"CSIR-CLRI & CSIR-NEIST in the Enhancement of Economic & Societal Status of Rural populace of North-East, India"
Dear Doyens and Members of the Indian Leather Fraternity, Colleagues from CSIR and Friends! It gives us great pleasure in sending you our November 2019 edition of The LEATHER POST.

Firstly, I wish to congratulate all the Export Award Winners of the Council for Leather Exports. Your contribution to the Indian Economy is greatly appreciated. I must add that despite the global slowdown, we have done well. There is an urgent need for evaluation of our materials and manufacturing systems. CSIR-CLRI reassures you of our fullest cooperation at all times.

I congratulate Dr L Suguna for winning the Dr C R Krishnamurthy Memorial Award 2019. Through JIGYASA, the various dimensions of Science and Technology and its utility for Development of the Society is being reached out to the young minds at school levels and Team CLRI is doing a yeomen job. We are constantly reaching out to the rural areas as well making all efforts in the enhancement of Economic & Societal Status of Rural populace of North-East and you will find some very interesting information on our work here in this edition.

I also wish to report that the CSIR-CLRI training courses under Skill Development Programmes is now accredited.

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

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Dr (Smt) L Suguna, Scientist
CSIR-Central Leather Research Institute
conferred with
Dr C R Krishnamurthy Memorial Award 2019

In recognition of her significant contributions for the advancement of Biomedical Sciences, Dr L Suguna, Scientist, CSIR-Central Leather Research Institute (CSIR-CLRI) was conferred with Dr C R Krishnamurthy Memorial Award 2019 on the occasion of the Inaugural Ceremony of the 40th Annual Conference of Indian Association of Biomedical Scientists (IABMS) held on 31st October 2019 at Chettinad Health City, Chennai.

This award is given for a biomedical scientist of eminence in the field of Environmental Toxicology / Environmental Biology with proven academic and research contribution and having not less than 25 years of professional standing.
“Enhancement of Economic and Social Status of Rural Populace of North East India”

Report on Training programme conducted on Development of combination products under CSIR-HARIT Project during 30th September 2019 to 19th October 2019 at Ningthoukhong, Bishnupur District, Manipur.

Preamble
CSIR proposed a project “CSIR-HARIT” - Harnessing Appropriate Rural Interventions and Technologies (CSIR-HARIT) Programme to focus on enhancing income generation and improvement in quality of lives of rural communities, thus catalyzing and bringing socio-economic development through CSIR interventions/technologies.

The programme was inaugurated on 16th July 2019 by Shri. Karam Shyam, Hon’ble Minister, Revenue, CAF&PD, Manipur who touched upon various benefits of the training programme and the long prospect/advantages for the trainees.

A four-day training programme was also organised on novel products based on Ethnic designs & Fabrics of NE India in collaboration with NEIST, Jorhat There were around 50 trainees who enrolled for the training programme. Out of the 50 trainees only 10 trainees possessed some skill in the product making. All the others were fresher’s. The four-day training programme was intended to give awareness to the already trained candidates in product making and introduction of combination products already designed and developed by CSIR-CLRI in other programmes. So ten candidates were selected for this training programme.
Mr. Herojit, an enthusiastic young individual who aspires to become an entrepreneur, is a native of Bishnupur district, Manipur. He had expressed keen interest in conducting a training programme in the district of Bishnupur, Manipur. He promised to mobilise 20-30 persons for product manufacturing in his locality. Mr. Herojit will mobilise candidates and will provide any compensation of wages/stipend to the candidates. He will provide the machines required for the training programme, which will be useful for the trainees.

The Training Programme
The first training programme was organized at Ningthoukhong, Bishnupur District, Manipur from 30th September 2019 to 19th October 2019. 25 candidates out of whom 24 were female candidates attended the training candidate.

The brief schedule of training conducted is as follows:
• Introduction to leather product manufacturing
• Product development process
• Introduction to tools and equipment used in leather product manufacturing
• Cutting practice in paper & chart paper and pattern preparation
• Introduction to materials such as leather, lining, ethnic textile material, reinforcement, synthetic and other material used in leather product manufacturing
  • Introduction to fittings & fasteners
  • Introduction to table work operations
    o Assembling
    o Pre closing and Closin
      o Construction methods
      o Finishing
  • Product development
    o Coin pouch
    o Tote bags
    o File folder
    o Ladies clutch purse
  • Costing of the products manufactured

Through this CSIR HARIT programme, we intend to create jobs and entrepreneurs. We also intend to motivate the self-help groups formed to create start-ups in their region. The possibility of the products being marketed in showrooms and in an online portal is also envisaged. This would enhance the revenue generation and livelihood of the northeastern people, which will enhance their socio-economic status. This might result in lesser migration of the northeastern population in search of jobs to other states.
“Initiatives for promotion of Entrepreneurship”

