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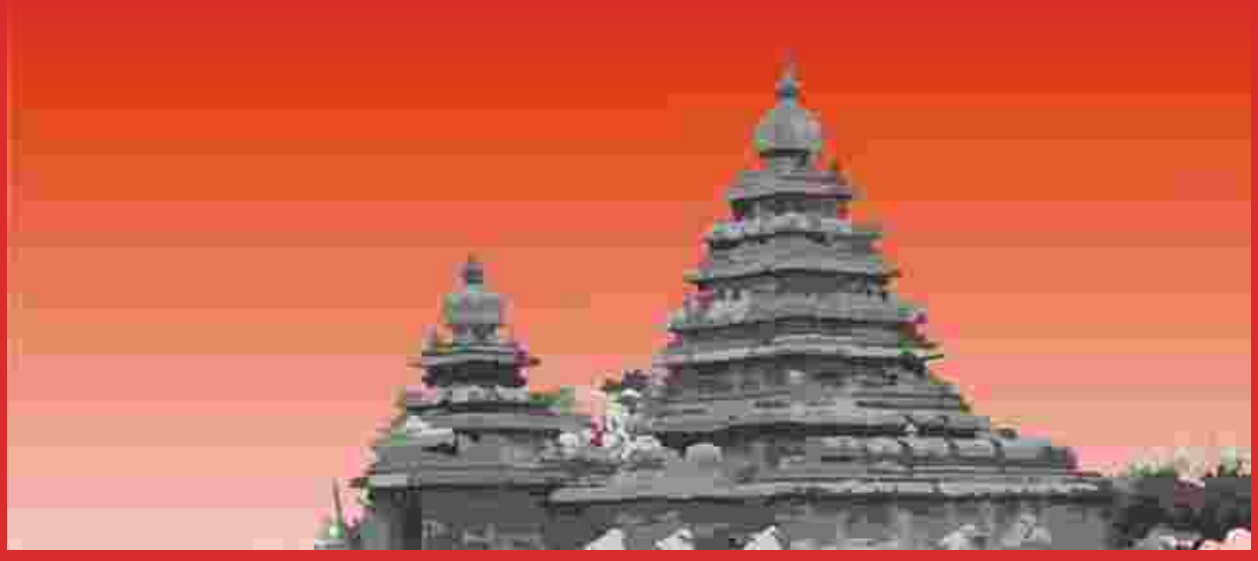
FUTURE FOOTWEAR FACTORY

19th INTERNATIONAL TECHNICAL FOOTWEAR CONGRESS



A REPORT

19th UITIC International Technical Footwear Congress

3rd - 5th February 2016, Chennai, India

Report readied for Council for Leather Exports by
CSIR-CLRI Shoe Design & Development Centre
Md Sadiq, Gautham G, K Dayalan
Support organization to 19th UITIC International Footwear Congress 2016

"596 delegates from 28 countries around the world at the 19th UITIC International Technical Footwear Congress which was unprecedented in the annals of UITIC"

PREFACE

UITIC: International Union of Shoe Industry Technicians

The International Union of Shoe Industry Technicians (UITIC) is an organisation which aims at developing technical knowledge in the footwear industry, in particular by organising international conferences on a regular basis and by taking the initiative in setting up information exchanges between its members, exclusively in the field of technology.

UITIC Congresses

UITIC's main activity is to organise an International Technical Conference which tackles the latest technical problems: automatic sewing, computerised management, new materials, quality, training, design, etc. It is the most prestigious meeting of experts at an international level and is attended, on average, by more than 400 technicians.

UITIC Conferences have taken place in :

1972	EVIAN (France)	New materials, new processes.
1975	ALICANTE (Spain)	Development and technical prospects in the footwear industry.
1977	MAYENCE (Germany)	Future prospects and development trends in the footwear industry in the European area. The use of computers in the footwear industry. Automation and flexibility.
1979	BRISTOL (Great Britain)	Successful footwear manufacturing in developed countries.
1981	BELGRADE (Yugoslavia)	Footwear production in the microelectronics age.
1983	MILAN (Italy)	Automation of processes that enhance productivity and avoid handling times.
1985	BUDAPEST (Hungary)	Advances in CAD/CAM systems.
1987	ALICANTE (Spain)	The footwear industry of the future.
1989	NANTES (France)	"Just-in-time" or how to meet market needs reducing lead times.
1991	MUNICH (Germany)	Successful footwear companies of tomorrow.
1993	ATHENS (Greece)	Industrial organisation, new materials, quality management, training and automatisms.
1996	PORTO (Portugal)	Materials with better performance, new production and commercialisation tools, quality assurance systems and environmental management.
1999	FERMO (Italy)	Evolution of the shoe technology in the last 3 years and prospects for the near future.
2002	BUDAPEST (Hungary)	Transnational production of footwear and its components as a result of the growing globalisation of the economy.
2005	TUNIS (Tunisia)	Changes driven by footwear production globalisation and delocalisation.
2008	ELCHE (Spain)	The advantages of technology for footwear trading and production processes.
2010	LEON (Guanajuato, Mexico)	Powerful ideas in the footwear market.
2013	GUANGZHOU (Dongguan, China)	Social Responsibility: a challenge for the Footwear Industry.
2016	CHENNAI, INDIA	Future Footwear Factory

In addition, apart from conferences, relations between members are encouraged by promoting technical study trips to other countries.

UITIC Awards

The International Union of Technicians of the Footwear Industry, also presents the "UITIC Award", to recognise, at an international level, the work of people who contribute particularly in the technological development in the footwear industries, whether it be for their activities in the actual footwear sector or in the related industries in three categories namely: Technical; Scientific & Managerial.

The Award Winners have been:

NAME	COUNTRY	CATEGORY
Wolfgang Schlamp	AUSTRIA	Technical
Wilhelm Fischer	GERMANY	Scientific
Kurt Seyboldt	GERMANY	Managerial
Jan Pivecka	CZECH REPUBLIC	Technical
Giancarlo Albanesi	ITALY	Scientific
Antonio Vicente	SPAIN	Managerial
Pietro Torielli	ITALY	Technical
Wilfried Screier	GERMANY	Scientific
Pierre Bonnet	FRANCE	Managerial
Tiziano Mostura	ITALY	Technical
Petr Hlavacek	CZECH REPUBLIC	Scientific
Santiago Pons	SPAIN	Managerial
Ars Arpel Group	ITALY	Special Mention for the Press
José Luis Poveda	SPAIN	Technical
Marc Folachier	FRANCE	Scientific
Giovanni Bagini	ITALY	Managerial
Leandro Alarcón	SPAIN	Special Mention for the Press
Enio E. Klein	BRAZIL	Technical
Sergio Dulio	ITALY	Scientific
Roberto Plasencia	MEXICO	Managerial
Revista CalzaVance	MEXICO	Special Mention for the Press
Ferenc Schmel	HUNGARY	Technical
Andreas Tepest	GERMANY	Scientific

Why is it useful for India

The UITIC Congress gave us a chance to update ourselves with the latest in Technology and Trends in the global footwear markets. It also brought eminent experts in these areas from across the world and gave us an opportunity to interact with them and imbibe the knowledge disseminated as well as implement the new ideas discussed to improve our product quality, improve productivity and march ahead of the competition.

Taking into account that the industry needs to be dynamic in order to meet market needs, it was important to keep themselves well informed on every aspect which concerned them and the UITIC Congress was one such important avenue for Indian manufacturers. In general, the presentations were made by technical experts who had thoroughly practiced the themes which were being exposed by them thus avoiding theoretical and publicity approaches, which made it even easier to follow and implement in the Indian context.

An UITIC CONGRESS in India was very beneficial for the Indian Footwear Manufacturers.

19th UITIC International Technical Footwear Congress

The Theme of the 19th Technical Footwear Congress is “Future Footwear Factory”. Advances in technology, design and information sciences have enabled the modernization of factories for producing footwear with advanced properties, making optimum use of resources. However there remains the perennial challenge of changing consumer demands and market vagaries. Also, today’s instantly-connected world has ushered in a plethora of opportunities and challenges. Footwear factories have to adapt and improvise to stay ahead in this dynamic scenario. The 19th UITIC Congress aims to bring together technical experts, manufacturers, and stake holders of the Footwear industry, for a period of intense deliberations on the theme.

The Council for Leather Exports (CLE)-India is the Apex body for the international promotion and overall development of the Indian Leather & Footwear sectors, hosted the 19th UITIC Congress during 2-5 February 2016 at Hotel ITC Grand Chola, Chennai.

Press Meet 2nd February 2016

Mrs Sunanda Santappa, Council for Leather Exports welcoming the gathering!

UITIC 19th Congress in Chennai:

A successful event!

Mr Yves Morin, President, UITIC in his address to the Press on 2nd February 2016

The 19th International Technical Footwear Congress of UITIC (International Union of Shoe Industry Technicians) has just ended. From the 3rd to the 5th February, more than 596 participants met in Chennai, India, discussing topics about "the future footwear factory"

Organized by UITIC and the Council for Leather Exports of India, the event managed to bring together a representative sampling of the international footwear industry with professionals and experts from nearly 30 countries, including 174 foreign attendees from outside India. It proposed 30 presentations and a total of 35 technical posters.

Yves Morin, President, and Françoise Nicolas, General Secretary of UITIC, as well as the Executive Committee, would like to thank everyone involved for this successful event:

- The attendees, first of all, for their presence and their active involvement,
- The presenters and speakers,
- Kenmore Shoes, BBK Leathers Private Ltd. And KH Group for organizing the factory visits,
- The sponsors of the congress.

.They would like to specially thank the CLE for its major contribution to the success of this congress. CLE provided a strong support organizing this event under the Presidency of Rafeeque Ahmed, Chairman of CLE, Aqeel Ahmed, Convener of the Congress and Regional Chairman of CLE, and Ramesh Kumar, Executive Director of CLE.

Mr Subash Kapoor, Vice Chairman, CLE speaking to the PRESS on INDIA LEATHER WEEK 2016 and the two major endeavours of the Council for Leather Exports: 19th UITIC Congress 2016 and 1st Designers Fair 2016.

Mr PR Aqeel Ahmed, Convenor, 19th UITIC & Regional Chairman-South, Council for Leather Exports addressing the PRESS on the Congress

Shri P.R.Aqeel Ahmed, Convenor, 19th UITIC addressing UITIC Press Meet

Mr Naresh Bhasin, Chairman, Design Task Force & Regional Chairman-West, Council for Leather Exports addressing the PRESS on the 1st Designers fair 2016.

