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The Leather Post

CSIR-Central Leather Research Institute

News you can use

INNOVATIVE APPROACH FOR THE SUCCESS OF AN ORGANIZATION & AN INDIVIDUAL

Prof Santosh Kapuria
Director, CSIR-CLRI

24th Octobert 2019

Dear Doyens and Members of the Indian Leather Fraternity; Colleagues from CSIR, Colleagues and Friends! It gives us great pleasure in sending you our October 2019 edition of The LEATHER POST.

In the October 2019 edition of The Leather POST magazine, I continue to urge all my colleagues to play a pivotal role in S&T growth with stellar growth in all its fields of research. The growth of the sector that CLRI services, skill development and enhancing production and productivity should be the key. Alternate materials are trying to move leather from its unique position. While we must be ready for the change, innovation in LEATHER itself is very important.

Let our research focus on these areas!

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

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78th Foundation Day of CSIR
organized by CLRI on 30th September 2019

On the occasion of the 78th Foundation Day of CSIR, Dr Malathy Jawahar, MC of the function welcomed the dignitaries on the dais.

In his welcome address, Prof Santosh Kapuria, Director, CSIR-CLRI said that it was a proud privilege to welcome one and all to the 78th Foundation Day celebrations of CSIR organized by CLRI. Prof Kapuria traced the origins of CSIR stating that CSIR had a modest beginning in September 1942 with a sum of Rs 5.0 lakhs. The purpose and objective of CSIR then was to provide S & T to the people of India. Today, said the Director, CSIR is spread from North to South and from East to West providing glorious service to the nation playing a pivotal role in S&T growth with stellar growth in all its fields of research. He recalled that the India Today magazine had featured CSIR as one of the 70 icons of India which itself was an indication of the competence of the people, high quality research and diverse functions. In conclusion, Prof Santosh Kapuria thanked the Chief Guest, the Guest of Honour, former Directors, retired staff and colleagues for their kind participation.

The Guests were welcomed with Angavasthras and the lamp was lighted marking the inauguration of the function.

The Guest of Honour, Shir P Gopalakrishnan, Managing Director, Sellam Chemicals and President, AC Tech Leather & Footwear Alumni Association recalled the great vision of the architects of India. He quoted Mahatma Gandhi who wanted the country to add value to the leather by producing leather products and thereby creating employment opportunities in the country. Shri Gopalakrishnan said that 1500 plus leather technologists from CLRI are serving all over the world and more than 60% is managed by the technologists. He praised CLRI as being one of the largest leather research institutes in the world. In conclusion, Shri Gopalakrishnan appealed to all students to emerge as Entrepreneurs and not just seek jobs.

Following this, a brochure on Leather Products made from Banana Fibres developed by Shoe & Product Design Centre was released.

Shri Md Sadiq, Chairman of the steering committee of CSIR 78 Foundation Day celebrations introduced the Chief Guest of the function.

Quote" The sky is not the limit when it comes to the profession of Dr Mylswamy Annadurai.
Space Research Centres are constantly innovating and all Indians are proud of their work.
The recent Chandrayaan 2 launch kept the whole country awake. It was a tense moment.

Our hearts pound when the countdown begins and when it goes 10, 9, 8 and then when it gets to 3, 2 and 1, we are all saying our prayers silently and keeping our fingers crossed for the success. This is true patriotism.

A Scientist is never tired nor satisfied. Although it was a 98% success for Chandrayaan 2 and Vikram lander had hardlanding on moon; the government is already looking at launching the first human space flight mission before India's 75th year of independence.

Ladies and Gentlemen, such is the unique profession of Dr Mylswamy Annadurai, who is space scientist of International repute and technical leader par excellence.

A distinguished Scientist, his significant contributions include:

- design and development of ISRO´s first Satellite Simulator
- his contribution was made to the India's first Lunar Mission, Chandrayaan-1 as Project Director.
- He realized the most prestigious Mars Orbiter Mission in record time with minimal budget
- He realized a record number of 29 satellites as on Jun 2018, which include seven communication, seven navigation, eight Earth Observation, one Science, one meteorological satellite, three Nano and five student satellites; including bringing including moon mission Chandrayaan-2 in final stages of Assembly and integration
- Dr Annadurai's significant contributions also cover areas like: development of new technologies, human resource development, academia interface, vendor development, international cooperation, social outreach and literary works.

- Dr Annadurai is a recipient of Padma Shree award in 2016 for Science and Technology from Govt. of India, and has many national and international awards, fellowships and recognitions. He has over 75 awards!
- Dr Annadurai is currently working as Vice President for Tamil Nadu State Council for Science & Technology a new position crated by Government of Tamil Nadu with the mandate to strengthen the development of S&T in the state. Recently he has been appointed as Chairman, Board of Governors, National Design and Research Forum by Institution of Engineers-India.
- Dr Annadurai's education and achievements in satellite technology have been highlighted in tenth standard science text book in Tamilnadu.

