. There was an air of positivity and optimism. There are priorities and many of them are very urgent in nature. CSIR-CLRI is parallelly handling them with kid gloves.

On the home front, infrastructure development is TOP PRIORITY and we hope to change the face of CSIR-CLRI quickly.

We will strive to make this magazine informative and interesting and welcome your feedback for improvement.

24th February 2017

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India International Leather Fair 2017

'A RESOUNDING SUCCESS'



Featuring an overview of a greener leather sector, the Theme Pavilion titled 'Enabling Leather' was co-ordinated by ITPO, CLE, CSIR-CLRI. The theme remained extremely meaningful in propagating the eco-friendly concern of Indian Leather Industry, new trends and forecast for MODEUROP Summer 2018 Fashion collections.

An exclusive fashion show was organized by FDDI with the support of ITPO highlighted an impressive collection of designs of the upcoming student designers.

At the Inauguration of IILF 2017

IILF is a Magnum Opus- the largest convergence of leather fraternity in the South Asia Region, opined Shri Jayanata Das, General Manager, ITPO.

In his welcome address, he said that IILF was the flagship event of ITPO here in Chennai. IILF is now accredited by UFI and Chennai is now on the global scenario of leather trade map & hence can gain best marketing experience. IILF provides a reliable and tested platform for SME's. This Fair reflects the determination to showcase the Indian Leather Industry.

'Presentation on Indian Leather Industry' Shri Muktharul Amin, Chairman, CLE emphasized that the time has come to make the Gaint Leap forward, to ensure optimum utilization of our raw material and labour strength, to fully tap the un-explored markets, to use cutting-edge technologies and design to increase production and productivity, to attract more overseas investments and above all, to increase our overall market share in India and abroad. To achieve this, we need to bring-in certain fundamental changes in our approach, aided by appropriate policies and schemes which will help in achieving large scale sustainable growth. Our focus in the coming months would be to concentrate on penetration in the largest market of USA. The Council for Leather Exports has already engaged consultants who will help in fixing-up direct buyer appointments in USA. We will also take sustained measures to tap the huge market potential in Russia, Japan and African countries through continuous engagement with the overseas missions and respective industry associations. In conclusion, he said that the immediate task ahead is to achieve overall positive growth in exports and bring the exports back to double digit growth momentum and also achieve significant growth levels in the domestic

After attracting a large number of business visitors from India and overseas, the flagship event of the India Trade Promotion Organisation (ITPO) and Indian Leather Industry, India International Leather Fair 2017 (February 1-3) concluded on a successful note at Chennai Trade Centre, Chennai, Tamilnadu, on 3rd February 2017

Significantly, the fair is approved by the Union des Foires Internationales (UFI) - the Global Association of the Exhibition Industry. The fair was organized by ITPO with support of CLE, CSIR- CLRI, ISF, IFLMEA, FDDI, AFCAMMI and IFCOMA.

Approximately, 15,000 business visitors visited this three- day specialized event which highlighted the latest trends of the leather industry as well as quality products with new colours and forecasts. According to the preliminary reports, brisk business, collaborations and joint ventures were reported in different stalls. The visit of foreign visitors includes Australia, Bangladesh, Brazil, China, Colombia, France, Germany, Italy, Lithuania, New Zealand, Portugal, Russia, Saudi Arabia, Sri Lanka, Spain, Switzerland, Taiwan, Thailand, Netherlands, Turkey, UAE and UK.

Out of 450 companies from India and 23 countries, most of the participants have evinced their keen interest to participate again in the next edition of IILF Chennai (February 1-3, 2018).

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market. I hope that with all our efforts and the support of the Government, we will be able to achieve the envisaged sustainable growth levels and targets under Make in India.

“Momentous journey shaping the most prestigious event of the industry over the last three decades.” Smt. Shubra Singh, Executive Director, ITPO.

A high potential market that makes Tamil Nadu a great destination for investment under ‘Make in India’ programme. Shared that good news ITPO Board has approved the expansion of Chennai Trade Centre.

‘Opportunity to share New Developments in Leather’ Thiru K.C. Karupanan Honorable minister of Environment and Pollution Control In his very dynamic speech at the inauguration of IILF 2017, the Honorable Minister stated that with the blessings of the former Chief Minister Late J. Jayalalitha Amma, the government would continue to support the 200 year old industry here in Tamil Nadu.