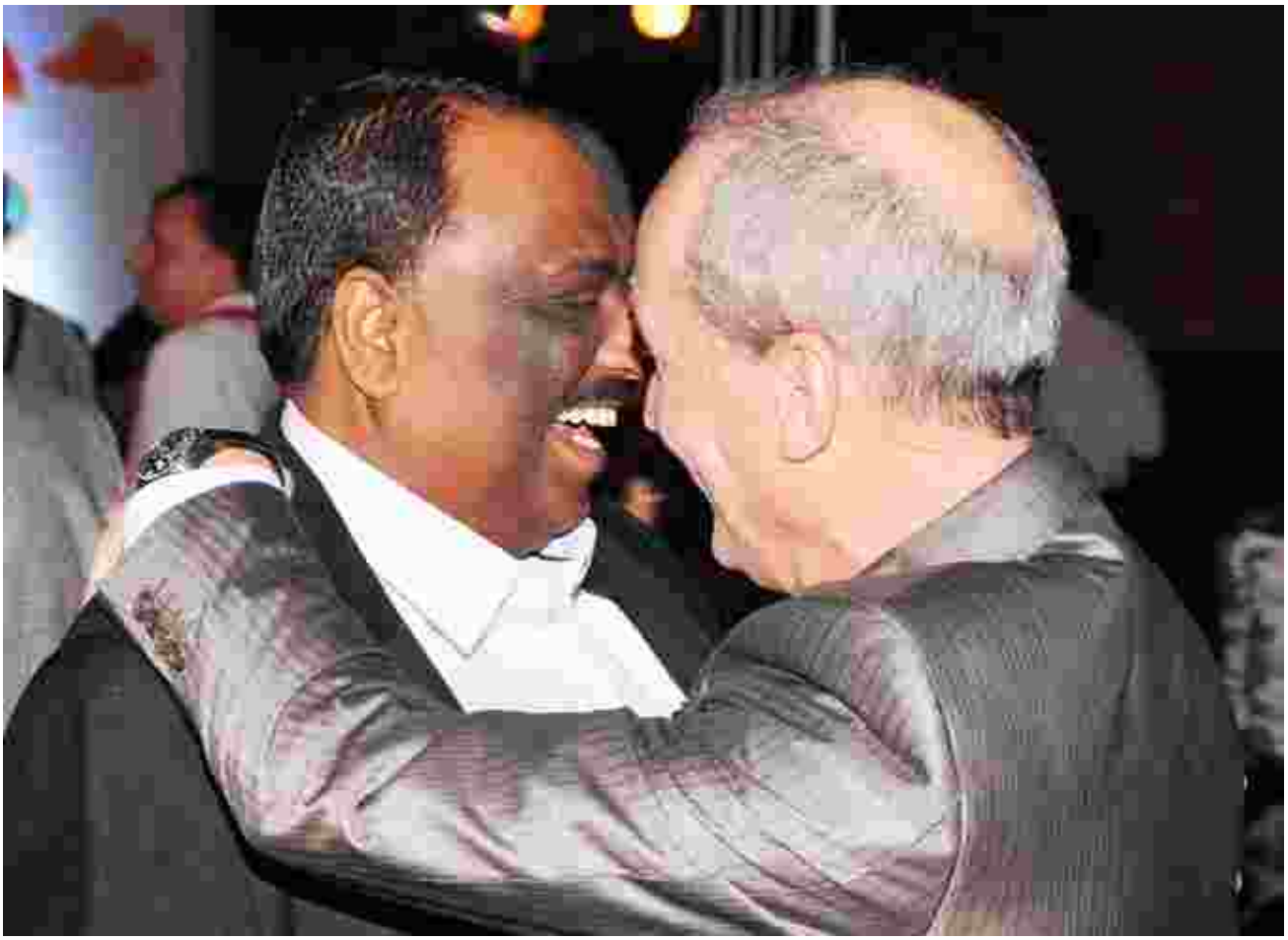
Mr Antonio Munar, Munar Consulting, Spain and Ms Karen Giberson, President, Accessories Council, USA speaking to the PRESS on the 1st Designers Fair 2016

Interaction with the PRESS

Welcome Dinner

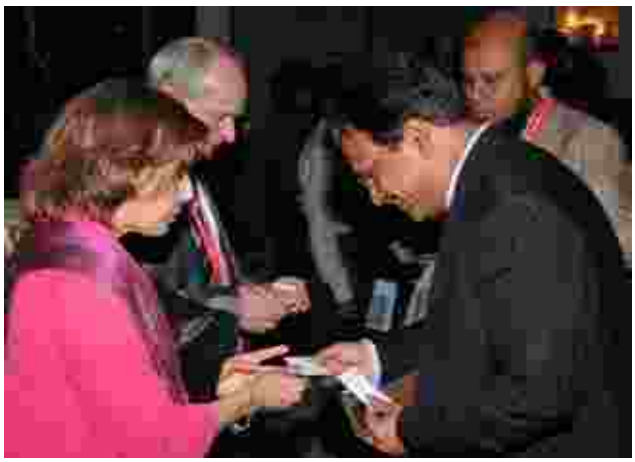
2nd February 2016

Shri M. Rafeeque Ahmed, Chairman, CLE welcoming the delegates and participants



Shri M. Rafeeque Ahmed, Chairman, CLE along with Mr. Yves Morin, President, UITIC

Shri P.R.Aqeel Ahmed, Convenor, UITIC addressing the participants at Welcome Dinner



Opening Session

4th February 2016

Dignitaries at the dais : Shri Subash Kapoor, Vice- Chairman, Council for Leather Exports ; Shri P.R.Aqeel Ahmed, Convenor, 19th UITIC ; Shri C.V.Shankar, Addl. Chief Secretary, Govt. of Tamil Nadu ; Shri M. Rafeeque Ahmed, Chairman, CLE ; Mr. Yves Morin, President, UITIC ; Dr. Girish Sahni, Mr. R. Ramesh Kumar, Executive Director, CLE

The 19th UITIC International Technical Footwear Congress commenced with an Address by Ms Jayne Estève Curé from Jayne Fashion Agency, UK who gave us a background of UITIC as an organization. She complimented the Council for Leather Exports (CLE) India for organizing the 19th Congress of the UITIC (International Union of Shoe Industry Technicians) in Chennai-India. She informed the gathering that it was for the first time that the UITIC Congress was being held in India, the second largest footwear manufacturing country in the world. She stated that UITIC was very proud of the overwhelming response to this Congress in India and said that there would be 600 delegates from 28 countries around the world which was unprecedented in the annals of UITIC and once again congratulated the organizing team from CLE for their extraordinary efforts in reaching out to the Leather and Footwear fraternity from across the globe.

Ms Jayne Estève Curé, Jayne Fashion Agency, UK

Ms Jayne added that this congress would bring together experts and decision makers who all play an important role in the worldwide footwear business and manufacturing process in addition to Brands, footwear manufacturers and experts who would all join together to discuss the Future of the Footwear Factory as well as innovations in the footwear Industry.

She thanked the organizing team for arranging visits to Leather and Footwear before the Congress which was very much appreciated by all. In conclusion, she expressed the delight of all delegates to be in India for the Congress and exuded confidence at the success of the 19th UITIC International Technical Footwear Congress in Chennai.

This was followed by the Invocation to mark the solemnity of the occasion.

Shri PR Aqeel Ahmed, Convenor of the 19th UITIC International Technical Footwear Congress and the Regional Chairman (South), Council for Leather Exports, India then Welcomed the gathering.

In his Welcome address, Shri Aqeel Ahmed stated that it was with immense pride that he stood before the august gathering as the Convenor of the 19th UITIC International Technical Footwear Congress and welcomed them all to India. He recounted that it was for the first time in its 42 year History that the UITIC Technical Congress was being held in India and added that as a major global hub for the manufacture of Leather and Leather Products, it was but appropriate that India played host to this event.

Shri P.R.Aqeel Ahmed, Convenor, 19th UITIC

Shri Aqeel informed the audience that the Footwear industry was an important driver in the economy of our country and was a significant segment of the leather industry and was in fact the 'engine of growth' for the entire leather industry.

He stated that India was on the threshold of a great leap forward with respect to its economic growth with major path breaking initiatives taken by its dynamic Prime Minister like the "Make in India" as well as "Skill India" programmes. The "Leather and Leather Product Sector" in India had been identified as a "Focus Area" under these programmes, he added, which would further provide a huge momentum for the growth of the Leather Sector in India. He underlined that the 19th UITIC International Technical Footwear Congress would witness Brands, Footwear Manufacturers, Technical Experts, Scientists discuss about innovations in the footwear Industry and the "Future Footwear Factory" which formed the THEME of the Congress and added that the ORAL Presentations as well as POSTER presentations on the sub-themes of:

- Manufacturing Based on the Needs of the Consumers
- Intelligent factory and smart supply chain
- Sustainability and regulatory trends impacting on factories
- Attractive Footwear Factories and New Way of Management would be very interesting and informative.

Shri Aqeel Ahmed said that the organizing committee of the Congress was immeasurably pleased to inform that the response to the 19th UITIC International Technical Footwear Congress had been OVERWHELMING and as opposed to the 300 – 350 participants in the previous edition of the UITIC Congress held in China, here in India the participation had surpassed all expectations and broken all records with close to 600 participants for the 19th UITIC Congress. He added that the members of the organizing committee remained humbled by this

response which spurred them to exceed themselves and put forward an event of such unforgettable grandeur that it would forever remain etched in the hearts of the participants as an "experience to cherish" lifelong.

The ORAL Presentations would be helmed by distinguished experts from across the world including Spain, Germany, Italy, Portugal, UK, France, Mexico, China, Hong Kong, Hungary, Austria, Romania and India while the POSTER Session would feature 40 Selected Posters which have been evaluated by a distinguished panel of International Experts comprising the "Scientific Committee" of the Congress, he informed. An interesting aspect of the POSTER Presentations would be the presence of a large number of Posters submitted by the STUDENTS which had encouraged the Organizing Committee to have a special AWARD for the Best STUDENT Poster, he added.

The Convenor of the 19th UITIC International Footwear Congress emphasized that a unique feature of the 19th UITIC would be the "Exhibition of know-hows, new technologies, new materials/ components" which would be showcased to the International Footwear Fraternity gathered here. He added that the response obtained for this Technology Showcase was also immense and all the 20 Exhibition Stalls had been completely sold out.

Shri Aqeel Ahmed stated that an event of this magnitude would not be possible without the help of Technical Support Partners and added that the Council for Leather Exports was singularly fortunate to have on-board the CTC Groupe, Lyon, France and CSIR-Central leather Research Institute (CSIR-CLRI) as "Technical Support Partners."

He also graciously acknowledged all the SPONSORS for this Event and especially conveyed heartfelt THANKS to the "Government of India" for being a major contributor towards the Organizing of this Congress.

He took the opportunity to THANK all the Speakers and Distinguished Experts who had travelled across the globe to be at this Congress to share their knowledge and experience. In conclusion, Shri Aqeel Ahmed heartily Welcomed the august gathering once again wished that they enjoy their stay and savour the Indian Hospitality and Culture and go back enriched and enlightened.

Shri M. Rafeeque Ahmed, Chairman, CLE welcoming Shri CV Shankar, IAS, Addl Chief Secretary, Govt of Tamil Nadu,

Shri P.R.Aqeel Ahmed, Convenor, 19th UITIC welcoming Dr Girish Sahni, Director General, CSIR

The distinguished dignitaries Shri CV Shankar, IAS, Additional Chief Secretary, Government of Tamil Nadu, Chief Guest, Mr Yves Morin, President, UITIC and Dr Girish Sahni, Director General, Council for Scientific and Industrial Research (CSIR), Guest of Honour, were then invited to the dais and honoured with Floral Bouquets and Shawls.