Report on visit of officials from Maharashtra Centre for Entrepreneurship Development (MCED), Maharashtra and joint activities for promotion of Entrepreneurship

Maharashtra Centre for Entrepreneurship Development (MCED) is an autonomous society working under Directorate of Industries, Govt. of Maharashtra and is an ISO 9001: 2015 certified organization. MCED has been a pioneer in espousing social and economic entrepreneurship since 1988. It is a training institute in the core area of entrepreneurship development. With this rich experience, MCED is planning to provide sector specific training (Technical Entrepreneurship Development Programmes) in leather and leather products to budding and existing entrepreneurs in collaboration with CSIR-CLRI where the training duration will range from 15 to 60 days.

Thus, MCED has approached CSIR-CLRI to discuss about the training programmes pertaining to entrepreneurship development that could be offered by the Institute for the artisans from Maharashtra. In this regard, a meeting was organized at CSIR-CLRI on 4th November 2019 where Dr. Abhiram S. Dabir, Establishment Head, MCED had a discussion with the expert team from CSIR-CLRI. The meeting was held to discuss about the various aspects pertaining to the feasibility of conductance of the training programme by CSIR-CLRI. The subject experts from CSIR-CLRI in leather and leather products were present during the meeting.

Dr. Sanjeev Gupta, Chief Scientist and Head, Centre for Human and Organizational Resources Development (CHORD) welcomed all the attendees. Dr. Abhiram S. Dabir briefed about MCED and the courses offered by them in collaboration with all the national and technical institutes. Dr. Sanjeev Gupta discussed about the short-term and long-term programmes offered by CSIR-CLRI. Dr. Abhiram S. Dabir was also briefed about two types of training offered by the Institute - Industry-based training and self-employment / entrepreneurship development.

Dr. Abhiram S. Dabir expressed interest in short term executive development programmes covering the modules of leather processing and leather products. CSIR-CLRI experts also suggested inclusion of environmental training along with leather processing and leather product aspects. The training has been proposed for a duration of two weeks and is to be organised either in MCED centre or in CSIR-CLRI. If the proposed training is to be held in MCED centre, a visit shall be arranged for the trainees to CSIR-CLRI to get exposed to the process of leather manufacture. The trainees comprise of both male and female candidates and the strength of one batch, as indicated by MCED, ranges from 30 to 40 candidates. MCED plans to organize short term training for minimum one batch for this financial year 2019-20 and training for further batches shall be conducted in the upcoming years.

Dr. Abhiram S. Dabir requested CSIR-CLRI to submit a proposal with details on training modules for a duration of 2 weeks along with training cost to MCED and the same will be submitted to Govt. of Maharashtra for further approval. Once the approval is sought, initiative for signing MoU between MCED and CSIR-CLRI will be taken. The training for the first batch is likely to commence between January – March 2020. The primary focus of training is on SC/ST candidates and the training will be extended for the benefit of other communities in the future.
Brief report on the Jigyasa program conducted at Chennai Girl’s Higher Secondary School, West Jones Road, Saidapet, Chennai on 5th November 2019 by CSIR-CLRI.

The first JIGYASA program for Corporation Schools, Chennai has been organized at Chennai Girl’s Higher Secondary School, West Jones Road, Saidapet, Chennai on 5th November 2019. As many as 197 Girl students of XI and XII comprising from Chennai Girls Higher Secondary School, Saidapet, Thiruvanmiyur and West Mambalam respectively participated in the event.

For the inaugural function, Prof. Santosh Kapuria, Director, CSIR-CLRI, Shri. P. Kumaravel Pandian, IAS, Deputy Commissioner (Education) and Mr. C. Mani, Deputy Commissioner, KVS Regional Office, Chennai graced the occasion. The host school Headmistress Mrs. R. Padmaja welcomed the gathering. Shri P. Kumaravel Pandian, DC (Education) delivered the importance of the Jigyasa program and suggested the students to use the opportunities and also insisted them to have interaction with the scientists. Shri Mani shared his experience with CLRI team that executed many Jigyasa programs for the benefit of KV students for past three years. Prof. Kapuria, Director, CSIR-CLRI explained the origin of Jigyasa and dwelt on various dimensions of science and technology and its utility for development of the society.
After the inauguration, the Lecture cum demonstration session started in four class rooms. All the students of three schools were divided into four different batches. About eight scientific experiments cum demonstrations were made for the benefit of students. The demonstrations include (i) Introduction to leather process - Dr. Satish, (ii) Introduction to Leather products - Dr. Phebe Aaron, (iii) Science Behind the walking - Dr. G. Saraswathy, (iv) Foldscope – a pocket microscope - Dr. N. Ayyadurai (v) Introduction to carbohydrates and the analytical technique for the estimation - Dr. N. R. Kamini, (vi) Smart gels, self–assembly - Dr. S. Ganesh, (vii) Isolation of microorganisms from Goat skin samples - Dr. Tamilselvi (viii) Identification of Microorganisms by Gram Staining - Dr. T. S. Uma, (viii) Activated carbon filter – a tertiary wastewater treatment - Dr. Swarnalatha.