Dr Mylswamy Annadurai is here today in our midst as our Chief Guest and will deliver the CSIR 78 "Foundation Day lecture."

Without much ado, I now invite **Dr Mylswamy Annadurai** to deliver the lecture please.
Ladies and Gentlemen, please put your hands together for Dr Mylswamy Annadurai "unquote.

The Chief Guest, Dr Mylswamy Annadurai presented the CSIR 78 Foundation day lecture.

The title of Dr Annadurai's presentation was "Innovative Approach for the success of an Organization and in Individual – a case study"

Dr. Mylswamy Annadurai, spoke on the growth profile of him in various stages and his contribution in the mega mission on Mangalyan as well as Chandrayan projects. Also gave much information about the various developments in the space research and where the ISRO has been placed at global level. He revealed the untold story about Mangalyan. The lecture was highly inspiring and motivating to the participants.

On the occasion of 78th CSIR foundation day celebrations, CLRI felicitated the staff who have retired from service during 2018-19, staff who have completed 25 years of service and the children of employees who have achieved excellence in academics and in sports.

On the occasion of 78TH CSIR foundation day celebrations, various competitions were conducted for the staff and students of CLRI. The Chief Guest Dr. Mlyswamy Annadurai distributed the awards and prizes for: Yoga, Chess, Carrom, Table Tennis, Shuttle Badminton, Throw Ball, Volley Ball, Cricket

We have great challenges and great opportunities as mentioned by our distinguished guests, CSIR-CLRI will meet them and result in fulfilled outcomes in the years ahead. "Every auspious function has an impactful ending" said Dr (Smt) Sujata Mandal as she invited Dr (Ms) A Gnanamani to propose the vote of thanks.

Dr. (Ms) A. Gnanamani, Sr. Principal Scientist and co-chairman, celebration committee proposed the vote of thanks.

CSIR-CLRI Jigyasa at KV-Kalpakkam

As part of JIGYASA (Student-Scientist Connect) 2019-20, "Visiting of Scientists to Schools" program was organized at KV-Kalpakkam on 20th September 2019. The program consisted of lecture cum demonstrations delivered by Women scientists of CSIR-CLRI. Around 250 students and 20 teachers from KV-No.1 and KV-No.2 of Kalpakkam had participated in the program.

Shri. C. Mani, Deputy Commissioner, KVS Regional Office, Chennai was the Chief Guest, and Shri Jyothish Kumar, IGCAR, Kalpakkam was the Guest of Honour. Mr. Harjinder Bhatia, Vice-Principal, KV-No.1 Kalpakkam and Shri. Harilal, Principal, KV-No.2 Kalpakkam, and scientists from CSIR-CLRI were part of the inaugural function.

Dr. A. Gnanamani and Dr. K. Purna Sai were event Coordinators of the program. Shri C. Mani while addressing the students expressed that Jigyasa kind of opportunities were not existed when he was young. He suggested to the students to make use of the demonstrations and lecture with utmost interest. Shri. Jyothish Kumar explained the need for the science and motivated the students by sharing experiences during his school days.

Eight scientific demonstrations were arranged for the students which include “Introduction to leather process by Mrs. Malathy Jawahar; Introduction to Leather products by Dr. Phebe Aaron; Science Behind the walking by Dr. G. Saraswathy; Magnetic Levitation by Meissner Effect by Mrs. J. Sri Devi; Sustainable material for reuse of enzymes by Dr. N. R. Kamini; Isolation and Visualization of DNA by Dr. Rachita Lakra; Isolation of microorganisms from Goat skin samples by Dr. Tamil Selvi; Identification of Microorganisms by Gram Staining by Dr. T. S. Uma; Activated carbon filter – a tertiary wastewater treatment by Dr. Swarnalatha.”

In the valedictory function the students were given participation certificate and the authorities of KV-No.1 thanked the CSIR-CLRI for organizing the event.

Release of Leather & Banana Fabric Combination Collection

The global leather goods market has been growing exponentially in the emerging and developed markets over the last five years and is shaping up to become one of the leading competitive markets at the global level. With increased globalization, the scope of growth of the global leather goods market is widening. According to the forecast report by “Technavio” the global leather goods market to grow at a CAGR of almost 5% during the forecast period (2017-2021). Lack of availability of good quality leathers and growing demand for products prompted the researchers to find alternative materials or to partially substitute the usage of leather in products. Hence there is scope for scientifically study the compatibility of various natural fabrics and design various leather lifestyle accessories based on the market need and also on specific customer needs Few studies were conducted at CSIR-CLRI to find the suitability of natural fabrics for making amalgamated products by combining with leather. Since the above findings are favourable for their suitability, new ranges of natural fabric and leather combination products based on trend forecast and novelty were designed and developed at Shoe & Products Design Centre (SPDC), CSIR-CLRI to support industry in developing indigenous designs from India.