A highly employment oriented industry, the Leather Industry of Tamil Nadu was ahead of other regions, he said. He urged the Industry to be a responsible industry and take continued measures to make it a green industry.

Enabling LEATHER Theme Pavilion at IILF 2017

A joint endeavour of ITPO | CLE | CSIR-CLRI



Partners in Progress: Alina Private Limited; AV Thomas Leather & Allied Products Limited; AXA Leather Group; Arkay Leathers Pvt Ltd., Ayyappa Enterprises; C Kalyanam & Co., Chennai Leather Fashions; Drish Shoes Limited; Forward Group; Good Leather Group; Genuine Leathers; KH Exports India Pvt Ltd., Mathi Leathers; PA Footwear; Pakkar Leathers; Ramjee Leather Fashions; Shafeeq Shameel Group; Shoeberry; Sura Leathers; Tata International Limited.

“Enabling Leather” traces the growth of the unique partnership between ITPO, CLE and CSIR-CLRI required for the sustainable development of the Indian Leather Industry.

That the Leather Industry has grown from exporting about Rs 800 lakh worth of raw hides/ skins and semi-finished leather in 1944-45 to US\$ 5854 million in 2015-16 has to be attributed to the technologies imbibed by this Industry. The transition to an industry manufacturing high quality leather and customer-desired products has not been easy.

Several paradigm changes had to be adopted bringing in sustainability and value addition. The trinity partnership between ITPO, CLE and CSIR-CLRI has enabled sustainable development of the leather industry. India International Leather Fair (IILF) plays an important role in these linkages.

Enabling Leather: Theme Pavilion at IILF 2017 focuses on

1. Shift towards Sports Footwear: To “strengthen India’s Sports footwear segment technologically and otherwise such that the vision of Hon’ble Prime Minister of India in sporting Nation could be realized sooner than later”.
2. New Dimensions in Children’s Shoes: The Children’s feet grow at a rapid rate thus necessitating a frequent change in footwear to accommodate this foot growth. In order to provide correct fitting shoes for them it is essential to gather reliable foot dimensions of children which was done through a ‘digital capture’ of the foot images.
3. Bringing paradigm shift from Don’t to Do Ecology: Technologies for reduction or elimination of chrome discharge in tannery waste waters. Demonstration of Waterless Chrome Tanning Technology.
4. Fashion Forecasting for Leather: Presentation of MODEUROP Leathers & Colours for the Spring Summer 2018 season.



Release of ‘happenings’ daily newsletter co-ordinated by CSIR-CLRI on all four days of IILF 2017



CLE’s Export Award 2017 ‘Top Winners’



Discerning visitors at the Theme Pavilion



CSIR-CLRI at 2nd Designers Fair 2017

2nd DESIGNERS FAIR
HOTEL ITC GRAND CHOLA | CHENNAI
Feb, 1-3
2017



CSIR-CLRI

at **LEATHER FASHION SHOW 2017**

"India's footprints into European Fashion": A "Made in India" achievement!

CSIR-CLRI presented the Leathers & Colours for MODEUROP Spring Summer 2018 season

MODEUROP has chosen titles for the three colour groupings that already allude to the materials and their character.

- ORIGINAL**: Colours inspired by Nature and Life!
- ARTIFICIAL**: Fashion Colours made for the Future!
- MAGICAL**: Welcome to Planet FANTASY!



CSIR-CLRI wins CLE's 'Best Shoe Design Award for Year 2017 jointly with KETHINI for its range of Ladies Comfort Sandals
Shri K Dayalan, India Fashion Studio, CSIR-CLRI receives the Award



XXXIV IULTCS Congress 2017 discusses **Leather - What's in Store for the Future?**



34th IULTCS, Shri NR Jagannathan, Working President, 34th IULTCS and Dr N K Chandrababu, Congress Convenor, 34th IULTCS, into the Hall amidst a rousing ovation. As the excitement subsided and the delegates settled down in their seats, Dr. B. Chandrasekaran, greeted the gathering. His warm words of welcome were followed by the lighting of the 'Kuthuvilakku' (Indian traditional lamp) by the dignitaries on the dais. This set the pace for the events to begin. The first was the play-back of the video recordings, the inspiring messages about the Congress by each of the above dignitaries. Dr. Dietrich Tegtmeier, Dr Campbell Page and Shri Ramesh Kumar, IAS added great value and thrust with their live speeches. Dr. Dietrich Tegtmeier later introduced Dr Mariliz Gutterres, IULTCS merit awardee followed by the latter's acceptance speech. Finally, Shri Arnab Jha proposed vote of thanks. The event concluded with the national anthem.