In the valedictory function, the feedback from students and teachers were sought. The students as well as the teachers expressed their satisfaction on the overall content of program. Mrs.R.Padmaja, Headmistress, Chennai Girl's Higher Secondary School, West Jones Road, Saidapet requested the CSIR-CLRI team to conduct the program for the benefit of IX and X class students which will motivate them to take science stream for their future career.
“Creating opportunities for self-employment in the rural areas in Gujarat”

Report on Leather Goods Training Programme organized by CLRI RCED Ahmedabad

In order to create opportunities for self-employment in the rural areas in Gujarat, especially for women from weaker sections of society, training programmes in leather goods manufacturing are conducted. These training programmes are funded by Govt of Gujarat through GRIMCO Gandhinagar. During the current financial year, CLRI RCED Ahmedabad has been entrusted to conduct 12 training programmes each of two months’ duration and 4 training programmes each of 3 months’ duration. These training programmes are basically on-site training programmes and inter-alia consist of theoretical lectures on topics related to leather goods manufacture, demonstration by experts and practical training on leather goods manufacture.

Two months’ training programmes have been started at the following places
i) Village- Dabhad, Taluka- Kheralu, Distt- Mehsana
ii) Pattharkuva, Relief Road, Ahmedabad
iii) Village- Kaniyol, Taluka- Himmatnagar, Distt- Sabarkantha
iv) Village- Kaliyakota, Taluka- Devgadh Bariya, Distt- Dahod

Three months’ training programme has been started at the following place
i) Village- Kahipur, Taluka- Vadnagar, Distt- Mehsana

Nearly 20-25 rural women are enrolled in each training programme and they are participating enthusiastically to learn the skill of leather goods manufacturing. Other training programmes shall be started in due course of time.
The 5th edition of India International Science Festival (IISF)-2019 was held at the Biswa Bangla Convention Centre and Science City in Kolkata. 28 events were organised at this venue. The Three-day event was jointly organised by the Union Ministries of Science and Technology, Earth Sciences as well as Health and Family Welfare in association with Vijnana Bharati (VIBHA).

The Young Scientists’ Conference was a major event at IISF-2019; where in young Scientists and Researchers came together and interacted with various subject experts of international repute. The young scientists' conference event brought together young minds and fresh ideas, the science city expo showcasing new age technology.

Honourable Prime Minister of India Shri. Narendra Modi inaugurated the IISF 2019 on November 5 through video conferencing. Prime minister said that science should not just be inventive but also innovative and research not just influential but also inspirational. Also, the goal of IISF-2019 was to connect the common man with science, research study should not just be confined to laboratories. The findings should be communicated to society at large.

Shri. Harsh Vardhan, Union Minister for Science and Technology, Earth Sciences and Health and Family Welfare, Shri. Dr. Sekhar C. Mande, DG, CSIR, Prof. Asutosh Sharma, Secretary, DST, Prof. Vijay Bhatkar, President, VIBHA, Shri. Jayanth Sahasrauddhe, National Organizing Secretary, VIBHA attended the IISF-2019. Welcome address given by Prof. Santanu Bhattacharya, Director-IACS, other dignitaries also present for the 1st academic session.

For the theme “Scientific Challenges in India and our responsibilities as Scientists” was chaired by Prof. Sekhar C Mande, DG-CSIR. “Scientific Challenges in India” plenary session by Prof. Abhay Karandikar, Director, IIT Kanpur and “Responsibility as Scientist” by Shri. U. Rajababu Project Director, DRDO.

Poster session was held at various halls of Biswa Bangla Convention Centre. Titles such as Make in India, Bio diversity, Frontier areas of Sciences, Swachh Bharat, Swasth Bharat, Digital India, Water crisis and conservation are used for the poster presentation.