About Banana Fibre extraction process:

The bananas or the plantains are essentially hot climate plants. Their original home is said to be the tropical forests of Asia. The two terms banana and plantain are used synonymously in this country. The banana fibres are obtained from banana plant’s pseudostem sheath. The composition of banana fibre constitutes majorly cellulose material that can easily be biodegradable. The fibre has a good mechanical, light weight and low density property. The extraction of the fibre can be done manually as well as automated extraction techniques. Manual extraction of banana fibers is tedious, time consuming, and causes damage to the fiber, hence automated machine extraction is preferred. Special machines are used in large industries for commercial extraction of fibres. The process flow of banana fibre extraction includes stem section preparation, removing moisture and other impurities, mechanical extraction, drying and lamination. Fibre thus extracted goes to yarning, spinning followed by weaving in loom for the development of fabric material.

Release of Brochure on Leather and banana fabric combination collection:

A brochure with 20 designs collection of leather and banana fabric combination products was released by Dr.Mylswamy Annadurai, Vice president, Tamilnadu State Council for Science and Technology along with Prof. Shri. Santhosh Kapuria, Director CSIR-CLRI and was received by Shri.P.Gopalakrishnan, President ALFA and Managing Director Sellam Chemicals Private Ltd., on the occasion of 78th Foundation day celebrations of Council of Scientific & Industrial Research(CSIR).

OPEN DAY

26th September 2019

78th CSIR FOUNDATION DAY CELEBRATION

On the occasion of 78th CSIR Foundation Day Celebrations 2019, CSIR-CLRI has organised "OPEN DAY" for the benefit of School and College students. Thirteen experiments with demonstration covering Chemistry, Biology, Physics and Engineering Sciences were made available for participants. The demos were handled by Ph.D Students of CSIR-CLRI. Around 300 KV Students of plus One and plus Two (Higher Secondary level) of various schools in Chennai had participated. Besides, Sri Sankara Senior Secondary School, Vana Vani M.H.S., The Hindu Senior Secondary School, Good Shepherd School, MGR University, Sathyabhama University and Nandanam Govt. Arts College students of Chennai also participated in the Open Day. The feed-back from the participants including teachers were sought and they appreciated the efforts taken by CSIR-CLRI.

Schools participated

No.	Name of School	No. of students	No. of faculty	Total
1.	KV CRPF, Avadi	40	2	42
2.	KV HVF, Avadi	48	3	51
3.	KV OCF, Avadi	48	2	50
4.	KV AFS, Avadi	49	2	51
5.	KV AFS, Tambaram No. 1	52	4	56
6.	KV AFS, Tambaram No. 2	53	2	55
7.	Sri Sankara Senior Secondary School	17	2	19
8.	Vana Vani M.H.S	37	2	39
9.	The Hindu Senior Secondary School	84	6	90
10.	Good shepherd School	23	2	25
11.	MGR University	4		4
12.	Sathyabhama University	200	5	205
13.	Govt. Arts College, Nandanam	12		12
	TOTAL			**699**

Experiments demonstrated	
S.No.	Title
1.	Molecular Modelling of Small Molecules and Chemical Bonding
2.	Nanomaterial Design Inspired by Nature in Biological Applications
3.	Separation and quantification of DNA using Agarose Gel Electrophoresis
4.	Synthesis, Purification and Characterization of Poly (methyl 1 methacrylate)
5.	Preparation of Microcapsule for the Controlled Drug Delivery
6.	Protein Estimation by Bradford Assay
7.	Gram Staining
8.	Visualization of Different Stages of Mitosis
9.	Estimation of Chemical Oxygen Demand (COD) from industrial effluents
10.	Qualitative analysis of carbohydrates
11.	Flotation of Non-Coking Coal using Bio surfactant as Collector
12.	Introduction to Leather Manufacture
13.	Magnetic Levitation by Meissner Effect

"THE SANTAPPA - RAGHAVAN MEMORIAL LECTURE"

THIS lecture, in memory of two former Directors of CSIR-CLRI – Prof. M Santappa and Dr KV Raghavan, was delivered by Prof. MS Ananth, Former Director IIT Madras, at the Triple Helix Auditorium of CSIR-CLRI on 3 October 2019, in the august presence of two former Directors, Dr G Thiagarajan and Dr T Ramasami. Prof. Santappa was the Director of CLRI between 1973 and 1981 and Dr Raghavan between 1994 and 1996. While Prof. Santappa rose to be reckoned as one of India's tallest polymer scientists, Dr Raghavan's expertise in the area of chemical engineering was exemplary. Both Prof. Santappa and Dr Raghavan were born in October 1923 and 1947 respectively and died in 2017.