The 34th IULTCS Congress was inaugurated on 6th February, 2017 with the ceremonial parade at the Rajendra Hall, ITC Grand Chola, Chennai. As the IULTCS anthem began playing, Dr Dietrich Tegtmeier (President-IULTCS), carrying the IULTCS flag led, the procession of celebrities comprising Dr. T. Ramasami (Congress President), Shri M Rafeeq Ahmed (Chief Patron), Shri Mukhtarul Amin, Shri P R Aqeel Ahmed, Shri N Shafeeq Ahmed, Shri M Israr Ahmed (Guests of Honor), Dr B Chandrasekaran, Director CSIR-CLRI, Shri Arnab Jha, President ILTA, Dr Campbell Page, Secretary IULTCS, Dr S Rajamani, Working President,



Nature's Marvel

Leather lives longer than the skin does and imbibes the characteristics of the nature's architectural marvel. Leather manufacturing is one of the earliest activities of mankind and yet it is one of the most traded commodities in the world today, commanding a global annual turnover of about 200 billion US\$. Leather and leather products sectors are people-intensive and therefore it provides significant employment that facilitates inclusive growth. The theme of this 34th IULTCS being 'Science and Technology for Sustainability of Leather', this article attempts to prognosticate the future of leather industry and trade that aspires to attain sustainability.

Environmental Footprint

Though leather industry is known to be one of the key sectors boosting the development, it is also recognized as a major polluting industry. The importers of finished leathers in the past had been concerned much about the quality of the leathers. The requirements and expectations have been inflated. In the recent past the consumers have been concerned about how friendly the leather would be to the user. Today, they are not only concerned how the leathers they buy are, and whether these would be precarious or not, but the way they are made. The consumers of the future will certainly prefer the leather products that would be manufactured with a minimum damage to the environment and adhering to the social norms. In a way, Indian tanners are forerunners in the pursuit of environmental protection. In this part of the country (Tamilnadu), Zero wastewater discharge has been mandated by the court of law. The other parts of the country have also been exploring the possibilities of attaining zero wastewater discharge through different means. They have taken a position that without the practice of all possible in-process pollution reduction measures, it would seldom be possible to attain sustainability solely through end-of-pipe treatment. The future course will be the preparation of 'cluster-specific sustainability road map'. And sustainability programs will be developed and implemented as per the roadmap. It is envisaged that it would not only happen in India but also in all the developing countries in the coming decade.

Is it Leather or not?

Over the decades, there has been a tremendous raise in the use of non-leather materials for the manufacturing of footwear and other life style products. The advancement in the area of non-leather materials is such that it has become hard even for leather technologists, to distinguish non-leather from leather. Whether non-leather materials are competing with or complementing leather? We need to recognize that the increasing global demand cannot be met solely by leather. Therefore, use of non-leather materials is inevitable to fill the gap, and eventually leather will find a way to niche segments with greater scope for higher value realization. Already there

has been a shift from leather being used extensively for footwear manufacturing to the manufacturing of high-end products such as upholstery. Therefore, leather will become a material for the manufacture of niche products of higher value. Hence, there will not be much demand for leathers made from low-grade hides and skins. The low-grade hides and skins may not be used for leather production but will be used for the production of high-value protein based materials. This trend may break the millennium old scenario of 'one product - one raw material' to a possibility of 'many products - one raw material' case.