“Recent scientific & technological achievements” session chaired by Prof. Vijay Bhatkar and plenary session of “Scientific achievements” handled by Prof. Anuraj Kumar, IISc Director and Prof. P.P Chakraborti, IIT KGP. Also Young Achievers session chaired by Prof. Aswini Nangia, Director, NCL, Dr. Dibyendu Bag, Joint director, DRDO, Kanpur and Prof. Pallab Banerjee IIT-KGP.

The Mega Expo showcased the outstanding contributions in Science & Technology and Industry. Achievements in Defence, Space, Atomic Energy, Agriculture, Medical etc. were exhibited in the Expo along with Government of India missions like Swachh Bharat, Digital India, Make in India, Swasth Bharat etc. CSIR had separate THEME PAVILION in the Expo Ground at Science City, Kolkata during November 5-8, 2019 in which the technologies and products were displayed. CSIR-CLRI show-cased its latest technologies and range of products during the exhibition. Members from RCED, Kolkata, Dr. C Sandipan elaborated about the products to various dignitaries during the visits to the stall. Dr. Harsh Vardhan, Union Minister for Science and Technology, Earth Sciences and Health and Family Welfare, visited the stalls at Science City, Kolkata. Dr Md Sayem Alam, Senior Scientist, Polymer Science & Technology, Shri K Karthikeyan, Senior Scientist, Shoe Products & Design Centre, Shri V Karthik, Scientist, Leather Process Technology Division and Dr B Ravikumar, Scientist, Project Planning and Business Development from CSIR-CLRI participated in the event.
“OUTREACH” was organized in CSIR-CLRI campus as part of IISF-2019 covering science & technology components of R&D activities and 536 students and 34 teachers were part of the event.

Mr. B. Srikumar, Senior Consultant, IISF 2019, Vigyan Prasar attended the Outreach Programme, Demos organised at the event include:

(i) Molecular Modelling of Small Molecules and Chemical Bonding
(ii) Nanomaterial Design Inspired by Nature in Biological Applications
(iii) Separation and quantification of DNA using Agarose Gel Electrophoresis
(iv) Synthesis, Purification and Characterization of Poly(methyl methacrylate)
(v) Preparation of Microcapsule for the Controlled Drug Delivery
(vi) Protein Estimation by Bradford Assay
(vii) Visualization of Different Stages of Mitosis
(viii) Estimation of Chemical Oxygen Demand (COD) from Industrial effluents
(ix) Qualitative analysis of Carbohydrates
(x) Flotation of Non-Coking Coal using Biosurfactant as Collector
(xi) Introduction to Leather Manufacture
(xii) Magnetic Levitation by Meissner Effect
(xiii) Gram staining.

The resource persons were Ph.D scholars of the Institute
REPORT ON PARTICIPATION IN THE
COLOUR MEETINGS
FOR THE SPRING SUMMER 21 SEASON:

1. MODEUROP Colour Club Conference held in Berlin during 17-18 October 2019, and
2. FASHION TREND POOL Colour Circle held in Antwerp during 20-22 October 2019

PREAMBLE

INDIA gained a berth at the European Fashion Club for the ‘first time’ in Year 1994.

India’s journey in ‘Fashion Forecasting for Leather’ began in September 1994 with our first participation in Munich, Germany.

INDIA’s participation in the Colour Meetings in October 2019 at both MODEUROP and FASHION TREND POOL marked India’s presence for 51 seasons in Leather & Colour Forecasting.

The Travel of India in ‘fashion forecasting’ for LEATHER

Travel of INDIA in ‘fashion forecasting’ for leather is an initiative to bring to the fore the ability of the Indian Leather Industry to take pro-active measures in fashion forecasting and design development by providing a scientific leather product development focus in the areas of colour forecasting, range building, design and retail analysis.

The outcome envisaged is to strengthen the Indian leather product design capabilities which would be reflected in product quality enhancement.

In a globalizing economy, design is being perceived as a new engine of economic and industrial growth. Design and breakthrough innovations can play a pivotal role in positioning of Leather and Leather Product industries in the global arena by value addition apart from enhancing competitiveness.

☐ Leather has emerged as a fashion product.
☐ Colour, texture and other highlights add to the fashion values of creatively designed leather products. These add significantly to the value realization from leather products.
☐ “To emerge as a strong global player in the world leather trade, all efforts to take proactive measures to be ready with the fashion leathers when the fashion does emerge, is crucial.”

“Success in being able to work with high-end customers requires building design capabilities that enable us to offer exciting collections that can compete internationally.”

A lot of attention would have to be paid to honing ‘Design’ capabilities, introduce technologically advanced tools to aid in the ‘design process’ and to develop ‘merchandizing’ expertise amongst our product design teams in the footwear companies.