The CSIR-CLRI and LERIG Trust had in 2017 decided to hold a memorial lecture in their honor, in October, every year. The first memorial lecture was delivered Dr RA Mashelkar, as someone who was globally recognized for his contributions to both chemical engineering and polymer engineering.

Prof. MS Ananth, who delivered the Second Santappa – Raghavan Memorial Lecture, opened with a warm appreciation of CSIR-CLRI for having done innovation in bringing together a memorial lecture in the name of two individuals. He recalled his association with Prof. Santappa and Dr Raghavan. He also recalled his association with CSIR-CLRI and the long connect that he had with Dr Ramasami.

The memorial lecture was titled "The idea of a university". He highlighted the difference between traditional universities and the expectations of a modern university. The university of today is built on the ideas of renaissance thinkers who made three basic assumptions: lawfulness of the material world, the intrinsic unity of knowledge and potential for indefinite human progress. While research brings about the passion to teaching, teaching rejuvenates the researcher and both have to go hand-in-hand. In modern university system, compared to traditional systems of university being a place for teaching, learning and research, there is a need for taking into account the gross enrollment ratio, the need to encourage innovation and entrepreneurship etc. A country like India can only meet the needs of higher education through innovative models such a virtual learning, a classic success model being the NPTEL. IIT Madras has been successful in bringing about innovation and entrepreneurship based on such innovations. The IIT Research Park has grown significantly.

Prof. Ananth's rich teaching experience came to light when he shared his experiences as a teacher. He spoke at length the need to get the attention of the taught to the lectures and the need for the teacher to get the confidence of the taught. He also spoke about the need for highest levels of ethical practices in research and education.

Earlier, Prof. Santosh Kapuria, Director CSIR-CLRI welcomed the speaker and the family of Prof. Santappa. Dr Thiagarajan and Dr Ramasami spoke about their association with Dr Santappa and Dr Raghavan. Dr Ramasami also gave an account of the contributions of Prof. MS Ananth and his connect with him right from AC College days. Ms. Sunanda Santappa, daughter of Prof. Santappa presented a memento to Prof. MS Ananth. Dr KJ Sreeram, Senior Principal Scientist thanked Prof. Ananth, for the lecture. He acknowledged the support of LERIG Trust for the second successful year of organizing the lecture jointly with CSIR-CLRI.

CSIR-CLRI at the

India Leather and Accessories Fair 2019

held in KOLKATA from 27th to 28th September 2019

D Suresh Kumar & K Krishnaraj, Shoe & Product Design Centre, CSIR-CLRI

India Leather & Accessories Fair (ILAF) was held at Hotel ITC Royal Bengal, Kolkata from 27th to 28th September 2019 and the fair was orgainsed by India Trade Promotion Organisation (ITPO).

The fair was inaugurated by Shri. Dr. Amit Mitra, Honorable Minister – Finance & Excise, Industry, Commerce & Enterprises, Government of West Bengal. It was a B2B fair with visitorship from across the globe and from other parts of India. Around 61 exhibitors participated in the fair and among them 33 are leather goods companies and the remaining are machineries, chemical and components amongst others.

CSIR-CLRI participated in the Fair and exhibited its various range of products and the main theme for this event was “Banana fabric and leather combination Products”. Other products developed at CSIR-CLRI were also exhibited.

During two days of the fair there were discerning visitors to CSIR-CLRI stall who showed interest in various products displayed. One of the visitor form USA appreciated the banana fabric combination products and enquired about the sourcing and testing of banana fabrics. Many of the visitors enquired about the cost of manufacturing.

Mr. D. Suresh Kumar, Scientist and Dr. Dipankar Choudhuri, Chief Scientist from CSIR-CLRI explained the details to the visitors. Some of the visitors shown interest in short term leather goods design programmes conducted at out institute and requested to commence similar programmes at RCED, Kolkata. One of the visitor shown keen interest in chicken feel leather products and requested for few samples of chicken feet leather. Dr. K. Krishnaraj, Srenior Principal Scientist interacted with the visitors and explained about the exhibits.

Overall it was good experience to showcase various products and services of CSIR-CLRI to the national & international visitors

Report on
Final assessment of NSFDC Trainees at G. D. Nellore, Andhra Pradesh
Skill Development Initiatives of CSIR-CLRI

Back ground

As a part of the Skill Development Initiatives of CSIR-

CLRI, Work order has been issued to training partners

Central Footwear Training Institute (CFTRI) to mobilize and train the 242 personnel in two modules such as Cutter- Footwear (LSS/Q2301) for 122 Numbers and Operator stitcher–Footwear (LSS/Q2510) for 120Nos in Andhra Pradesh. Based on the work order CFTI as initiated mobilization activities of the beneficiaries at G D. Nellore, Chittoor Districts, and Andhra Pradesh. Initially CFTI has identified 28 female candidates based on the guidelines provided by funding agency NSFDC to impart training on Operation Stitching – Footwear module (Code LSS/Q2501).