New Age Tannery

Mahatma Gandhi in 1938 recognized the untapped opportunity for value addition and employment generation because of the export of raw hides and skins. Today, Mahatma Gandhi's dream of tapping the opportunity and value addition is being realized. Nevertheless, the value addition has been happening, the question, 'Has the value addition reached the ultimatum?' needs to be answered. There are so many avenues that could be explored for still enhancing the proportion of value addition. One of such avenues could be an integrated approach of utilization of skin and hide. The 'New Age Tannery' may not be akin to what it is today. The tannery of the future, either by self or through conglomeration would explore all the possibilities to generate revenue from all the components of the raw hides and skins. The establishment of new age tanneries should be geared up in utilizing the proteinous hides and skins to the fullest. The new age tannery in a nutshell shall produce various products along with leather putting to use all the skin components. This will result in reaping increased financial returns while minimizing the inputs. Starting from trimming of raw materials (hides/skins), one of the first steps in leather manufacture, to the buffing dust, valuable proteins are lost in the form of solid wastes. Presently, not only these valuable materials are wastes but resources are further spent upon these ensuring secured disposal. There is a greater opportunity in tapping these solid wastes for making high-value products such as collagen, gelatin and moderate-value product protein hydrolysates for poultry feed, fertilizers and protein fillers. These value generation opportunities can offset the costs associated with the sustainable environmental management.

Smart Leather Products

Leather has the imminent need to break the convention and come out from the classical tag, both leather and its products have to become functionally smart and need to fit in for newer applications. Newer design and technology interventions in leather products might pave way for fulfilling value added requirements such as 'footcare' for healthy living instead of 'footwear'. This article is written jointly by Dr B Madhan, Principal Scientist and Dr B Chandrasekarn, Director, CLRI.



Eminent Speakers at XXXIV IULTCS 2017 and their Topics

Heidemann Lecture 2017:
Probing collagen structure and function
John A M Ramshaw, Melbourne, Australia

Fundamentals of leather science
Anthony Covington, Northampton, United Kingdom

Tanning strategies for sustainable leather production
Heinz-Peter Germann, Reutlingen, Germany

Waste to wealth approach: Adhesive from the unused goat head skin
Md. Abulhashem, Khulna, Bangladesh

Fabrication of Antibacterial Casein-based ZnO Nanocomposite for Leather Finishes through in situ Route
Wang Yanan*, Ma Jianzhong, Xu Qunna Xi'an, China

Ionic Liquids: New age "designer" chemicals for leather processing
N Nishad Fathima, Chennai, India

A New Age Chromium-Melamine Syntan : Towards Quality Upgradation of Lower - end Raw Materials
M Sathish, Chennai, India

Novel surfactants – in Leather Processing
V Vijayabaskar, Chennai, India

Tanning with a Gallic extract in combination with a cationic ester for the production of high performance leathers
Eric Poles, San Michele Mondovì (CN) Italy

Study of the variation of chromium VI content inside the leather
Jean-Claude Cannot, Villeurbanne, France

Intelligent real time leather defect detection system using image processing technique
Malathy Jawahar, Chennai, India

Analysis of characteristic odor compounds in leather by GC-MS and GC-Olfactometry
Hirohiko Washiya, Hyogo, Japan

Method for determining the optimized exhaustion of fat liquors to minimize the ETP-inflow
Dirick von Behr, Nijverheidslaan, Weesp

Artificially induced collagen fibril orientation affects tear propagation in leather
S J Kelly, Palmerston North, New Zealand

Chrome-free Tannage : Suede Garment Leathers from Rural Vegetable Sheep Crust Leathers
Ali Elnaeim Musa, Khartoum, Sudan

Effect of binder selection on topcoat property retention after accelerated weathering
Joseph Hoefler, Colledgeville, USA

Advances in Bio-based Polyurethanes for leather finishing
Michael Costello, Director of Sustainability at Stahl

Enzymatic unhairing: Permeability assay of bovine skin epidermis with fungal enzyme extracts
Galarza Betina, Gonnet, Argentina

Preparation and characteristics of surface modified PAN fiber by collagen protein
Ding Zhiwen, Beijing, China

Study on the Recycling Technology of Unhairing-Liming and Tanning Wastewater
Li-qiang Jin Shangqiu, China

Different pre-treatments of chrome tanned leather waste and their use in the biogas production
Carolina Gomes, Freiberg, Germany

Formaldehyde and Acetaldehyde on Leather: Similarities and Discrepancies
Jochen Ammann, Ludwigshafen, German