The 19th UITIC International Technical Footwear Congress was then inaugurated with the traditional 'Lighting of the Lamp" by the Chief Guest and the distinguished dignitaries.

Shri CV Shankar, IAS, Additional Chief Secretary, Government of Tamil Nadu in his Chief Guest Address warmly welcomed all the delegates from around the globe and expressed his pride in the fact that the UITIC Congress was being held in India and that too in Chennai for the first time in the history of UITIC. He informed the audience that the "New York Times" has recently adjudged Chennai as one of the 50 'Best Cities' in the world and added that Chennai had a very rich Cultural heritage with high levels of Technical adaptation and great Human resource capital and skills. He opined that, therefore, it was appropriate that the Technical Footwear Congress was being held in Chennai. He added that India produced outstanding Leather and Leather Products and used the Design Inputs available globally. He lauded the Leather Industry as being 'Economically and socially sustainable' and complimented them for their proactive measures taken for 'Pollution Control' which matched global standards, he added.

Shri CV Shankar also highlighted that CSIR-Central Leather Research Institute (CSIR-CLRI) provided excellent Technical Support to the leather Industry and Chennai also was lucky to have the presence of other leading Technical Institutes like the IIT, Madras and he added that with over 500 Engineering Colleges, Tamil Nadu produced about a million Engineering graduates every year which provided the skilled manpower required for the Industrial progress of the country. He emphasized that continuous R&D and Innovation were required to make better products of value which should benefit both the Customer as well as the Entrepreneur.

Lighting of Lamp by Dignitaries

Shri P.R.Aqeel Ahmed, Convenor, 19th UITIC Lighting the Lamp

Shri M. Rafeeque Ahmed, Chairman, CLE Lighting the Lamp

The Chief Guest, Shri CV Shankar, expressed his confidence that this Congress would be useful for all the attendees and would forge many new friendships. He recalled the Global Investors Meet (GIM) held last year and underlined that the meet ended with US$ 38 Billion worth of agreements signed primarily in the areas of Renewable Energy, Building Technology , Automobiles, Auto Components, Food Products and Information Technology among others. He also informed the audience that in the area of automobiles, the Tamilnadu Government had been able to develop world class R&D Institutes in collaboration with leading auto manufacturers like Mahindra, Ford, Renault and Nissan among others.

Concluding, Shri CV Shankar hoped that this Congress be held in Chennai many more times and wished all the participants a successful Congress. He also urged them to visit the numerous Heritage sites in and around Chennai. He also congratulated the Council for Leather Exports (CLE) for taking up this initiative to bring this Congress to Chennai and complimented Shri M Rafe-

Shri CV Shankar, IAS, Additional Chief Secretary, Government of Tamil Nadu

eque Ahmed, Chairman of the 19th UITIC International Technical Footwear Congress and Chairman of CLE and his Team for their tireless efforts in staging this world class congress.

Mr Yves Morin, President UITIC in his address greeted the delegates and saluted the presence of Shri CV Sankar, Additional Chief Secretary, Industries Department of Tamil Nadu and Dr Girish Sahni, Director General of Council of Scientific & Industrial Research, New Delhi,

He stated that he would like to emphasize two main points, the First being that during the 18th UITIC Congress in China in 2013, he had declared that the footwear industry had a "promising future" and some delegates were surprised and recalled a few figures to explain his position at that time namely that the World shoe production in 2014 exceeded 24 billion pairs, which was the very first time this figure had been reached, with a growth of 8% compared to 2013, and added that most of the industrial sectors that would love to obtain these great results. He said that in addition, the worldwide population being of 7.3 billion people, the average consumption of shoes in 2014 was 3.3 pairs per person and per year, a number again that we had never reached before and if you benchmarked this 3.3 pairs to the 7 pairs of shoes sold per person and per year in the USA, you would understand that there was still scope for improvement vis-à-vis our consumption and this would lead to increased production and hence the optimism.

He underscored that thanks to the increase of the population and thanks to the growth of purchasing power, the footwear industry had on a long term basis, a “promising future” and we need to manage this increase of the worldwide production!

He stated that his second remark was that nobody present knew what would be the “Future Footwear Factory” but one thing was sure, “if we do not try to understand what could be the future, if we do not try to illustrate it, if we do not take time to sit down in such a Congress to think about it, we are sure that we will not be prepared to face it and we are sure to miss the changes that will occur”, he opined. Stressing this point, he wished that the 19th UITIC International Technical Footwear Congress would be an opportunity to present actionable insights or food for thought, which could help define the contours of the "Future Footwear Factory".

Mr Yves Morin, President UITIC

Continuing, Mr Morin added that already the various editions of UITIC Congresses have deliberated on innovation, technology, automatic machines but the emphasis has now moved to other major changes in preparation that would modify the entire supply chain which in turn would affect both the way we design, manufacture and sell shoes. He stated that while the new technologies of information and Corporate Social Responsibility, which were the topics of the prior Congress the accent at this Congress was on distribution using the internet and online selling, generating greater responsiveness, more flexibility and more communication between customers and suppliers in order to attract 'connected' consumers in ever more demanding markets.

He hoped that the broad panel of selected presentations would measure the progress made and urged the attendees to identify the ones they wanted to implement in their plants in the coming years with realistic examples. He emphasized that we must think big and we must look ahead and plan for the future, set up modern factories if we wanted to be an industry capable of attracting skilled workers tomorrow. He added that UITIC was not the only institution to work on this topic as in January 2016, the “World Economic Forum” in Davos, Switzerland, had chosen almost the same theme “The fourth Industrial revolution: what it means, how to respond” and added that India was largely involved in this forum in Davos, with a great specific session called “India and the world”, which was dedicated to describe how India could be a global resource for innovation, growth and talent!

In conclusion, Mr Morin stated that the factory visits, quality and diversity of speakers and visual presentations in the form of posters, experts from all over the world and networking are the hallmark and originality of

the UITIC Congresses and this explained its growing success since 44 years.

He proudly informed the gathering that with more than 568 delegates and amongst them about 180 coming from 28 foreign countries, this Congress would probably the largest one ever organized by UITIC since 1972 and hoped that this would be an opportunity for foreign delegates to discover or rediscover India, its prestigious culture and history and also its footwear industry that ranks second in the world, with a production of 2 billion pairs a year, and fervently wished that this would make them all want to practice "Make in India"!

On behalf of UITIC, its Executive Committee and its Scientific Committee, which had both contributed a lot to the success of this Congress, Mr Morin, warmly thanked the Council for Leather Exports (CLE), India, without whom the staging of this grand Congress would not have been possible, and in particular he thanked Shri M Rafeeque Ahmed, Shri PR Aqeel Ahmed, Shri R Ramesh Kumar and Mrs Sunanda Santappa for their tireless efforts in ensuring the success of the 19th UITIC International Technical Footwear Congress. He also thanked Mrs Françoise Nicolas and Mrs Alexandra Faivre of the UITIC Secretariat as also the Sponsors for their generous support. He concluded by requesting the audience to give a Standing Ovation to all who had contributed to the Organization of the 19th UITIC International Technical Footwear Congress.

Shri M Rafeeque Ahmed, Chairman of the 19th UITIC International Technical Footwear Congress and Chairman of the Council for Leather Exports (CLE), India in his address deemed it an immense pleasure to welcome the dignitaries and the Congress participants to the 19th UITIC International Technical Footwear Congress in Chennai, India. He expressed his sense of gratefulness to the global Footwear community fo supporting this UITIC Congress. Tracing the genesis of this event, he informed that Mr Morin, President, UITIC had approached the Council for Leather Exports, India about a year back requesting it to host the 19th UITIC Congress in India and added that CLE considered it an honour to host this event and agreed to the request forthwith.

He stated that Footwear was an element of elegance, style and a symbol of the stature of the person and the Theme of the Congress “Future Footwear Factory” clearly represented this train of thought. He thanked Shri CV Sankar, Additional Chief Secretary, Industries Depart-

Shri M. Rafeeque Ahmed, Chairman, CLE

ment of Tamil Nadu and Dr Girish Sahni, Director General of Council of Scientific & Industrial Research, New Delhi for their presence at the inauguration of the Congress.

He informed the gathering that India was the second largest producer of Footwear in the world with a current Turnover of US$ 5 Billion and had an ever-growing Domestic Market with the per capita consumption of footwear in India set to grow to 3 pairs by 2020. He also added that the Production of Footwear was set to increase to 4 Billion pairs by 2020 which clearly highlighted the huge Market Potential of India.

Shri Rafeeque Ahmed thanked all the Industry Members and the various Trade Associations for their support in the hosting of this Congress and expressed his confidence that the deliberations at this Congress would help evolve Concrete Roadmaps for the development of this Industry.

Dr Girish Sahni, Director General, CSIR

Dr Girish Sahni, Director General of Council of Scientific & Industrial Research, New Delhi in his Guest of Honour address welcomed the dignitaries and the delegates of the Congress. He stated that the excitement and aura of the Congress was palpable and deemed it as a great privilege and honour for him to be present at the Inauguration of such an important Congress especially in an area which was so fundamental to the growth of the Indian economy.

He added that Footwear was an area imbued with great Creativity and Design and he was extremely excited at the large turnout at this Congress which augured well for the future development and growth of this in-

dustry, he added. He expressed his optimism that the deliberations at the Congress would throw up a great synergy of mind and action. He also informed the audience that India was at the forefront of Green Technology and CSIR had been pioneering solutions in this area. He also recalled the efforts of Dr T Ramasami, former Secretary, Department of Science & Technology and former Director of CSIR-CLRI for his path breaking initiatives in establishing Environmental friendly options for Leather Processing which had helped the industry a great deal.

He concluded by wishing the Congress great success.

Shri R Ramesh Kumar, IAS, Executive Director, CLE

Shri R Ramesh Kumar, IAS, Executive Director, Council for Leather Exports (CLE), India proposed the formal Vote of Thanks. He thanked Shri CV Sankar, Additional Chief Secretary, Industries Department of Tamil Nadu for his presence despite his busy schedule and complimented him for his great commitment to the growth and progress of the Leather Industry. He also thanked the Guest of Honour, Dr Girish Sahni, Director General of Council of Scientific & Industrial Research, New Delhi for gracing the occasion and recalled CSIR-CLRI's partnership with the Indian Leather Industry and thanked him for his encouraging words.

The Executive Director, CLE thanked Shri M Rafeeque Ahmed, Chairman of the 19th UITIC International Technical Footwear Congress and Chairman of the Council for Leather Exports (CLE) for being the 'Driving force' of the Indian Leather Sector and opined that the organization of the 19th UITIC International Technical Footwear Congress was another feather in his cap. He added that the microplanning of Shri M Rafeeque Ahmed had helped the Organizing Team plan this event meticulously and his spirit, soul and hard work had gone into ensuring the success of this Congress.

A view of the participants.