Training Venue & Infrastructure

This program was conducted in the factory premises of M/s Putta Shree Leathers Private Limited, A P Industrial Development Park, G.D.Nellore Chittoor District, Andra Pradesh. This unit is housed with upper fabrication machines along with two conveyor lines with a capacity of 500 pairs of uppers per day. Apart from this they also have separate line for training purpose. And also full shoe line machines are under installation and will be functioning in a couple of weeks.

Training Program

In this training centre CFTI has deployed a trainer Shri Chandrasekar, who was trained by CFTI. Training program of this batch of 28 female candidates was commenced on 21st August 2019.All the trainees were given hands on practice of sewing machine control and operation that are needed for fabrication of uppers. They also exposed on the theoretical knowledge on various Machines, Materials and Accessories used in footwear fabrication. The duration of this training program as per the Guidelines of NSFDC was 37 working Days. Trainees were also asked to fabricate uppers of various models during the training period. This program was concluded on 4th October 2019.

Final Assessment

As part of the NSFDC guidelines final assessment should be conducted by CSIR-CLRI. In connection with this CSIR-CLRI has deployed Shri.K.G.Prabhu and Shri G.Arun Raj to conduct final assessment on 10th October 2019. Trainees were assessed on the following aspects i.e Theoretical knowledge is assessed through objective type questions, Practical skills were assessed through practical test finally communication skills assessed through Viva –Voice

Exam.

Details of Assessment pattern / Type & Duration.
Trainees were assessed for the total of 100 marks. It has segmented as follows

S.No	Assessment components	Marks	
	Duration		
1	Attendance	10	-
2	Internal Assessment	20	-
3	Theory Exam	20	1.00Hrs
4	Practical Exam	40	0.30 Hrs
5	Viva Voice	10	0.15 Hrs
	TOTAL MARKS	100	

The minimum marks required for qualifying the exam is 50 % in all the above assessment components.

Conclusion

The overall performance of this batch i.e theoretical knowledge, Communication and practical skills are much above the minimum requirements.

"Report on
ENTREPRENEURSHIP DEVELOPMENT PROGRAMME"
CLRI RCED Ahmedabad

Technological support was provided to the Entrepreneurship Development Institute of India Ahmedabad in conducting an Entrepreneurship Development Programme on leather industry sponsored by the Department of Social Justice and Empowerment, Govt of Gujarat. The objective of the programme was to promote entrepreneurship in leather industry among SC youth of Gujarat. Twenty-six potential entrepreneurs from 12 districts of Gujarat participated in this one month programme commenced on 23rd Sept 2019.

Expert lectures on leather processing, leather products and challenges/opportunities for leather industry in India were given by Shri Abhinandan Kumar, Principal Scientist, CLRI RCED Ahmedabad on 24th and 25th September 2019 at EDII Ahmedabad. The participants also visited RCED Ahmedabad from 9th to 11th October 2019 where they were demonstrated various unit operations involved in leather processing and leather products manufacturing. They also got some hands on experience in leather goods manufacturing etc. Interactive sessions were also held to clear the doubts raised by the participants.

PARTICIPATION AND UNDERSTANDING REPORT OF TRAINING PROGRAMME ON CALIBRATION AND UNCERTAINTY MEASUREMENT AS PER NABL REQUIREMENTS ISO IEC 17025:2017

Organised by: CSIR-Central Scientific Instruments Organization
Venue: CSIR Madras Complex Taramani, Chennai-600113
Date Period: 23.09.2019 to 24.09.2019

OVER VIEW UNCERTAINTY MEASUREMENT AS PER NABL REQUIREMENTS ISO IEC 17025:2017

With a view Towards the importance of electrical and mechanical parameters measurement and its traceability to National /International standards, CSIO Chennai is conducted a two days training program on NABL requirements, Overview on ISO/IEC 17025:2017 and calibration uncertainty in measurements. The course is designed, to familiarize the above concepts for electro-technical and mechanical calibration for the participating engineers, Technocrats and quality manger/Auditors.

The participations were able to understanding the requirements of calibration laboratory as per ISO/IEC 17025:2017 related to electrical and mechanical parameters for NABL accreditation in addition to hands-on experience on calibration instruments.