Redefining Chrome Tanning: A waterless approach
P Thanikaivelan, Chennai, India

Concept of Sustainability: Looking Forward
Anne Lama Northampton, United Kingdom

The elimination of effluent from liming, acid /salt pickling, and chromium tanning, verified by five years high-volume wet blue leather manufacture
Richard Daniels, Shangqiu City, China

Probiotic solutions for sustainable leather
Juan-Carlos Castell, Kansas City, USA

Green bio-polymers for eco-friendly leather
Dr. Valentina Beghetto

Controlling emission in leather production: How can we make a difference?
Jürgen Christner, Basel, Switzerland

Clean Salt recovery and water recycling using Nanofiltration and Reverse Osmosis
Wolfram Scholz, Vienna, Austria

Biodecolorization and biotreatment of leather dyes from aqueous solution and dyecontaining effluents by native white-rot fungi strains
Santiago Ortiz-Monsalve, Porto Alegre-RS, Brazil

Novel formaldehyde scavenger containing active methylene for efficient removal of formaldehyde in leather
Ting Zhang, Xi'an, Shaanxi, China

Analysis of flow and energy aspects of zero liquid discharge (ZLD) technology in treatment of tannery effluents in Tamil Nadu, India
Jakov Buljan

Studies on simultaneous removal of nitrogen and organic carbon from tannery wastewater using Airlift sequencing batch reactor
Aysanew Gorems Melesse, Addis Ababa Ethiopia

Microbial fuel cell a novel technology for effluent treatment and electrical energy generation
P Divyalakshmi, Chennai, India

Technological developments for total dissolved solids (TDS) management and environmental sustainability in asian leather sector
S Rajamani, Chennai, India

New Dimensions in Children's Shoes
Md Sadiq, Chennai, INDIA

Dynamic plantar pressure analysis of persons with diabetes: an approach to improve the design of therapeutic footwear
G SathishBabu, Chennai, India

Reduction of skin disorders by HCHO in leather products
Daisuke Murai, Osaka, JAPAN

Comparision of Visual Asorting Process and Spectral Photo meter Usage in Leather Apparel Production
Mehmet Mete Mutlu, Izmir, Turkey

E-learning and Blended Training in the Leather Professional Education
Ivan Král, Vienna, Austria

Coopetition in leather engineering education - a strategy for a win-win situation for concerned stakeholders
Sayed Sadulla, Chennai-600020 India

Role of CSIR-CLRI in Skill India initiative: enriching primary level human resource through artisanal skill development
B Kanimozhi, Chennai, India

Indo-Ethiopian Alliance for Transformation of Ethiopian Leather Sector
Wondu Legesse, Addis Ababa, Ethiopia

Development of an International Proficiency Testing by Inter laboratory Comparison Applied to Physical and Chemical Test Methods for Mineral Tanned Leather
Carlos Amador Meza Moya, Guanajuato. México

For more information on XXXIV IULTCS Congress, video clips and photos, please visit <http://iultcs2017.org/>





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Congress 2017

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Congratulations !!!
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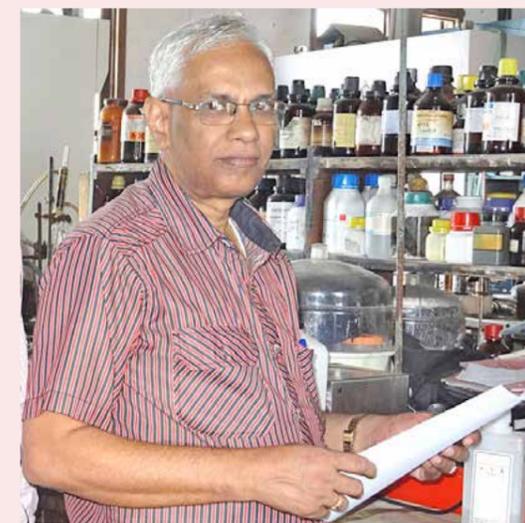
Dr. Md. Sayem Alam, Scientist,
 CSIR-Central Leather Research Institute, Chennai, India