Shri R Ramesh Kumar also profusely thanked Shri PR Aqeel Ahmed, Convenor of the 19th UITIC International Technical Footwear Congress for his attention to every detail in the planning and hosting of this Congress which had resulted in such a professional display of the event. He also thanked Mr Yves Morin, President, UITIC for choosing Chennai as the venue for the Congress and expressed his gratefulness to Mr Morin and his team for giving their valuable inputs towards the conduct of this event.

The Executive Director, CLE also thanked the Government of India and the Government of Tamil Nadu for their immense support and thanked them for including the leather Sector as a Focus Sector under the "Make in India" programme of the Hon'ble Prime Minister of India. He also thanked the Industry Members, the Academics, experts as well as the participants who had graced the occasion. He concluded by expressing his heartfelt Thanks to Shri M Mohammed Hashim, the Doyen of the Indian Leather Industry for his inspiring presence at the event and also took the opportunity to thank the entire team behind the Organization of the 19th UITIC International Technical Footwear Congress.

Shri M. Rafeeque Ahmed, Chairman, CLE along with Mr. Yves Morin, President, UITIC

Dr. Girish Sahni, Director General, CSIR with Shri R Ramesh Kumar, IAS, Executive Director

Introductory Lectures

4th February 2016

"From the millenial fashion consumer to the millenial footwear factory."

This session featured two presentations from Ms Jayne Estève Curé from Jayne Fashion Agency, UK and Mr Sergio Dulio from AtomLab. Italy which had as its Theme - "From the millenial fashion consumer to the millenial footwear factory."

Ms Jayne Estève Curé from Jayne Fashion Agency, UK focussed her presentation on 'Understanding the Millenial Fashion Consumer' and commenced her presentation with a 'a concise portrait of the millenial generation' whom she described as the the world's current young adults and were those born between 1980 and 2000 and were between 15 & 35 years of age. She added that they were also named as the Y Generation, the Echo Boomers, the Net Generation, the Boomerang Generation or the Peter Pan Generation. Ms Jayne underlined that the Millenials were the generation that made up the largest segment and had the most future purchasing power in the fashion industry and giving Statistics, she stated that their Estimated world combined purchasing power globally was to the tune of US$10 trillion and out of this it was US$2.45 trillion for apparel. She added that about US$600 billion was spent on apparel in the US and it was estimated to grow to US$1.4 trillion in 2020.

Ms Jayne stated that millenials were complex consumers with increasing demands as they are mobile & tech-savvy, multichannel buyers, money conscious & frugal, Social & socially conscious, brand addicts, Trend Setters and highly sensitive to change. She emphasized that the Millenial Fashion Consumer was sensitive to a new set of values that had emerged from the economic, social and political crises. She added that these New expectations and requirements were more qualitative and identity based.

Ms Jayne described that the millenials were experiencing an ecological awakening and were thinking on the lines of No to greenwashing!, What can I do for the planet?, Let's partnership to progress together!, Now is the time to act responsibly & ethically! and Sustainability is more than a concept! Let's embark on the eco journey ! She stated that emotions & experience were at the heart of their value system and they wanted to experience emotions and be enchanted by the brands they wanted to love !

Elaborating further Ms Jayne explained that the Millennial Fashion Consumer was a digital native, hyper connected & social! and was part of the first generation born with the web ! She stated that the millenials live in an online community and were hyper connected to social platforms like pinterest instagram and the fashion millenials were followers of fashion bloggers. They were also smartphone addicts and loved smartphone fashion apps and were always searching for new smartphone fashion apps.

She added that Fashion brands of today have to se-

Ms Jayne Estève Curé , Jayne Fashion Agency, UK

riously rethink their business models and adapt their strategies at all levels to positively engage a new and far more complex and challenging consumer who is emerging in a fast-changing international environment. The democratization of fashion, an ecological awakening, the digital revolution and years of disruptive economical changes ranging from financial crisis to the emergence of rapidly growing new markets have driven the fashion consumer to radically change by adopting new purchasing habits, she opined. According to her the consumer could be described as a "consumer' actor" with a wish to master their purchases in tune with their personal desires and explained that today's new fashion consumer is often a digital native, is highly sensitive to encountering a personalized and seamless purchasing process allowing the enjoyment of a unique shopping experience whatever the retail channel. This new fashion consumer loves fashion and particularly shoes that they buy more and more online expecting to discover and feel much more in a store than on the internet, she added.

Ms Jayne stressed that they were highly sensitive to the use of both technology and human relations and were drawn to the physical store that provided both an interactive and fluid process that optimized their in-store customer experience and continued by stating that this new consumer buying behavior pattern was forged by the challenging growth and importance of omni channel strategies that aimed to achieve a 360° customer relationship & experience and added that in this context, brands were challenged by the need to redefine the contours of the type of relationship they wanted to build with their customers and develop means and actions that would enable them to enrich their commercial performances.

According to Ms Jayne, fashion brands faced key challenges to seek ways to place this new consumer at the heart of an all-encompassing multi-channel strategy with a view to create proximity and to engage in a direct relationship and experience with them and emphasized that Success in the store would come through adopting a personal shopper approach to one's fashion customer... in this way trained sales teams would become the best

possible ambassadors for their brand capable of optimizing a personalized customer experience, she added.

In conclusion, Ms Jayne observed that with this objective in mind, physical stores had a major role to play alongside digital channels by putting the consumer at the heart of their strategy De facto and added that they had the potential to represent the incarnation of proximity and build a direct relationship with the consumer who could enjoy a multiform experience with the brand. She concluded by stating that 'DON'T FORGET THE Z GENERATION IS ON ITS WAY!'

Mr Sergio Dulio, Head, ATOMLab, Italy dwelt on the 'Challenges in Manufacturing' and listed the challenges as:

CHALLENGE # 1: ON DEMAND PRODUCTION where he queried "Is there any better way of being sustainable than producing only what a consumer will certainly need?"

CHALLENGE # 2: THE EXPERIENTIAL FACTORY where he explained how Factories become places where consumers go and see how shoes are made and shop for their true values: no workshops but work and shop outlets

CHALLENGE # 3: THE RAM SHOE FACTORY which elaborated on RAM -Robot Assisted Manufacturing which ensured that Factories became attractive places for workers: healthy and safe environments where humans perform rewarding jobs while repetitive and alienating ones are left to machines and robots

CHALLENGE # 4: HIGH TECH – HIGH TOUCH where he gave the example of The Human Digital Fingerprint : a "signature", based on advanced RFID technologies, that helps consumers to appreciate the human touch in the product they buy

CHALLENGE #5:HYBRID AND 3D PRINTED SHOES where he described about two types of consumers namely PRO-SUMERS: consumers become producers and CON - WORKERS: a new breed of informed and aware consumers.

Mr Sergio Dulio, Head, ATOMLab, Italy

Mr Dulio opined that if dealing with new consumers habits and trends and new purchase attitudes would pose major challenges to fashion and shoe brands in the I future, it was even more true that these mutations could have a disruptive effect on manufacturing as we know it today and on the way shoe factories of the future would look like. He explained that the scope of the second part of his presentation was to analyse how challenges on brands that need to cope with an evolving and proactive consumer, translate into challenges to the company manufacturing system and on its related technologies. He exposed the audience to a number of suggestions inspired by the analysis presented in the first part such as: the on demand challenge, whereby highly demanding consumers with fast changing desires and a growing sustainability push will call for the capability of producing only what is really needed and purchased by the clients, with limited wastes and low energy consumptions. He queried 'Which enabling technologies would this require?' and went on to talk about the "experience "domain; the whole product choice and how purchases would have to be more and more based on experience; why not extending this experience down to the manufacturing steps? He added that Factories would have to become "experiential" transparent, places where consumer could go and appreciate, right and there, the value of what they buy and continued that factories would also have to be attractive places for workers: healthy and safe environments where humans were offered rewarding jobs while repetitive and alienating ones were left to machines.

Mr Sergio Dulio opined that added value tasks for humans should be under the spotlight and chain work tasks for robots, working side by side with them and added that these would become common sights in the "glass factories" of the future. A "human signature" based on advanced RFID technologies, would help consumers to appreciate the human touch in the highly automated factories of the future, he surmised and finally stressed that additive manufacturing and 3D printing with their disruptive potential on product and processes and the "democratization" power they bring along where consumers became workers, creators of their own products and workers were a new breed of informed and aware consumers would be the order of the day and added that barriers would fade away in a continuum that would have profound effects on companies and factories of the future.

In summary, he stated that the THE FACTORY OF THE FUTURE would need:

- Intelligent "human centric" automation
- Less specialised, more versatile machines
- Robots as servants
- Flexibility as a must
- Distributed control intelligence
- RFID for tagging and tracking
- Integration of additive technologies
- New CAD tools for new products
- Technologies for circular economies

Shri M.Rafeeque Ahmed, Chairman, CLE and Mr. Yves Morin, President, UITIC honouring the speakers

Session I - Part 1 4th February 2016

The title for this Session was
"A Manufacturing based on the needs of the consumers"

This Session was chaired by Mrs Satyam Srivastava, Footwear Design and Development Institute(FDDI), India and Mr Uwe Thamm, ISC, Germany.

☐ The Introductory Presentation in this Session was by Mr Claude Eric Paquin from FFC, France who spoke on "Consumers are always right, but do they really know what is right for them? How can a shoe company work under such uncertainties?"

Mr Claude Eric Paquin from FFC, France

Mr Paquin opined that today's world is a world of paradoxes and the Markets are more and more global, but consumers, at the same time, want more personalized and customized products. He stated that Consumers wanted to differentiate themselves from the mass but at the same time, they behaved more like flocks, choosing products they were not specially prepared or wiling to purchase, they wanted "the must have" of the moment and so on. He then dwelt on "How to respond to these paradoxes?" and added that independent shoe companies had several solutions: a strong brand, a well-defined market position, a strong domestic base, to be capable to adjust its offer to local requirements but still pretends it is the original product to its supply chain.

He cautioned that if one were a generalist then this would be the most difficult road to success because today one must compete with global players (large 'retailers and high fashion brands) and added that for one's future, one must find for oneself some strong market niches where one could add value for the customers. He stated that many different roads existed where one may be good at and which one could explore in order to differentiate oneself from one's competitors. Mr Paquin also advocated taking advantage of the new digital technologies, introducing new materials and components, developing a real recycling policy, developing products especially designed for one's customers' wellbeing.

In summary, he advocated the following steps, the manufacturing companies need to take :

- Step 1 – Launch a SWOT analysis of your Brand
- Step 2 – Think about your communication strategy, build your brand image
- Step 3 – Think about your distribution strategy
- Step 4 – Adjust your supply chain

☐ The Second Speaker in this Session was Ms Elisa Lopez Alaniz from CIATEC, A.C., Mexico who spoke on "Integration of the Footwear Design and Development area in the Modern Factory."