The following are the focal points of the technical sessions organized as part of the program:

- Introduction to ISO/IEC 17025:2017
- NABL Requirements as per ISO/IEC 17025:2017
- Uncertainty in measurements.
- Electro-Technical calibration Techniques.
- Mechanical calibration Techniques.
- Hands on experience on Electro-Technical and Mechanical Instruments.

The training program has also included visits to CSIR-CSIO calibration laboratory under Electro technical, Pressure, Linear dimensions, Mass & volume and Temperature calibration sections to give the participants on-field exposure. The conducted program was more practical intensive to expose participants to experimental learning calibration and uncertainty measurement as per NABL requirements ISO IEC 17025:2017. There were various sectors like "The Indian Space Research Organisation is the space agency (ISRO)", Thermal Power Stations, BHEL, ONGC, Railways and private companies etc. about 43 participants has gained the knowledge in calibration uncertainty methodologies for the laboratory instruments through this two days training program.

REPORT ON INDUSTRIAL VISIT B.TECH. LEATHER TECHNOLOGY (7TH SEMESTER STUDENTS - 2016-2020 BATCH)

The B.Tech. Leather Technology students of 7th semester - 2016-2020 batch (45 students) from CSIR-Central Leather Research Institute (CLRI) visited the VKC Group of companies in Kerala on 21st September 2019 as part of their industrial visit, which is a part of their academic curriculum. The students were accompanied by two faculty members from CSIR-CLRI: Mr. N. Govindarajan, Principal Technical Officer, SPDC and Mrs. B. Kanimozhi, Technical Officer, CHORD. The students first visited the Head Office at VKC Tower, Nallalam in Kozhikode, Kerala. The students were given an introductory presentation about the VKC Group by Mr. Edwin James, General Manager - HR, VKC Group (Division II).

Introductory Presentation about VKC group of companies

Mr. Edwin James welcomed the faculty and students with the brief explanation on the history of the VKC Group. VKC Group is a footwear manufacturing and marketing company, based in the Kozhikode district of Kerala state, in India. Mr. VKC Mammed Koya is the founder of the VKC Group. It stands as number one in PU footwear manufacturing in India. VKC was started in the early 1980s and it first ventured into the matchstick industry. Owing to the decline in the matchstick industry, the company changed its focus to the footwear industry.

A corporate video was played as part of the introductory presentation. The video showcased the journey of VKC Group of how it started manufacturing Hawaii chappals and then ventured into the product portfolio of PU, EVA and PVC footwear. The raw materials are sourced from various parts of the world and are ensured with utmost quality. The significant aspects which enhance the competitiveness of the VKC Group includes - SAP enabled business processes, state-of-the-art design studies and unique designs, leveraging on IT processes, unparalleled promotional/marketing schemes, ensuring better service delivery to dealers and retailers, outstanding after sales service and organizing professional development programmes for employees. The video coverage also included many dealers and retailers expressing their views and extreme satisfactions owing to their association with VKC. The video show - cased the activities taken up by VKC Group as part of Corporate Social Responsibility (CSR) through its VKC Charitable Foundation. The Trust runs two schools in Kozhikode and also provides school shoes to various schools in Kozhikode. The Trust is also involved in providing relief measures to the needy people. A considerable share of profit of the VKC Group Companies is contributed to this Charitable Trust for helping the economically backward people.

Mr. Edwin James further explained about the various aspects of the company profile. The group's turnover was around Rs. 66 Crores in the year 2006. The next turning point in VKC's group emerging with the active participation of the next generation. Mr. Koya's sons Mr. Rasaq, an MBA and Mr. Noushad, M. Tech, Polymer Science and Rubber Technology, are now leading the group towards prominence. They have been influential for participation of more professionals on the board of directors, giving a further impetus to growth. Thus, the VKC Group has witnessed a manifold increase in its annual turnover to Rs.2300 Crores currently. The total production of the entire VKC Group is 11 Lakh pairs of footwear per day. VKC Group has about 27 manufacturing locations including those in the states of Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, Gujarat and West Bengal in India. The current footwear manufacturing of VKC Group is in the following proportion - PU (81%), EVA (14%) and PVC (5%). VKC provides direct employment to around 12000 manpower and also facilitates indirect employment to many people.

VKC Group organizes various professional development programmes for employees including communication skills, creativity, team building, women empowerment and problem solving. The employees are motivated by endowing with awards like "Innovator of the Month", "Superstar of the Month" and "Workman of the Month" awards. VKC Group is keener on employing younger workforce and the average employee age is 31.

Finally, Mr. Edwin James had an interaction session with the students where he answered several interesting questions raised by the students. In the course of the interaction, he explained about the reasons for the rapid growth of the VKC Group and other product portfolios which VKC is about to venture into in the near future.

Visit to the Fortune Elastomers Pvt. Ltd.