**For the prestigious Young Scientist
 Award for 2017**

**Chemical Sciences
 (Saraswathy Srinivasan Prize)**
 The Academy of Sciences, Chennai



Dr. Md. Sayem Alam is a Scientist in Polymer Science & Technology, CSIR-Central Leather Research Institute (CSIR-CLRI), Chennai, India. He received Ph.D. in Chemistry from Aligarh Muslim University, Aligarh, India. He has made several important contributions to the understanding of micellar systems. He has a broad range of scientific interest right from R&D and Industrial Developments. His contributions to surface and colloid sciences are valuable and noteworthy. He is a scientist with a strong commitment to the cause of his profession, particularly, in the field of Colloids & Surface Sciences/Physical Chemistry/Biophysical Chemistry. He is author of over 50 publications in refereed journals, which have attracted more than 1200 citations (h-index = 25). He has 2 patents to his credit. He is an Honorary Assistant Professor of Academy of Scientific and Innovative Research (AcSIR), New Delhi, Anna University, and University of Madras, Chennai, India. He is a member of several professional, scientific and academic bodies.



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**“There are many new avenues
 such as specialty polymers
 with respect to Leather
 applications”**

Dr N Somanathan

Senior Principal Scientist, Polymer Laboratory, CSIR-CLRI who retires on 28th February 2017 after almost four decades of service, says that the “Legacy that has been created in the Polymer Lab has to be continued for country’s development. He added that there are many new avenues such as specialty polymers with respect to leather applications



His colleague,
Dr N Jaishankar
 stated that the Polymer Lab colleagues have enjoyed some of his experiences. Dr Somanathan is a very motivating person, he said.

Training Program on Science Technology and Innovation Policy for SAARC countries jointly organized by UNESCO, DST & Zaheer Science Foundation

13-17 February, 2017

A training program cum workshop on Science and Technology Policy was held from 13th-17th February, 2017 organized by Zaheer Science Foundation in collaboration with UNESCO for SAARC countries. The program was held at Indian National Science Academy (INSA), New Delhi. The program was supported by Department of Science and Technology, (DST) and UNESCO. The program covered large gamut of Science, Technology and Innovation Policy; Economics of Industrial Innovation; National Innovation System; International Technology Transfer; R&D Management; Technology Forecasting and Assessment; Information and Communication Technology (ICT); and Climate Change and Environment Issues. A large number of resource persons from South Asia, Southeast Asia, Europe and America gave lectures and interacted with the participants. Indian Faculty also made their contribution on different topics related to Science and Technology Policy.



Dr B Chandrasekaran, Director CSIR-CLRI presented at Workshop on Science, Technology and Innovation Policy for SAARC countries organized jointly by Zaheer Science Foundation and UNESCO at INSA, New Delhi on 14th Feb 2017



“Translating from Leather Research to Glass & Ceramic”

Prof Dr AB Mandal

INAE Distinguished Professor, CSIR-CGCRI & former Director, CSIR-CLRI Also Additional Editor for Journal of Surface Science & Technology, CGCRI

Prof Dr AB Mandal who was here in Chennai recently to participate at the XXXIV IULTCS Congress 2017 and had visited the Institute shared some of his work at CSIR-CGCRI.

Dr Mandals' current work is in the area of water purification by using Nano Materials | Ceramic Glass. His long cherished dream even as a Task Force Committee Member of CSIR-CGCRI, he said. Dr Mandal is extremely happy that he could now take up this work.

High temperatures are not essential for nano materials is the current finding of his work. Some part of this work has also been supported by CSIR-CLRI Scientists said Dr Mandal. He was hoping for positive

results. The work has also been published in a recent Times of India article. The mix of silicon, glass and a lubricant gives excellent result that is best suited for manufacture of CONTACT LENS.

He also mentioned about his future work that would cover shoe soles as well as for Tanning purposes. Dr Mandal expressed joy over the fine organization of XXXIV IULTCS 2017 as well as the quality of papers presented. He exhorted younger colleagues in CSIR-CLRI to keep the flag of CSIR-CLRI flying high!

“SHOWCASE” MODEUROP

Autumn Winter 18/19 season

CSIR-CLRI | CLE | ISF | IFLMEA endeavour in association with

Arihant Dyechem | BASF India Ltd | Colourfast | Colorants | Colourtex | Pure Chemicals | Stahl India Ltd

“Smile for Colours!”