Ms Elisa Lopez Alaniz from CIATEC, A.C., Mexico

Ms Lopez stated that Innovation is not a magic spark that generates a great idea, but it is a conscious integrating process of market needs with production parameters and added that still, it is a formula that is not easy to achieve. She explained that the design and product development activities, as the initial part of the manufacturing process, are responsible for considering and in its turn integrating issues such as brand identity and fashion, as well as the creation of specialized products that meet specific performance needs of the users and further elaborated that the modern factory must be characterized inter alia, by having an area of design and development of footwear that meets three conditions of integration to really be a key element in the value chain of the shoe. She enumerated the first condition was to have human elements, research, technological development plus innovation for proper materials and means of communication to enable it to capture fashion trends and other demands of customers and the environment. The second condition, she added, was to be able to transfer its developments and new products to the factory production lines, so that there were real products of the original designs. She added that the third and final condition was that there is a continuous flow of information or else feedback from the manufacturing areas to the design area, with data on the different limitations of materials, equipment, batch volumes and workloads, among other things, that ultimately determine what can effectively be made and when.

According to Ms Lopez, in footwear design the techni-

cal knowledge and experience of the stylist of footwear are determinant in the result of the product and she listed out the Emergent technologies as being: Distributed manufacturing and Additive manufacturing. She also highlighted that the DIY “maker movement” involving ‘3D printing’ represented changes in New Product Development, where the Customers define their needs resulting in Mass customization. She stated that Product aesthetics, Quality and Functionality were key to have access to information which opened new decision aspects of purchase including the social responsibility for the experienced user.

Ms Lopez opined that the product specialization had managed to differentiate the personality of the brands, and it had been the best tool to incorporate the R &D into the productive processes and she explained how, In footwear factories, the implementation of technology (CAD/CAM/CAE) had allowed to increase efficiency in process, as well as to improve communication between departments and suppliers. She stated that Technology present in the department of design like 3D modeling and 3D printing optimized the process of design and manufacture of the prototype and added that New production technologies and innovative materials made possible the manufacture of very complex shapes possible, permitting a greater freedom of design.

She emphasized that R & D created the basis for product opportunities which had to be supported by specialized technicians, corporate efficient communications, brand identity, fashion, technology and marketing the cumulative effect of which made the footwear design and development area as a piece key to incubate the integration of the information in the chain of generation of value. According to Ms Lopez, the 'Wow Factor' resided in the process and materials used and stated that 3D modelling and simulation tools could have access to important information in initial stages of the process.

Ms Lopez concluded her presentation by underlining that the " creative" design and engineering solutions could support the performance and functionality of the footwear reducing its complexity, cost and environmental impact and emphasized that a new successful product is related to an efficient communication between all factors that converge on the manufacture and final user.

☐ The Third Speaker in this Session was Ms Vera Pinto from Centro Tecnologico Do Calcado De Portugal, who spoke on “Footwear Functionalized at a Nanoscale.”

Ms Vera Pinto from Centro Tecnologico Do Calcado De Portugal

Ms Pinto commenced her presentation by stating that presently, consumers expectations and needs requires that footwear integrates fashion, emotional desires and multifunctional performances and to meet these challenges and be competitive, the footwear and allied trade companies have put their efforts in the creation of advanced products exploring the remarkable properties of nanomaterials. She added that in footwear the control of bacterial and fungal growth were important to prevent and minimize the generation of malodours and some foot skin problems and continued by saying that these challenges were tackled by developing finishings and leathers with antimicrobial and antifungal properties based on metallic NanoParticles (NPs).

Additionally, she said that, thermal comfort and antistatic properties were important in fashion and casual footwear but an outstanding factor in safety professional shoes which needed to protect the wearer from work hazards while at the same time offering thermal comfort. In this sense, she continued, the development of more thermally and electrically conductive nanocomposites based on carbon NPs was done to contribute to an improvement of comfort, since such materials would improve the dissipation of overheating which is produced within the footwear during use and security as they reduce the electrostatic charges accumulation. Ms Pinto stated that in the framework of European project ‘Nanofoot,’ 5 companies and 4 RTD from 3 countries (Portugal, Spain and Italy) worked complementarily and developed finishings, leathers and polymeric insole materials based on NPs. These materials were produced at pilot scale and applied in the development of new nano technological footwear, she said and added that these developments were complemented by the definition of new methodologies to assess the effective environmental burden due to NPs application.

Ms Vera Pinto gave a brief description of the Characteristics and Properties of NPs and gave a background of the 'NanoFoot' project and defined the Research Lines as being: Leathers and Microfibers, EVA Nanocomposites, Nano Technological Footwear and Human Safety and Environmental Impact. She elaborated on the Specifications and Screening of Nanoparticles with a potential to be used in Footwear Consumer goods, Investigation of processing products and coatings/finishing formulations for producing tailor made products and Development of Leathers and Microfibers based on Nanoparticles.

Shri PR Aqeel Ahmed, Convenor, 19TH UITIC presenting mementos to the speakers

At the end of the Session, Mementos were presented to the Speakers by Shri PR Aqeel Ahmed, Convenor of the 19th UITIC International Technical Footwear Congress and the Regional Chairman (South), Council for Leather Exports, India and Certificates to the Speakers were presented by the Chairman of the Session Mr Uwe Thamm from ISC, Germany.

Shri M. Rafeeque Ahmed, Chairman, CLE and Shri P.R.Aqeel Ahmed, Convenor, 19th UITIC along with Bangladesh Delegation

Session I - Part 2 4th February 2016

The title for this Session was

"A Manufacturing based on the needs of the consumers"

This Session was chaired by Mrs Satyam Srivastava, Footwear Design and Development Institute(FDDI), India and Mr Uwe Thamm, ISC, Germany.

☐ The First Speaker in this Session was Mr Omar Sayed from Servis, Pakistan and he spoke on "Remaining Close to the Customer and Remaining on Top - Experience of Servis, Pakistan"

Mr Omar Sayed stated that Pakistan was a US$1.2 Billion a year domestic footwear market and added that in this market, a local Brand called 'Servis' had consistently matched any large Multinational Company in terms of scale and profitability. He elaborated that Servis was a 50 year old local brand in Pakistan and had used Brand Management, Positioning and extensive Consumer Research and understanding to stay on top.

He gave an overview of the Pakistan Footwear Industry and stated that it was a Rs 120 billion ($1.2b) industry in 2015 and was growing at 7% per year with a breakdown of 35% market share of the organized sector and 65% controlled by imports and cottage industry. He added that there were only a handful of tax paying companies and the market was flooded with Chinese products, low quality and under-invoiced goods. He also listed out the Revenues of the Top 7 companies and also the major Urban Footwear Brands.

Mr Omar highlighted the 'Customer Centric Changes' carried out by Servis as Reucing Lead Times with Strategic suppliers where they had managed to shrink 'Order to Delivery' time to 45 days and had Brand managers leading product development rather than factory product development teams. He elaborated by saying that Servis was now the most recognized shoe brand in Pakistan with an ambitious and energetic Senior Management and they were ready to build a sustainable competitive advantage with more than 100 franchised stores. He emphasized that Branding and Customer segmentation was at the heart of business for Servis and they had the largest Ad spend in the industry, he added.

Outlining the plan of Servis over the next 5 years, Mr Omar stated that they wanted to build a world class supply chain and build their business through three channels namely retail, wholesale and franchise. He informed that they wanted to dominate in their 'bread and butter' category of footwear and planned to bring in new brands and store formats to cover all segments of the market.

Mr Omar Sayed from Servis, Pakistan

In conclusion, Mr Omar spelt out the various Lessons they had learnt and stated that:

- Lesson 1 was: Creating a Strategy and aligning everyone to it is a tough task in large companies
- Lesson 2 was: A strategy without technology and innovation at its core will most likely fail
- Lesson 3 was: to watch out for the Consumer Behaviour Patterns, the Competition and the Government policies

☐ The Second Speaker in this Session was Mr Victorien Picolet from CTC, France and he spoke on "Development of Senior Shoes, a New Direction through Biomechanics"

Mr Picolet prefaced his presentation by stating that the senior population continued to increases and thus represented an important market all over the word. He informed that fifteen manufacturers carried out a new project to improve the senior shoe. He added that the way the footwear dedicated to this fragile population is designed is critical to limit injuries, pain and risk of falls and said that very few studies on the analysis of footwear adapted to the morphological and biomechanical changes in the senior foot had been conducted so far. He underlined that their study, therefore, aimed to quantify the biomechanical impacts of different footwear characteristics (heel high, insoles, etc.) in terms of locomotion and balance in order to improve the design of shoes for this specific population and informed that the results of their study indicated that wearing 3 cm high heels worsens balance and thus modifies locomotion. He added that the integration of textured insoles increased postural stability and thus reduced risk of falls and added that the optimal characteristics of such textured insoles to guarantying a better balance had been identified. He stated that backed by the results of their study, the benefits of biomechanical analysis for the design of shoes and present innovative biomechanical tools for these applications are vital for the development of shoes for senior citizens.

Mr Victorien Picolet , CTC, France

He informed that French Shoe Federation and CTC carried out a project : ADOCS to offer improved shoes for senior citizens alongwith 15 Shoe manufacturing partners. He briefly outlined the objectives of their study as to know the morphological changes to the senior foot ; to analyze the shoe characteristics that influence the balance and walking of elderly and to design a new generation of shoes adapted to the senior population. He described the Morphological modifications, Physiological modifications and the importance of two main parameters namely Heel and Insole. He added that the shoe characteristics that influence the balance and walking of elderly were analyzed Using Biomechanical tools and described the conclusion as being that Textured insoles could be a simple way to reduce the risk of falls for elderly people as it resulted in an improvement of postural stability when increasing the plantar stimulation and added that their study concluded that 3 cm heel and textured insoles were the parameters required for the footwear for senior citizens as this what limited their risk of falls.

☐ The Third Speaker in this Session was Mr Bruno Marelli from Oom Exports Agra, India and he spoke on "Made to Measure Shoes in Mass Production"

R Bruno Marelli described this concept as "m2m" and said that it was the most advanced way to produce made to measure shoes in an industrial production process. He added that in the production side we had needs that required investments and efforts to be realized, but not in the least odd or complex and opined that the real difficulties were all in the marketing side. He stated that while all the other problems could be passed as the technology required was already available and tested, the market still remained for us the jungle where everything was difficult and hard to be achieved. He underlined that it is for this reason that m2m was more than an industrial improvement; it was the way to handle the marketing challenges related to such a big step forward. Mr Marelli stated that we could make the shoe as per the specification of the feet of an individualeven if it varied in the length or height and added that the sole would not be stretched or compressed to meet the feet size but it would be exactly as per requirement. He further stated that we could also make the shoe in which we could provide extra hardness or softness at the place where the

individual needed it – with NO CHANGE OF MOULD and also we could change bottom design and side profiles, not superficial but drastically again with NO CHANGE OF MOULD.

Mr Bruno Marelli ,Oom Exports Agra, India

Mr Marelli talked to us about how the concept of m2m works and what it really means to produce a m2m shoe in a mass production plan. He stated that a m2m shoe is absolutely not a shoe designed from scratch following the final customers measures and request and desribed the process starting with a 'last' and a a scanned 3D image of the customer's feet. He elaborated that the parameters that needed to be considered were length and the the volume of the INSTEP. He further stated that we needed to modify the central part on a standard last while the two areas are identified as transaction areas to the unmodified parts of the and heel. He added that the Insoles and soles could now be cut by a CAD/CAM system with the information controlled by the m2m software.