Post the introductory presentation, the students were taken to one of the production units of the VKC Group at KSIDC – IGC, Kinaloor in Kozhikode, the Fortune Elastomers Pvt. Ltd. The students witnessed the various stages of the PU chappal injection moulding process wherein PU coated with Rexin is used for making chappals in the unit. The various advantages of PU coated with Rexin and the usage on the different components of the footwear were also explained. The various stages were broadly explained in terms of incoming raw materials, manufacturing, quality, packing and dispatch. The various unit operations involved in the chappal manufacturing process (PU chappal injection moulding process) were elucidated to the students. The process of cutting the uppers and insole from rexine, joining and stitching of the cut components, lasting of uppers on moulds, keeping the closed moulds on the conveyer (where the moulds move along with the rotary conveyer) and casting of PU on the upper and sole were demonstrated to the students. After casting PU sole, the chappals are shifted for checking and trimming. The finished chappals are subjected to quality check and then packed for dispatch. The production unit deploys semi-automated as well as automated machines (computer-controlled machines) for various operations.

The total investment for the Division 2 of the VKC Group which comprises of 14 units that are streamlined with the concept of pan India with the overall investment of Rs.95 Crores and the production unit at Kinaloor is one of the 14 units was visited by the students. The total production capacity of the Kinaloor unit per day is 25000 pairs of chappals. Other aspects like strap making, roll cutting and strap folding operations were also explained to the students. Mr. Karim, Chairman of Fortune Group was also present during the visit.

The industrial visit was proven to be a great exposure of industrial - learning applications at site for the students where they acquainted better understanding on industry processes and procedures for footwear manufacture (chappals). The knowledge gained from the visit was a supplement of theoretical knowledge and inspired confidence – building in the field of footwear manufacturing and technologies.

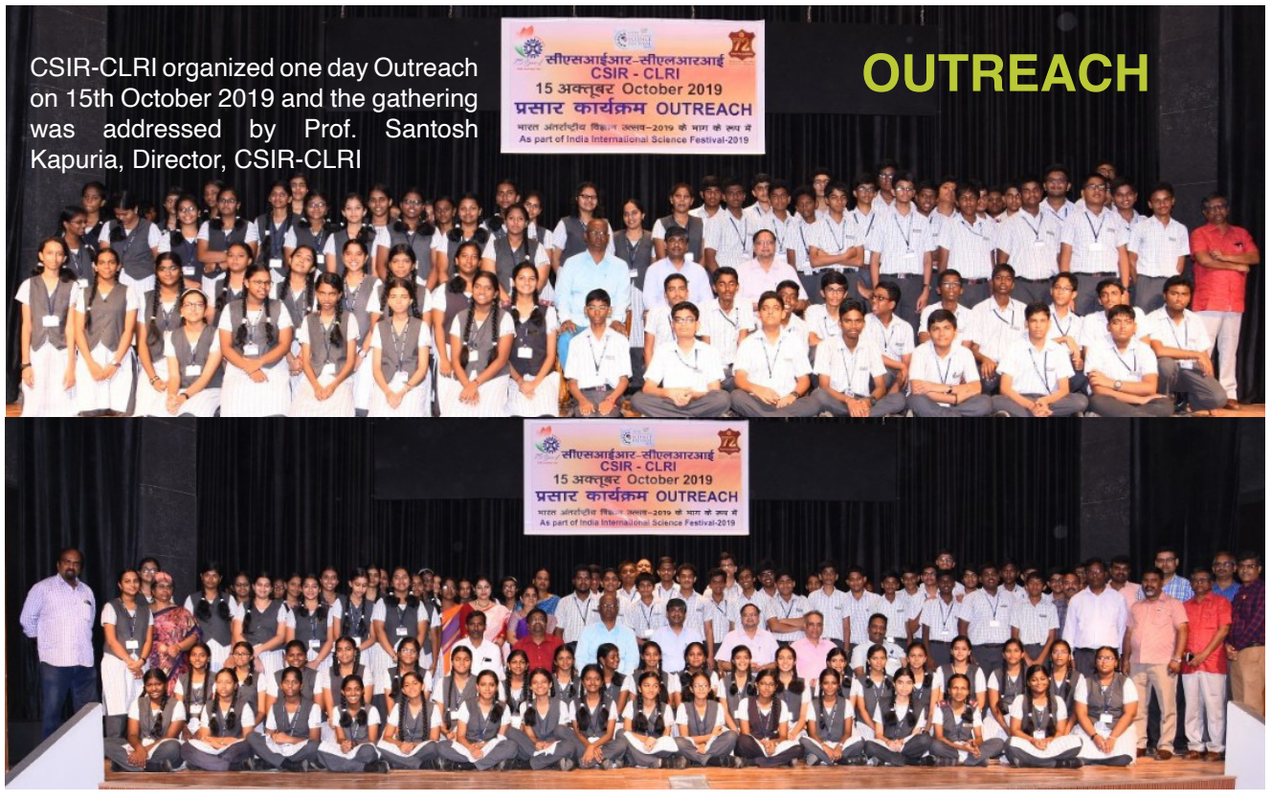
SNIPPETS

"CUSTOMISED TRAINING PROGRAMME ON "BAG MAKING"