The Stories for MODEUROP Autumn Winter 18/19 season are:

Performance: A mix of Retro Sport and Future, and a Little Bit of Folk as well.

Passion: Rich and dark. Diva & sophistication. Luxury and Mystery.

Reflection: Metallics with Patina. Between Gold and Silver, Bronze, Platinum and Copper!



(In picture: Team MODEUROP meeting in Stuttgart on 16th February 2017 to ready the first look of colours for the MODEUROP Autumn Winter 18/19 season)



The 400 plus leather / colour proposals being developed by 20 Tanners would be showcased in CSIR-CLRI Shoe & Product Design Centre on Thursday, 9th March 2017 between 9.30 am and 11.00 am.

The MODEUROP Roundtable and Colour Club Meeting for the season will be held in Pirmasens during 29-30 March 2017.

Director's Blog

19 February 2017! It looks like yesterday but it's one year! 365 Days! I wanted to take stock of what has happened in this last one year ever since I have assumed office. But one things is sure “miles to go before I can take leave.”

Transfer of some milestone technologies including waterless chrome tanning, dry tanning, bio glue, Hi grade collagen for wound healing, Chrome-Melamine syntan and many more has put CLRI into next level. Recently concluded 34th IULTCS has been acclaimed one of the best ever conducted seminar. My heartiest congratulations to team-CLRI for making this happen.

I am looking forward to more rewarding outcomes in the coming days. I am able to see that industry is looking forward to CLRI to deliver towards sustainability of the sector. Kanpur sector will be our focus along with other regions as well. This is the golden opportunity for everyone of us to rise to the occasion and prove our mettle. We need to plan ahead to improve our productivity and deliverables.

CSIR has drawn clear mandates for all of us. Social and industry relevance are the order of the day. I shall soon convene meeting of all the area leaders. I am expecting a business plan for the next two years from every area where I expect defined deliverables for every one in the group. Performance appraisal would be purely based on those deliverables.

While R&D remains our major priority, infrastructure development also gain significance. It is imperative that our campus and all the facilities are given a facelift to match International standards. Coming April we will be entering into 70th year of our establishment. There is a strong need to strengthen our RECDs also to meet the growing demands of the sector.

Every group, Admin and Scientific, need to work together for realising the organisational goals. Let's join hands to make CLRI as No. 1 laboratory of CSIR.

Mr Darren Knight of the Quality Services team at SATRA in CSIR-CLRI on 16th & 17th February 2017 to begin the arrangements for the annual audit of the CSIR-CLRI Physical Testing laboratory for 2017



For details of Testing Charges, please visit
<http://www.clri.org/Admin/TestingCharges-CATERS.pdf>

INDIAN LEATHER INDUSTRY - STRIDING WITH CONFIDENCE



COUNCIL FOR LEATHER EXPORTS

(An Export Promotion Organisation sponsored by Ministry of Commerce & Industry, Govt. of India)

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CLRI's Experiences in Africa

A Case Study
Presented by **Dr B Chandrasekaran,**
Director, CSIR-CLRI

At the one-day Workshop on **"Indo African Trade Cooperation in the Leather Sector"** organized by Council for Leather Exports in Hotel Shangri-La, New Delhi on 14th February, 2017.

In order to promote export of leather and leather products (with focus on Footwear segment) to the African Countries, Council for Leather Exports organized a one-day Workshop in New Delhi with the diplomats and counselors of the Missions of African Countries in India on 14th February, 2017. CLE also organized 'display of products' by around 25-30 Indian exporters of leather and leather products at the meeting venue. Even though India is exporting leather and leather products to most of the 51 African countries, South Africa, Morocco, Algeria, Ethiopia and Egypt, are our top 5 importers.

TECHNOLOGY UPGRADATION OF ETHIOPIAN LEATHER SECTOR

Benchmarking of Ethiopia Tanning Sector

In 2010 and 2011, CLRI conducted a technology upgradation programme for tanneries in Ethiopia leading to Govt. of Ethiopia adopting value addition in leather sector.

Objectives of Benchmarking

Transforming the Ethiopian Leather Sector through

- Implementation of technology up gradation program (Benchmarking) in the selected tanneries to achieve global competitiveness in the production of finished leathers
- Development of systems in the respective tanneries for continual improvement and sustaining the growth.