In the latter part of his presentation, Mr Marelli described as to how to customize a moulded sole with NO CHANGE OF MOULD and how we could mould a sole in pieces and assemble it on a modified last and insole.

☐ The Fourth Speaker in this Session was Mr Miguel Angel Martinez from INESCOP, Spain and he spoke on "Lessons from 3 examples on Customized Footwear Projects: Technology Perspective"

Mr. Miguel Angel Martinez commenced his presentation by stating that during the last decade there had been an increased interest in customized products and footwear has been also in the wave and added that available technologies had permitted to create digital workflows from foot scanning to last and footwear design and opined that the commercial reality today, however, was that customized products were still a drop in an ocean of produced shoes. He presented a review of 3 cases where technology played a relevant role and analyzed to show how different brands have afforded the customization issue with different results and success levels. He elaborated that these cases were a case for lady shoes in the US market, a case for men's shoes worldwide in specialized boutiques and a case of luxury men's shoes in shops and he proceeded to present and analyze them. He stated that in all the cases the companies used advanced tools at different stages of their business processes in foot scanning, data processing, last and shoe design or even e-commerce, with different results.

Mr Martinez informed that there were different degrees of Customization and said that the different ways of Customization could be through a Physical Shop or an Online Shop or through Mobile Devices like Tablets and Smart Phones and graphically illustrated each of these. He said that from idea to sales for Customization Digital Elements of the Lasts, Soles, Upper Materials and Decorations were required while the Hardware requirements were required for foot size measurement and the Software requirement comprised of Model design, Foot last matching and Model configuration.

He described the process as starting with the Footwear Last Scanning and Editing, Material Scanning and editing, Footwear Model Design and Configuration, Scanning, Measuring and Foot-Last matching, Footwear configuration, Choosing a footwear style and making modifications desired, choosing the outsole, connecting with the scans and matching, rendering the final model selected, changing the materials, changing the sole and finally manufacturing the customized shoe and delivering it to the customer.

Mr Miguel Angel Martinez from INESCOP, Spain

Shri Subash Kapoor, Vice- Chairman, CLE presenting mementos to the speakers

The Pakistani delegation presenting a memento to Shri M. Rafeeque Ahmed, Chairman, CLE

Session II - Part 1 4th February 2016

The title for this Session was

"Intelligent Factory and Smart Supply Chain"

This Session was chaired by Mr Ricardo Guerra Sanchez from CIATEC, Mexico and Dr Bhabendra Nath Das from CSIR-CLRI, India

☐ The Introductory Presentation in this Session was by Mr Cesar Orgiles from INESCOP, Spain who spoke on "Footwear and Technology Base"

Mr Cesar Orgiles from INESCOP, Spain

Mr Cesar Orgiles stated that Footwear manufacture had always been associated with descriptive terms that were not of much help for it to be considered as something interesting for the future: traditional, handcrafted, labour-intensive, low added value, ... However, those who worked for the Sector should appreciate its strengths with respect to other technology-based sectors that seemed to be the only ones to be considered as the sectors of the future, he emphasized. Mr Orgiles added that the continuous incorporation of advanced materials, computer-aided design technologies, automation, or even robotisation, should make us feel proud of implementing a larger technology base than that of many other sectors.

Mr Orgiles described the process of 'Manufacturing Technology based Footwear' and graphically described the various processes of : TECHNOLOGY INNOVATION, NANOTECHNOLOGY, BIOTECHNOLOGY, BIODEGRADABILITY, ROBOTISATION, SHOE LAST DESIGN, HEEL DESIGN, SOLE DESIGN, PATTERN ENGINEERING, GRADING, CUTTING, ARTISTIC DESIGN, FOOT SCANNING, DIGITISATION OF SHOE LASTS, BESPOKE FOOTWEAR, CHROME-FREE LEATHER, BIOMATERIALS, ENVIRONMENTAL MONITORING, DATA EXCHANGE, VIRTUAL REALITY, AUGMENTED REALITY, DEFORMATION IN THE MANUFACTURING PROCESS and CONTINUOUS CONTOUR RECOGNITION.

☐ The First Speaker in this Session was Mr Michele Cantella, from ATOMLab, Italy and he spoke on "Advanced Man Machine interfaces for the Factories of the Future"

Mr Michele Cantella stated that Shoe machines have become in time complex mechatronic systems that incorporate various levels of software control and that require attentive and skilful operators for their efficient functioning adding that this was particularly true for the modern generations of dieless cutting machines currently adopted both for prototype and sample making and more and more in production. He opined that the technologies commonly used by these machines to communicate to the operator all the relevant process parameters and to allow him to effectively layout the patterns to be cut, are the result of a constant perfecting and improving of concepts introduced more than twenty years ago. Displays, projectors, laser systems, keyboards and mice were the state of the art in the so-called man machine interfaces, he added and said that a new breed of modern technologies could offer interesting alternatives like wearable devices, augmented reality, gestural interfaces which were becoming common elements in gaming as well as in some industrial applications. He presented the on-going work at ATOMLab, the research and innovation division of the ATOM group, worldwide leader in shoe process technologies, in the field of advanced man machine interfaces that, he said, were due to become the standard of the next generation of cutting machines (but with possible applications also in other fields and other process phases). He opined that this would introduce a totally new approach to man to machine communication with potentially disruptive effects similar to what happened with the appearance of the first keyboard-less smartphones with touch screens.

Mr Michele Cantella, ATOMLab, Italy

He gave a brief introduction of ATOMLab and the work being carried out there. In his presentation, he said that factories of the past used to rely on human labour and workers' skill; no machines to interact with: just eyes, hands and simple tools and opined that perhaps shoe factories tomorrow will certainly call for new ways for the workers to interact with their machines with Tablets and other similar devices. He added that Cutting leather had always been a matter of eyes and hands - Eyes to see and inspect and hands to move and place the cutting die where the skill of the operator suggests and added

that Modern Cutting machines despite the technological advancements, the operators still needed their eyes and hands to manage the cutting process, but now they had to interact with the machine and its hardware and software systems. He elaborated that the current generation of dieless cutting machines still use relatively "primitive" interaction devices, legacy of very early IT paradigms but in the 'New Paradigm' Smartphones, tablets and other modern electronic appliances have introduced radically new ways of interacting with the devices. Talking of 'Touch and Gesture', he stated that Tapping, pinching, swiping with the fingers on the touch screen have become the natural way to command our devices.

Mr Cantella then spoke about 'Wearable Devices' which he opined were the new frontier and added that researchers thought that 2016 would see an explosion of wearable devices, Smart electronic devices would be more and more embedded in shoes, garments, bracelets, eyeglasses, goggles and helmets, he added. He stated that we were on the threshold of 'Augmented Reality' (AR) which he described as a technology that superimposed a computer-generated image on a user's view of the real world, thus providing a composite view and added that in an industrial perspective, AR allowed to see better the surrounding environment and to see more of the digital data that could be associated to the environment, specific objects and also to shoe patterns.

In conclusion, Mr Cantella stated that a few messages to be taken home were:

- ☐ Man machine interaction is a crucial aspect in the design of modern efficient manufacturing equipment
- ☐ Traditional ways of interacting with the machines are the legacy of the early years of the IT era
- ☐ Augmented Reality combined with other technologies can provide a modern and effective answer to this innovation need
- ☐ A whole new breed of interesting AR, wearable devices is entering the market
- ☐ The application to cutting machines although complex is not impossible and certainly worth being investigated
- ☐ The Second Speaker in this Session was Dr Gautham Gopalakrishna from CSIR-CLRI, India and he spoke on "Material Optimization and Computation of Footwear Consumption Norms"

Dr Gautham Gopalakrishna , CSIR-CLRI, India

Dr Gautham stated that Leather was the single most important component of a shoe and every attempt must be made to optimize its usage by minimizing its wastage and added that Rule of thumb procedures to arbitrarily fix the norms by adding an approximate percentage of waste over and above the traced out area of the upper patterns could lead to a lot of inaccuracies in arriving at the norms for cutting and consequently affect the profitability of a company. It is therefore imperative that an accurate method of computing the consumption norms be adopted, he emphasized and underlined that the methodology followed in developing the algorithm for the software was based on precisely such a scientific premise.

He gave the Methodology followed and commenced with the Preparation of Upper Leather Allowance, where he said that the objective was to take a set of upper patterns and to accurately predict the Area of Leather that would be used when those patterns were used to cut up Leather for an order.

He gave a detailed description of the procedure to be followed as:

1. Layout the patterns as described in 'Procedure for Pattern Scaling'. This figure included the 'first waste' or unavoidable interlocking waste.
2. Using the 'Second Waste Table' add the percentage that describes the relationship between the 'average pattern size' and 'skin size.'
3. Add an allowance for the 'type or shape of leather.'
4. Add an allowance for the 'Quality' or 'cuttability' of the leather.
5. Adjust the 'Clickers Area allowance' for any inaccuracy in the measurement of the skin. Tanner's measures can be inaccurate.
6. Adjust the 'scale figure' for the 'average shoe size of the order.'

He illustrated each of the above 6 parts of the procedure with examples and computed a sample Norm for Leather Consumption for a style.

He then went on to describe "The Innovative Footwear Norms Estimator" which is an automated algorithm conceived, designed and developed by CSIR-CLRI, India towards minimizing material utilization and estimating the product costing. He added that it was standalone software to establish a standard system for measuring shoe patterns and upper materials to produce computerized cutting allowances and costing. It is fast and accurate and allowed users to interactively monitor and control material utilization, he stated.

He emphasized that an accurate figure for estimation of Leather Consumption was essential because the 'Leather Consumed' was the largest single item of cost in the total cost of the Product and the profitability of any company depended on accurate costing. He informed that this could also be used as a basis for incentive payment or as Leather Saving Bonus.

Extolling the virtues of the software, Dr Gautham informed that this was developed on a JAVA platform and

that this Windows based software was unique because Patterns could directly be scanned or imported in as a 'dxf file' independent of any CAD system. He added that apart from calculating the parallelogram area i.e. First waste, Second Waste due to the Average Pattern Size, Third Waste due to the 'CUTTABILITY' of the Leather, the program was also able to compute the Clicker's feetage incorporating a lot of essential parameters such as leather coefficients, leather grades, coefficients for size & fit, adjustments for average size of order etc., thus arriving at an accurate computation of the consumption norms for any footwear style.

In conclusion, he stated that this software would find readymade application in any footwear manufacturing unit for use in deciding cutting norms, estimating clicker efficiency, accurate costing and optimization in material usage.