Colour Club Conference held in Berlin during 17-18 October 2019

Report on MODEUROP Colour Club Conference held at AMD AKADEMIE MODE & DESIGN in Berlin during 17-18 October 2019.

Mr Manfred Junkert, Director General, German Shoe Federation and Managing Director, MODEUROP announced the new Presidency of MODEUROP:

President:
Mr. Karim Choukair, MELVIN & HAMILTON

Vice Presidents:
Mr DIETMAR JOST, JOST Bags
Mr NIECK JANSEN, REXOR GmbH

In picture (L to R): Mr Dietmar Host, Mr Karim Choukair, Mr Nieck Jansen and Mr manfred Junkert
The times they are a-changing. Bob Dylan wrote these lines in 1964, and they are more relevant than ever. It is not only the Fridays-for-Future movement that causes the fashion market to reposition itself. The fast-fashion collections focusing on the next logo hype are no longer in tune with the times. Ethical design is one of the most important trends according to the agency WGSN. Buy less but better is the motto that’s currently going round.

Nature and environment are the higher-level constants for all the trends in summer 2021, be it the emerging crafts movement identified under the theme “Sensitive”, or abstract floral statements in the rubric “Impulsive”. As more and more people live in mega-cities around the globe, our theme “Constructive” addresses their need for protection, but also their desire for a general feeling of wellness in the urban space.

The time has come for a new reductionist approach. Stylistically, realism and minimalism are key: the flawless trouser suit, the strong shoulder, grown-up, elegant high heels. This reduced, minimalist style teams up with eccentric 70s and 80s influences. Vivid summer colours radiate optimism and lightness, whetting an appetite for sensual fashion. On the ornamental side, hippie culture revivals and tribal elements are made out. Abstracted blossoms and decorative patterns continue to play a big role. It is not only the new confection A la Prada that counts, it’s also the fine balance between romance, naturalness and a fresh interpretation of bygone decades.

The buzz is fashion grounded on statements and styles that can stand the test of hype is no longer fashionable. Reality rules. Down-to-earth trends replace street cult brands. In an interview, Miuccia Prada recently diagnosed a new “focus on the Essential”, meaning looks and trends will last across seasons, in best sense. The trend portal Highsnobiety quotes Uniqlo’s creative director John C. Jay talking about current changes in the fashion industry: “Fashion derives a lot of its ideas from art and culture, from crafts and science. Fashion is totally dependent on the context. So are we as fashion makers - we have to be relevant to people’s lives.”

This contextual, social relevance will definitely continue to be one of the most important trend drivers over the coming years.

In line with these socio-cultural developments we identify three Modeurop Colour Themes for Spring Summer 2021: SENSITIVE_IMPULSIVE_CONSTRUCTIVE
All Together Now— together we are strong, is the motto of this theme. Add a strong focus on nature and naturalness, and deconstructed looks with natural aspirations are the result. Linen and slightly transparent fabrics are foregrounded. Patterning and embroidery are inspired by a plethora of botanical motives. The processing reflects artisanal labour, it is crafted with a slightly imperfect, unfinished touch. Details are: ruffled sleeves, crochet collars, batic effects and — this season’s homecomer — fringes! They are chiefly made of raffia or bast fibres and show up on unusual places, for instance as straps with mules and backless slippers, and bags showcase them in flouncing layers.

The colour leitmotif of this theme is nature at the dawn of a sunny summer day by the sea. The naturally dark base is Ruby Redwood in combination with Driftwood Brown and slightly weathered Cactus Green. These shades are illuminated by hues of neutral Misty Grey, soft Beach Sand and mellow Tan Beige. Light grey-green Pebble sets soft colourful accents and brings cool freshness. Pearly Rose adds a glamorous gloss.

In this gentle mood, Sulphur represents an element of energy and lets more neutral hues shine brightly. It is both the gentle and the wild side of nature which serves as the basis of a fresh interpretation and a modern-style implementation of colours.

Materials also pay tribute to nature: macrame and other braiding techniques are in a neck-to-neck race with wickerwork and crochet surfaces for seasonal relevance. Natural fibres from cotton to sisal and raffia, even woven willow receive new honours here. Wood finds its way to the hall of fame, manufactured into delicately carved platform soles, bag handles and — as wooden pearls — also whole bags. Leather continues to play an important supporting role for sophisticated details, bag handles and straps. Oiled surfaces and finely finished suede and velours with slightly uneven parts will open up a new chapter in vintage looks. Open surfaces resulting from intrecciato weavings in multiple dimensions, punched surfaces and abstract cable-knit patterns are other exciting news.