"We are aware of the fact that CLRI has been working with a few African Countries, including Ethiopia, South Africa, Kenya etc. on various Projects. It is a matter pride for all of us that the African Countries are acknowledging our technical expertise for further developing their value added product segments. It is also very interesting that a few Indian companies had already established their own tanneries for sourcing leather from the Countries like Ethiopia. Keeping in view all these developments, the prospects for increased cooperation with African Countries in the leather sector is very high." ...Shri Mukhtarul Amin, Chairman, Council for Leather Exports

Aspects considered in gap analysis

- Materials
- Man power – Skill and discipline
- Machine including maintenance
- Technology know-how
- Quality of the products
- Quality/process control system
- Production system and practices
- ETP and
- Safety aspects

Various Action Modules

- System Development Efforts
- Product Development including upgradation of lower end
- Training and Capacity building
- Documentation and manual
- Maintenance Management system
- Environment Management System Development

Twinning Project for Leather Industry Development Institute (LIDI) of Ethiopia by CSIR-CLRI Overview of Twinning

Objectives of Twinning

- Creating and providing intellectual and skilled manpower to cater to the requirements of the Institute and industry
- Providing technical support in all the spheres of leather and leather product sectors
- Providing services to the industry such as testing, certification and establishing norms or standards
- Forecasting the global market dynamics and preparing the Ethiopian leather and leather products sectors to meet the changing requirements
- Creating functional tripartite linkage among the Academy, R&D/laboratories and industry to start real time activities in research and training during the twinning period.

Significant outcomes of Twinning

- Establishing QMS system with organisational restructuring of LIDI
- Strengthening of academic programs of LIDI with AAiT through a tripartite agreement for B.Sc., M.Sc. and Ph.D.
- Training of about 100 technical personnel from LIDI for various short, medium and long term programs in select areas including M.Sc. and Ph.D. programs (35 Nos.)
- Modernising TVET curriculum for leather, footwear, goods & garments and preparation of detailed learning outcomes for Level 1 to 4. CLRI & FDDI have jointly contributed to this important exercise, which would pave way for generating quality manpower for the manufacturing sector.
- Joint R & D initiatives to enhance the capabilities of LIDI carrying out developmental activities for leather and environment.
- Enabling organisational functions of LIDI through interventions in IT and Management activities.
- Joint industrial consultancy programs in leather and products area in solving problems of the leather sector and enabling the sector through value addition and employment generation leading to increased export realisation.
- Success stories of this endeavour have resulted in making this as a model program for the country so that other industries such textile, metal, food, pharma & chemical also take up similar initiatives for capacitating their sector.

TWINNING II

- Twinning could bring about significant capacitation of LIDI with which LIDI could now perform R&D activities, consultancy activities, academic programs and skill development program.
- However, LIDI to reach the pinnacle multiplication of capacitation of LIDI on a broad basis needs to be carried out. The following areas have been identified for further broad based capacity ensuring.

- B.Sc. Program in leather technology
- Ph.D. for LIDI personnel
- M.Sc. program in leather technology
- Collaborative Research in Leather technology and Materials
- Technology Development & Transfer
- Environment Engineering and Technology
- Consultancy and Skill Development

Preparation of Master Plan for the Development of Leather Sector of Kenya

Scope of Work

- Preparation of Master Plan for the Development of Leather Sector of Kenya
- Detailed report for the establishment of Integrated Leather Park comprising Leather and Product Sector with ETP
- Establishment of Leather product Training Centre covering Footwear, Leather Goods and Garments
- Providing Policy Direction for driving the growth of Kenyan Leather Sector
- Revamping Curriculum and Syllabus for Academic Programs
- Assistance in carrying out survey for collection of baseline data
- Live stock population, Raw Material production & Availability, Leather & products- production & consumption

CLRI for PAN AFRICA

- Ethiopia: Technology upgradation of tanneries and institutional capacity building
- Kenya: Institution building and policy directions for the leather sector
- Botswana: Undertaking validation study on the viability of leather Industry Park
- South Africa/Sudan/Tanzania: Technology upgradation and institutional building



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