☐ **The Third Speaker in this Session was Ms Maria Jose Ferreira from Centro Tecnologico Do Calcado De Portugal and she spoke on "High Speed Shoe Factory"**

Ms Maria Jose Ferreira stated that the footwear industry was traditionally characterized by production units consisting of sections (cutting, sewing, assembly, finishing), physically separated from each other and with autonomous organizational and management processes. This type of organization, she felt, createed several areas of intermediate stocks, large production lead times, excess of materials and product handling, thus long delivery times and people in activities that do not add value to the products and processes. In this context, she opined that, High Speed Shoe Factory project which developed and implemented a new model of footwear factory for quick response, able to produce pair-to-pair, in order to satisfy internet sales, small orders, quick replacements in stores, as well as manufacturing of samples for new collections was the answer. She elaborated that the shoe production was designed in a logic of a "single section" with high flexibility, applying agile and reliable technological solutions, which ensured the versatility of multiple processes operating simultaneously. She enumerate the technologies developed which included a) Interactive online sales system based on an online shop incorporating footwear research and suggestion algorithms, b) New multi tool cutting system and c) Integrated logistics flexible production system, which crossed in a single step, the traditional productive sections of cutting, sewing, assembling and finishing. She informed that the project involved 5 industrial partners and 3 RTD that were able to redesign the footwear process to meet the needs of new purchasing realities with agile response. A fully operational Pilot Line was installed in a representative Portuguese Footwear manufacturer, she added.

Ms Ferreira stated that the main goals for the 'High Speed Shoe Factory' model was to obtain an 'Agile Response', eliminate pair-to-pair production and stocks elimination, encourage online sales, efficient production of samples and new collections and ensuring Flexibility and Versatility. The Approach, she said, was to Integrate in a 'single productive phase' the Cutting, Stitching, Assembly and Finishing with the support of an 'Internal Logistics Team.'

In conclusion, she flagged the 'Future Trends' as:

- Digital Factories
- Horizontal and Vertical System Integration
- Industrial Internet of Things (IIOT) with Cloud Data Analytics
- Robotics
- Growth of Mobile, Anywhere, Anytime Computing

Ms Maria Jose Ferreira , Centro Tecnologico Do Calcado De Portuga

Shri M. Rafeeque Ahmed, Chairman, CLE presenting mementos to the speakers

Session II - Part 2 4th February 2016

The title for this Session was

"Intelligent Factory and Smart Supply Chain"

This Session was chaired by Mr Ricardo Guerra Sanchez from CIATEC, Mexico and Dr Bhabendra Nath Das from CSIR-CLRI, India

☐ The First Speaker in this Session was Mr Prerak Mittal from Footwear Design and Development Institute (FDDI), India and he spoke on "Necessity of Services in the Footwear Sector"

Mr Prerak Mittal , Footwear Design and Development Institute (FDDI), India

Shri Prerak Mittal stated that one of the essential needs of the Human life is a proper shoe and that a person is known by the shoe he/she wears. He added that in India the footwear industry had shown an average growth of 8.22% over the last five years and that this industry had invested significant efforts in improving the material efficiency and quality of footwear that it produced but said that no efforts had been directed towards the repairing and after sales service of shoes. He stated that this had resulted on the consumers being solely reliant on 'Cobblers' for repair of their footwear.

He presented therefore his research on the highly unorganized footwear services sector which aimed to introduce the repair, cleaning and customization of footwear services in an organized manner to the consumer. He added that in the present scenario there were no such provisions or services and stated that his research would benefit the footwear industry to tap the opportunities in the organized sector for footwear services. He further stated that his research posed interesting implications for the entrepreneurs who wanted to work in the footwear services sector and would ultimately also benefit the end consumers as they would receive quality services for their footwear and concluded that this work would benefit the unorganized footwear workforce at large.

Most of the footwear companies are product or industry driven, Shri Mittal said and added that they need to understand the current and future requirements of the market. He opined that providing services are definitely looking forward and futuristic which will create its own 'niche' in the footwear industry. He stated that it was imperative to understand your Consumer as they are vigilant and are continuously looking beyond prices and offers and added that there was a huge gap between demand and supply of quality services (Cleaning, polishing, repairs, restorations and personalization) in footwear sector.

Shri Mittal stated that Cleaning and polishing services were always on the top list of consumers as no matter what is the price or quality of the footwear, it would require cleaning and polishing after use. He said that Worldwide large number of footwear were dumped without real use because of minor repairs and added that Consumers were also keen to restore their ages old beloved pair of footwear.

He said that to counter this supply gap Footwear brands and stores (Online & offline) needed to take care of services on their own like mobile handset brands provide. He added that the services could be at their own service centre or through their chain of service centers and added there could also be an Online provision of services where consumers could send their shoes via courier or with pickup and drop facility from the servicing factory like

pasqualeshoerepair.com or shoecareclinic.com

Speaking of the Challenges of providing services in footwear sector, Shri Mittal said that the Quality of services should satisfy the consumer's needs and expectations as well and added that this meant quality value added services for the consumers.

Shri Mittal stated that the inclusion of services would benefit the footwear manufacturer as it would instill a sense of Brand Loyalty and Consumers would see inclusion of services along with product as a solution to their problem. Brand reliability and loyalty would leap high and make the early mover a prominent player in industry, he opined.

☐ **The Second Speaker in this Session was Mr Klaus Freese from Kloeckner Desma Schuhmachinen GmbH, Germany and he spoke on "Shoes Produced by Smart Robots"**

Mr Klaus Freese , Kloeckner Desma Schuhmachinen GmbH, Germany

Mr Klaus Freese stated that the future would be made by networked machines around the globe, robots and humans side by side, single pair production at the cost of mass production, shoe rack, which places its order itself, personalization of the buyer in the shop for individual shoes (Personalization). He added that most aims exist theoretically, but some approaches have been already practiced and with the fourth industrial revolution "Industry 4.0" new paths have been trodden in the footwear manufacturing, he said. He presented the technological achievements and the way to the future and spoke about two types of footwear production categories regarding placement of uppers onto soles namely 1. Traditional production with the manual setting of pre-made soles and a labor-intensive adhesive bond (CP = cementing process) and 2. Highly automated direct soling technology (DIP = direct injection process) and added that in both categories, automation was progressing. Describing the process, he said that the 'Lasts' were detected by means of RFID chips and uppers were scanned by barcode and that both were specified on the desired product by computer control. The accuracy of fitting and processing characteristics of the shoe uppers on the shoe lasts was registered by means of optical detection, he continued and stated that this formed the basis for quality assurance. Mr Freese added that Shoe uppers and shoe lasts passed through fully- automated production lines or production cells and that the processing steps such as roughing or adhesive spraying were applied by 6-axis robot. He informed that these robots worked quickly and accurately and stated that the required robot programs for individual processing of each shoe upper were digitized and transmitted automatically. He opined that Users were fully in agreement that Automation was the future.

Mr Freese Wsaid that Automation resulted in Improvement in quality as the Robots operated in a constant standard process which was Precise, robust and fast and stated that it also led to a reduction of production costs both in labor costs and material costs. He also underlined that it resulted in Higher productivity as the Robots worked 24/7 and delivered a Constant output in heavy as well as difficult work. He highlighted that there was considerable Risk reduction as it released and protect humans.

Talking in detail of the Direct Soling (Direct Injection Process – DIP) he informed that it led to an Increase of productivity, Standardized manufacturing processes, Reduced labour costs, there were no transportation and storage of soles, it resulted in a Flexible working process, it was preferred for large production figures and also No or less adhesive were needed.

He envisaged the situation tomorrow and opined that Human & robots would work side by side, there would be more sensorics, use of Integrated software would increase, there would be High speed data transmission with More data-space, shoes would have memory and the end result would be Smart factories & smart shoes!

☐ **The Third Speaker in this Session was Ms Li Shu from Shaanxi University of Science and Technology, China and she spoke on "The Establishment of Foot Model based on CT images"**

Ms Li Shu , Shaanxi University of Science and Technology, China

Ms Li Shu commenced her presentation by stating that the Foot structure was complex with irregular shape, its modeling data was hardly obtained by direct measurement and added that medical measures and three dimensional software could be used to obtain its modeling data. She informed that the male person with normal foot in middle size 41 was enrolled in their research and the scanning data of his foot was obtained by CT. The modeling data was processed by threshold

segmentation and rendering in Mimics, then imported into Solidworks where every foot structure model was obtained by compressing other ones, she elaborated. Continuing, she said that every foot structure model was segmented by different reference planes, then imported into Design Modeler of Ansys Workbench to compress part of the segmented foot structure model. Then, she added, in Solidworks, the outline of every cross section of the segmented foot structure model was drawn and then the new foot structure model was obtained by sweeping these outlines. She explained that after all the foot structure models were obtained in this method, they were assembled through the correlation between parts in Solidworks and thus the new foot model was obtained ,but there were interferences between different foot structures and that these interferences were eliminated by Boolean operation. She stated that at last the whole foot model was built and said that this laid a foundation for the finite element analysis of the foot.

Ms Li described the foot Ankle structure and elaborated on the Data acquisition for modelling which she said was done by Scanning the right foot of the volunteer by CT to get the Standard DICOM format file with a Scan thickness is 0.67mm. She then described in detail the Establishment of foot solid model which was then analysed using the Finite element Analysis.

☐ **The Fourth Speaker in this Session was Mr Samy Vaikundamani from NIKE, India and he spoke on "Future Footwear Manufacturing- Complexities and Opportunities"**

Shri Samy Vaikundamani stated that the Footwear market was rapidly expanding and the production tools had to adapt to the needs. He described how NIKE had

Mr Samy Vaikundamani , NIKE, India

set up a new way of Management to improve the Productivity, the Development of Products and the Response time. He presented a precise example as well as the results in his presentation.

Shri Vaikundamani traced the footwear market growth trajectory and discussed what it meant for Manufacturing. He opined that More New Products meant More FACTORIES and More PEOPLE which would result in the Complex becoming MORE complex. He then dwelt on the Challenges in "Manufacturing" and according to him it meant Increase in Changeovers, Productivity Challenges, Consistent Quality, Slow response, Sustainability challenges and this he said led to the Complex becoming MORE complex.

He stated that to Manage this we had to invest in Product Technology and New Material development and gave the example of NIKE's FLYKNIT which he informed was relatively simpler to manufacture. He also urged to Leverage Information Technology and added that if one wanted to make Improvements one should know where one was NOW! He opined that DATA was VITAL and that the flow of DATA was critical and stressed that ERP would play a strong role in transforming factory operations

He emphasized that LEAN Manufacturing was the way forward and gave the analogy of "TIMWOODS"i.e. Transportation, Inventory, Motion, Waiting, Over production, Over processing, Defects and Skills. He concluded by stating that "Banishing Waste" with empowered workforce was much needed.

Shri P.R.Aqeel Ahmed, Convenor, 19th UITIC presenting memento to Dr. B.N. Das of CLRI


Think Leather
Think India

Gala Dinner

4th February 2016

Welcome by Shri M Rafeeque Ahmed, Chairman, CLE

Shri M Rafeeque Ahmed, Chairman, CLE speaking at Gala Dinner

Shri M Rafeeque Ahmed, Chairman of the 19th UITIC International Technical Footwear Congress and the Chairman, Council for Leather Exports, India was ecstatic at the proceedings of the first day of the 19th UITIC International Technical Footwear Congress. He recalled the days and months of planning and was very happy that the Congress being hosted by the Council for Leather Exports was being appreciated by one and all. He complimented the Team behind the event and expressed optimism that Day2 of the Congress would be equally exciting and rewarding.