IMPULSIVE

Fashionable transgression and empowerment are the defining aspects of this theme. The mood is optimistic and open. Colourfulness and a cheerful use of quotations from the most diverse stylistic traditions emphasise the positive attitude. Past trends present themselves invigorated in fresh constellations. Anything from ladylike elegance to Disco chic goes. Jungle inspirations and ethno styles come into play, digitally recycled. Everything’s bursting with energy, with a wink and a nod to the future.

The colour composition here represents the antipode of naturalness and serenity. Significant impulses are awaiting their pioneering mission. This summer’s favourite dark shade is deep Kidney Bean Red, combined with radiant Acid Green and vivid Virtual Violet. A summer breeze brings golden yellow Medlar; Artificial Rose and Synthetic Mint add a cutting-edge element of pixelated aesthetics. Connecting links and sound basic shades are impulsive Red Light and smart Almond Brown. Light White is the central anchoring component. The digital becomes colourful reality in an analogous context here. A vision of the future is coming in ultramodern colours.

Materials abound, as do looks and styles. Satin is taken for granted, as well as lacquered leather and synthetics — from transparent to multiply layered everything’s there. Loose large-format braiding and knotting techniques in modern forms allow for even more transparency. Leathers shine big and on large scales, with a modern touch guaranteed by photo prints and foliation. Nubuk comes in slightly gummed surfaces, freshened up by abstract embossings.
The new cool with a huge potential for the future: This theme's focus are deconstructed silhouettes. Proportions are shifted to create looks between asymmetrical and wildly oversized. There are clean and reduced lines, for one thing. But there are also masculine, square-shouldered confections marking the transition from the 80s to the 90s. Looks have a cool, minimalist utility attitude, occasionally with an experimental touch. Tailoring continues to be a hot topic, generating excitement and a new type of style. The colour range reflects the new modernity, cool and smooth at once. Parameters are readjusted. Clayey natural tones form the basis. Slightly greying Beige in combination with burnt utility Olive and dark Avocado Green set the tone, complete with Tar Black. Silver Shadow grey brings in metallic aspects and cool combination possibilities. Pastel Rose Petal adds feminine appeal and offers modernist interpretations. It needs the frosted shiny Bulb Yellow, intensely radiating Sign Blue and brightened Sphere Blue, though, to create the truly cool touch of modernity that carries the potential for future classics.

Materials perfectly reflect the search for a new status quo. Full grain napa leather forms the basis, both in its polished, unblemished version and with metallic effects on fine-pored surface texture. On the one hand there are calm, scar-free, smooth surfaces, occasionally with papery handles. On the other side we have lush and luxurious pleatings and foldings, and sophisticated braiding complete with pull-up effects. There is also rubber lining and matt coating as well as new textures with a technical spin. TechMesh is being evolved by innovative fabrics. Tarpaulin and water-proof eco-nylon are summer allrounders and major players in the field. The lightness of the material, whether textiles or leathers, is a decisive issue for the new mega-size formats in the bags department.
Presentation by Mrs Marga Indra Heide & Mr Gebhard Muller, Fashion Experts, Fashion Trend Pool

Colour Trends: SUMMER 2021
Cross-seasonal. Genderless. Timeless. Clear-cut separation of the seasons is no more. The borders between seasons are becoming increasingly blurred. Summer colours become winter colours and vice versa. At the same time, the genders are increasingly merging in fashion – parting with traditional role stereotypes and moving towards high-powered clothing in the form of universal styles with a unisex approach. Demands on the quality and sustainability of products are rising immensely. Collections are divided up: into timelines and cross-seasonal themes on the one hand, and short-term, trend driven highlights and accents, on the other. And all of this is driven by the longing for nature, for warmth, security and authenticity. Mindfulness sustainability offer valuable space for global harmony. A spirit of adventure and curiosity for the future, desire and joie de vivre, having fun with friends and fun sharing are the positive drivers of the season. It's about being together, being part of it. It's about feeling and experiencing yourself and the environment more intensely.

For SS 21, we distinguish between three different colour groups:
1. The VIBRANT
2. The SUNNY
3. The EXOTIC
Virtual and super digital: the flood of digital images is changing our viewing habits every day. Inspired by virtual reality and artificial intelligence, the colours of this theme appear more intense, electrifying and lively – caught between sensually sweet and refreshingly cool. Holographic effects make for a novel rainbow palette made to look unfamiliar as it oscillates between iridescent, shot and transparent. Liquid motifs, crystalline surfaces and translucent looks challenge our sense of vision. Artificial things become precious again, plastics suddenly seem pretty. Romantic visions of the future echo candy colours in blindingly bright LED light that seem to be fusing with soft neon pastels and digital ombres.