Dr C Muralidharan, Chief Scientist, CSIR-CLRI is interacting with the students of a "Customised training programme on "BAG Making" organised by CLRI Shoe & product Design Centre for M/s KH exports. Certificates were distributed to the students on 3rd October 2019. Dr.C.Muralidharan, Chief Scientist graced the function & distributed the certificates to the students. Mr. Srinivasan, Vice President -Personal & HR from M/s KH exports participated in the function."

OUTREACH

CSIR-CLRI organized one day Outreach on 15th October 2019 and the gathering was addressed by Prof. Santosh Kapuria, Director, CSIR-CLRI



Dr P Shanmugham, Senior Principal Scientist, CSIR-CLRI delivered the key note address at the 4th National Conference on "Frontiers in Ecobiological Sciences and its Applications." The Theme of the programme was "Agriculture, Ecosystems & Environment" and was held during 16-18 October 2019 In Salem.

CONFERENCE ON SAFETY, PROTECTIVE AND OCCUPATIONAL FOOTWEAR ON 25TH NOVEMBER 2019 AT INDIA HABITAT CENTRE, LODHI ROAD, NEW DELHI

मानकः पथप्रदर्शकः

REGISTRATION DETAILS

Visit: www. bis.org.in
Call: 011- 2360 8493

The Conference is being organized by Bureau of Indian Standards as an Inaugural event for ISO/TC 94/SC 3- 'Foot Protection' meetings. International Organization for Standards (ISO) is the global body for development of standards related to foot protection.

Footwear Experts from all over the world will participate in the conference and meetings and participants will get in-depth information on the latest trends in foot protection.

Conference Topics:

National & International Standards on Foot Protection
PPE requirements for EU regulations and CE certification
Major changes and developments in safety, protective and occupational footwear requirements and test methods
Industry case studies on challenges faced during production, testing and marketing of safety and protective footwear
Case studies on occupational safety regulations in India and foot protection measures taken by organizations.

Diabetes mellitus is the disease in which the body's ability to produce or respond to the hormone insulin is impaired, resulting in abnormal metabolism of carbohydrates and elevated levels of glucose in blood.

World Diabetes Day is being observed every year on 14th November and the theme of this year is "The Family and Diabetes" to

- Raise awareness of the impact that diabetes has on the family and support network of those affected
- Promote the role of the family in the management, care, prevention and education of diabetes

TYPES OF DIABETES MELLITUS

- Type 1 diabetes, formerly referred to as insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes
- Type 2 diabetes, formerly called non-insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes, usually occurs after age 40 and becomes more common with increasing age

SYMPTOMS

- Diabetes can develop with no early symptoms and the disease is only diagnosed several years after its onset, when complications are already present. They are often diagnosed when routine measurements reveal high blood glucose concentrations
- Excretion of large volumes of urine
- Weakness, fatigue, weight loss, and increased appetite
- Excessive thirst
- Recurrent urinary tract infection and vaginal infection

DIAGNOSIS

- Measurement of blood sugar levels – fasting, postprandial sugar (before and 11/2 to 2 hours after meals)
- Measurement of HbA1c

TREATMENT

Treatment for diabetes mellitus is aimed at reducing blood glucose concentrations to normal levels. Achieving this is important in promoting well-being and in minimizing the development and progression of the long-term complications of diabetes

- The mainstay of non-pharmacological diabetes treatment is diet and physical activity
- Medical management with anti-diabetic oral pills, insulin
- Management of associated co morbid diseases like hypertension, dyslipidemia, obesity

COMPLICATIONS

- Heart disease like fatal myocardial infarction (heart attack), cardiomyopathy, stroke
- Diabetic retinopathy
- Diabetic nephropathy, Kidney failure
- Diabetic foot disease, due to changes in blood vessels and nerves, often leads to ulceration and subsequent limb amputation
- Diabetic neuropathy
- Urinary bladder dysfunction

Glucometer monitoring

Self monitoring of blood glucose level (SMBG) should be done by diabetics using glucometer especially in patients taking insulin, with episodes of hypoglycaemia and with diabetic complications

GESTATIONAL DIABETES

Gestational diabetes is a temporary condition in which blood glucose levels increase during pregnancy but usually return to normal after delivery. However, gestational diabetes is recognized as a risk for type 2 diabetes in later life

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