**SUNNY NATURALS**

Sunny natural tones awaken the longing for Indian summer landscapes; for colourful fields, delicate nuances of grain, but also arid desert landscapes with magnificent dunes in sun-kissed sand tones. Surfaces look as if dried up and bleached, but also gold brushed and sun drenched at the same time. Influences from Ayurveda and Yoga bring wellness and well-being, meditation and humanity. Purity is key – gentle, soft, warm. Natural linen and high-quality cotton materials with a crisp touch meet fine wool, hemp and raffia. Smooth wax surfaces contrast with authentic raw looks. Pale nuances remind us of chalk, bone and lime. Indispensable here are sustainable materials, hand-spun textures and handcrafted details.

**DARK EXOTIC**

In SS 21 ethnic influences are translated into sophisticated, dark and magical colour schemes – featuring oriental spice colours, exotic dark skin tones and mystical night shades. The hypnotically dark submarine world of the ocean merges with the splendid dark colours of Indochina and Bali. Re-interpreted floral batik prints and intense indigos are given new luminosity on dark brown backgrounds. Shocking pink sets exciting accents. Elaborate embroidery and folklore weaves enhance the sophisticated cultural mix with artisanal handicrafts. Surprising sparkling effects come care of glittering and shimmering Lurex materials in new colour infusions. The distinct looks of raw silk and silk create fascinating surfaces as do animal prints and embossing in new variations.
CSIR-CLRI has successfully registered the Qualification Packs (QPs) and National Occupational Standards (NOS) for various Skill Development Programmes (SDPs) like Post Graduate Diploma, Diploma and other training programmes under National Qualifications Register (NQR). The NQR is the official national public record of all qualifications aligned to National Skills Qualifications Framework (NSQF) levels, qualification pathways and accrediting authorities. It gives access to learners and other users to all the registered qualification files.

Now CSIR-CLRI is a part of NQR as an accredited and certifying body for the SDPs. CSIR-CLRI is the first laboratory among CSIR to obtain such an accreditation and we can issue NSQF/ National Skill Development Agency accredited skill certificates to the trainees.

The information about the SDPs offered by CSIR-CLRI are brought together in the form of Qualification Files and recorded in the NQR which will allow learners and employers to understand the details of the (training programme) qualification, especially the outcomes which are assessed, how they are assessed and how this is quality assured, and the opportunities for employment and advancement or access to further stages of education and training which the training programmes offer.

List of SDPs (Qualification Files) approved by NSDA:

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Skill Initiative Courses - QP NOS</th>
<th>NSQF Level</th>
<th>Qualification Code</th>
<th>NSDA CODE</th>
<th>Course Details</th>
</tr>
</thead>
</table>
| 1     | Post Graduate Diploma Programme in Leather Technology | 7          | CLRI/PGDLT/Q02     | 2019/LT/CSIR/3139 | Duration : 18 Months
Entry requirements: Any graduate with science background Minimum Age: 21 Years |
| 2     | Diploma in Leather Processing    | 5          | CLRI/DLP/Q01       | 2019/LT/CSIR/3136 | Duration : 12 Months
Entry requirements: 10+2 with science background Minimum Age: 18 Years |
| 3     | Diploma in Leather Goods Manufacture | 5          | CLRI/DLGM/Q16     | 2019/LT/CSIR/3138 | Duration : 12 Months
Entry requirements: 10+2 Minimum Age: 18 Years |
| 4     | Diploma in Leather Garment Manufacture | 5          | CLRI/DLGM/Q25     | 2019/LT/CSIR/3137 | Duration : 12 Months
Entry requirements: 10+2 Minimum Age: 18 Years |
Benefits of the Accreditation:
NSDC/NSDA certificate will open up more career and placement possibilities in the current scenario where, Government of India is planning to ensure common recognition among candidates who obtained these certificates (similar to GATE / GRE scores).

Increasing the productivity of the skilled individuals which would contribute to the national agenda of Skill India Mission.

Following standardization in the certification process and getting CSIR-CLRI etched in the registry of skills Increase productivity of the existing workforce and align the training and certification process to the contemporary needs of the Indian Leather Industry.

Future Plans:
CSIR-CLRI is planning to add 7 more training programmes (QPs) in the very near future. CSIR-CLRI is planning to develop Qualification Files for the niche areas of footwear courses like therapeutic footwear - diabetic, obese, running, non leather, fabric - open and closed footwear. CSIR-CLRI will also look for niche areas in goods and garments and make the Institute unique with newer and uncommon courses which are not offered by other institutions. Courses related to collagen/ other biological/ 3D printing/ chemical engineering courses (leather chemicals) etc. may also be developed. The expertise gained through this exercise will be helpful to develop modules for international clients as well.

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TOLIC Rajbhasha Shield First Prize

CLRI bags the TOLIC Rajbhasha Shield First Prize among Big-II offices Category in Chennai for the best performance in the progressive use of Official Language.

Launch of a monograph on the “Musical Excellence of Mridangam”

The Vice President, Hon’ble Shri M Venkaiah Naidu at an event to launch a monograph on the “Musical Excellence of Mridangam” in Chennai on 5 November, 2019
Under the Skill Development Programme, CSIR-CLRI has completed assessment of 58 candidates at Mayiladuthurai on 18 & 19 November 2019. The work was carried out by S/Shri K G Prabhu and AK Prajapati of Shoe & Product Design Centre, CSIR-CLRI.

Team CSIR-CLRI at a Seminar on “Safety, Protective and Occupational footwear” organized by Bureau of Indian Standard in New Delhi TODAY. The topics covered were: Modification requirements for International Standard for protective footwear; Current European PPE Regulations (EU) 2016/425 and requirements of CE marking; Major changes and developments envisioned in requirements for safety, protective and occupational footwear; major changes and developments envisioned in test method for safety, protective and Occupational footwear and Capabilities and Facilities of CSIR-CLRI. The speakers were Dr.BN Das, Former Chief Scientist CSIR-CLRI and Chairman, National mirror committee for footwear; Mr. Pete Doughty, Head of product certification, SATRA and Chairman, ISO/TC 94/SC 3; Mrs. Ellen Wabmann, Convenor, ISO/TC 94/SC 3/WG 2; Dr. JC Cannot, Convenor, ISO/TC 94/SC 3/WG 1 & Dr. R Mohan, SPS, CSIR-CLRI.

The delegation from CSIR-CLRI got the current international standards and standards in EU for protective footwear, changes proposed to the standards, upcoming changes in international standards that will improve quality of service offered and in knowledge dissemination. CLRI showcased its capabilities and facilities to the wide group of audience that included international delegates, defence personal and members of the Indian leather and leather products.
The Leather Post

Maintenance Management of Tannery Machines & Effluent Treatment Plant at Leather Industry Development Institute (LIDI), Addis Ababa


The BIRTH and JOURNEY of CLE’s ‘DESIGN AWARD’

Design Award was instituted by Council for Leather Exports during January 1997. “Design Award” is for increasing ‘Fashion & Design’ awareness in the Industry and help Indian leather and leather products find a place of prominence in the global fashion world of leather. It also encourages promoting design capabilities within the country to create a contemporary image for Indian leather products in markets abroad.

Every year the Council for Leather Exports presents Design Awards to Member-Exporters of the Council, Free-lance Designers and Students of Design Course Institutions.

Organizers of International Footwear Conference (IFC) have instituted an International Footwear Design Competition (IFDC) to promote design capabilities among member countries. This competition is to enhance the international status of International Footwear Designs. Winning entries at CLE’s Design Award are thereafter sent to IFDC and the result in Year 2019 is: M/s Gupta Overseas from Agra, INDIA not only won the CLE’s Best Shoe Design Award 2019, but also the International Footwear Design Competition Award 2019. Kudos!

To participate in CLE’s Design Award 2020, please write to The EPO-MS at epo-ms@cleindia.com
**Ankle Foot Orthosis for Children with Cerebral Palsy**

Design and Development of dynamic knee ankle foot orthosis for Children with Cerebral Palsy built using pneumatic actuating mechanism for purpose of gait training. This device uses hand held control device, which is used by the physiotherapist to simulate the GAIT phases and introduce the child to follow the GAIT pattern. This ultimately improves the walking pattern and plays a vital role in management of spasticity of muscle of the children with cerebral palsy.

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**OBITUARY**

Mr. Sunil Kumar Bhadra

left for heavenly abode on 18th November 2019.

He had been a loyal member of Indian Leather Technologists Association (ILTA) over the years and followed all activities of the organization till his last days.

A true friend of CSIR-CLRI and an active participant at the annual LERIG event at CLRI.

May his soul rest in peace!
CSIR-CLRI foresees 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.

Dr. B Chandrasekaran, Director, CSIR-CLRI

Cutting Edge Technologies in Leather Processing
Consultancy Services
Education & Training
State-of-the-art Testing Facilities
Leather Processing
Leather Chemicals
Environmental Technology
Health Care Products

CSIR-CLRI
World’s Largest Leather Research Body.
A Dependable Source for Technologies & Services

Striving for Excellence and Global Leadership in Leather Technology

Global Leadership in Leather
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