He wished all the delegates present to enjoy the evening and savour a slice of Indian Culture that would be presented.

Brief Remarks by Mr Yves Morin and Shri PR Aqeel Ahmed

Mr Yves Morin, President, UITIC

Shri P.R.Aqeel Ahmed, Convenor, 19th UITIC

Mr Yves Morin, President, UITIC expressed his unbounded joy at the huge turnout at the 19th UITIC International Technical Footwear Congress and said that it was the biggest UITIC Congress in the annals of the history of the Congress. He complimented the organizers for putting up such a spectacular display and added that the Congress would be remembered not only for its magnitude of scale but also for its content which was top class.

He traced the origins of the proposal to host this congress in India and thanked Shri M Rafeeque Ahmed and Shri PR Aqeel Ahmed and their team for agreeing to host it here and for putting up such an impressive Congress. He also urged the delegates to have a nice time and get a taste of Indian culture, hospitality and food.

Shri M. Rafeeque Ahmed, Chairman, CLE and Shri P.R.Aqeel Ahmed, Convenor, 19th UITIC receiving mementos from Mr. Yves Morin and Ms. Francoise Nicholas

Shri PR Aqeel Ahmed, Convenor of the 19th UITIC International Technical Footwear Congress and the Regional Chairman - South, Council for Leather Exports, India marvelled at the overwhelming response to the Congress and fondly recalled the enormous efforts and promotional events at various locations around the world which had resulted in such a huge response. He added that the quality of deliberations at the Congress was of an exceptionally high order and he had found himself enriched. He wished that all the delegates enjoyed their stay in India and carried happy memories of their stay in India and also go back enlightened after imbibing the vast treasure trove of knowledge shared by the eminent speakers at the Congress.

Distribution of UITIC Awards

The UITIC Awards were then distributed by Mr Yves Morin, President UITIC and the prominent amongst them was the "UITIC Technical Award" to Dr Ferenc Schmel of TECHNORG, Hungary for his enormous contributions to the implementation of Technical Knowledge in footwear factories globally and for his steadfast support to UITIC.

UITIC also honoured Mr Andreas Tepest from Deichmann, Germany with the "UITIC Scientific Award" for Scientific Excellence.

Another highlight of this edition of UITIC was their decision to Award the 'Best Poster" presentation by a Student and this year UITIC awarded the "BEST Poster Presentation" to Shri T. Loganathan, a student of M.Tech (Footwear Science and Engineering, CSIR-CLRI, Anna University) for his work on "BIODEGRADABILITY STUDY OF FOOTWEAR SOLING MATERIALS."

Mr. Yves Morin, President, UITIC presenting award to Dr. Ferenc Schmel

Mr. Ewe Thamm receiving award on behalf of Mr. Andreas Tepest

Best Poster : Shri T. Lognathan - presented by Ms. Francoise Nicholas, General Secretary, UITIC

Felicitations to Ms. Francoise, Ms. Sunanda and Ms. Alexandra Faivre

Presentation of Mementos to Partners and Sponsors

The Council for Leather Exports honoured its Technical Support partners and the Sponsors and presented them with Mementos, which were handed over by Shri M Rafeeque Ahmed, Chairman of the 19th UITIC International Technical Footwear Congress and the Chairman, Council for Leather Exports, India and Shri PR Aqeel Ahmed, Convenor of the 19th UITIC International Technical Footwear Congress and the Regional Chairman - South, Council for Leather Exports, India.

Shri M. Rafeeque Ahmed, Chairman, CLE presenting memento to Canara Bank - Gold Sponsor

Shri M. Rafeeque Ahmed, Chairman, CLE honouring Ms. Sunanda Santappa, Asst. Director, CLE

Shri M Rafeeque Ahmed also made a special mention of the enormous contribution of Ms Sunanda Santappa, Asst. Director, Council for Leather Exports and Co-ordinator of the 19th UITIC International Technical Footwear Congress and honoured her contributions by presenting her with a memento.

Mr. Ashok Sambandam, Business Director, BASF receiving memento for Silver Sponsor from Shri Mukhtarul Amin, former Chairman, CLE

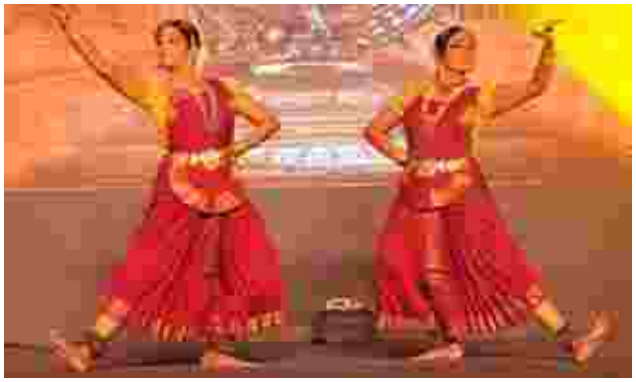
Mr. Puneet Singh of CTC receiving Memento for Technical Partner from Shri Puran Dawar, Regional Chairman (North), CLE

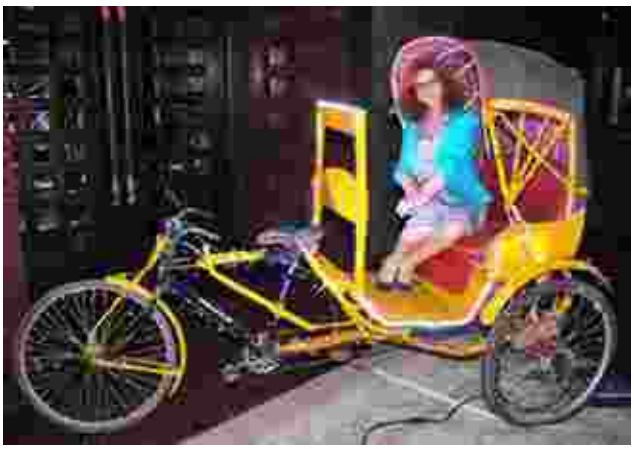
Shri B.N. Das and Shri G. Gautam of CSIR - CLRI receiving memento from Shri Naresh Bhasin,, Regional Chairman (West), CLE

CLE presented 'NATRAJ STATUES' carved from STONE to Mr Morin and to Ms Nicholas

Cultural programme

An excellent Cultural Programme featuring various Indian Dance forms namely Bharatanatyam, Garba, Odissi, Bhangra and 'Poi Kaal Kuthirai" was then presented. The vibrancy and dynamism with the rich play of colours was immensely appreciated by all the delegates present and they went back with a fine sense of the Indian culture.





Dinner

The first day of the 19th UITIC International Technical Footwear Congress concluded with Dinner which was enjoyed by all the participants.

Session III

5th February 2016

The title for this Session was

"Sustainability and Regulatory Trends impacting on Factories"

This Session was chaired by Mr Leandro de Melo from Centro Tecnologico Do Calcado De Portugal and Mr Sergio Dulio from ATOMLab, Italy

☐ The Introductory Presentation in this Session was by Ms Dorothy Adolf from Deichmann, Germany who spoke on "Transparency in the Supply Chain- the expectations of the Consumers and NGO's"

Ms Dorothy Adolf , Deichmann, Germany

Ms Dorothy Adolf from Deichmann underlined that they don't just offer their customers fashion at a great price, but also quality and safety when buying shoes and added that at Deichmann they guarantee the quality that they promise their customers because they work closely with their suppliers on manufacturing processes. She said their mantra was 'We're not satisfied until our customers are."

She reiterated that they believed in the transparency of their supply chain and adhered to three principles which they believed should be every customer's reality namely Prices, Quality and Advice.

She added that the company's motto was, "The company must serve the person" and they make it their concern and personal duty to make sure that this mission was carried out in day-to-day decisions.

She opined that business was there for the people, and not vice versa and added that Profits and growth aren't just ends in themselves, but help to keep the company healthy and to keep jobs secure, which according to her was only possible with qualified, motivated employees and absolute customer orientation. Touching on the aspect of the Supply Chain, she said that when dealing with their suppliers, they stress on fairness and partnership, but where necessary they also pressed for improved working conditions much in the same way they approached business, they approached social responsibility also.

She stressed that while it may sound obvious, but it must be repeated all the time: The goal of all their activities must be to satisfy their customers and this was the foundation of their business success..

Ms Adolf emphasized that they believed that mutually pulling together between the manufacturers, Consumers and NGOs, brought pride in their achievements, strengthened camaraderie and increased work satisfaction. At the same time, this collegial interaction has

positive effects on the company and its success. This, in turn, made it possible to bring meaning to their mission.

She said that they supported work safety, environmental protection and worker health, a ban on discriminatory practices, as well as on child and forced labour, regulated working hours, and clearly regulated compensation. In addition, they also set obligatory social and environmental standards that supplier companies must abide by, she added.

☐ The First Speaker in this Session was Mr Sergio Alonso from CIATEC AC, Mexico and he spoke on "Tannery Blue Waste as raw material for Plastic Composites fabrication"

Mr Sergio Alonso stated that Tanneries were commonly considered as contaminants and added that in this regard, CIATEC had developed a unique solution to valorize blue leather scrap as reinforcing filler in plastic formulations. He informed that several contents of the scrap had been incorporated into ABS creating a unique formula of plastic composite potentially usable in shoe heels and platforms and added that the mechanical properties of the material had also been quantified in polyolefins composites envisaging a wide panorama of applications. Mr Alonso underlined that the results showed the technical feasibility of the composite, either in polyolefins or ABS, in order to take the development further into a spin-off from CIATEC and stresses that one further advantage of the technology was that it could consume all the leather scrap generated locally to fabricate commercial plastic composites. He opined that as a result, the fabrication and commercialization of the plastic composite may contribute to the environment by valorizing a residue that is now difficult and costly to dispose.

Elaborating, Mr Alonso said that the manufacture of leather involved wastes and added that after the tanning step, the leather thickness should be adjusted, generating blue leather waste. He listed out the benefits as classified it as a NEW VALUE-ADDED RAW MATERIAL defining it as PLASTIC + LEATHER WASTE = NEW COMPOSITE. He informed that the Leather blue waste was treated and combined with plastic by means of a proprietary process and formula and a variety of articles could be manufactured from it. He stated that the composite material could be transformed into valuable industrial products either by extrusion, injection, and compression molding processes.

To investigate the mechanical properties of the leather blue waste – plastic composite to better understand the material behavior, Mr Alonso outlined that one had to characterize the material under different waste concentrations and under different processing technologies to envisage the possible applications of the composite.

Listing out the Advantages, Mr Alonso stated that the inclusion of chrome leather waste residue to the virgin plastic generated a composite material whose cost is reduced compared to that of the virgin plastic being used and that it also maintained most of the mechanical properties. In conclusion, he said that the technology valorizes a leather residue, provides alternatives of use and contributes to reduce the use of non-renewable resources such as plastics as well as avoids the confinement of a contaminant

Mr Sergio Alonso from CIATEC AC, Mexico

☐ The Second Speaker in this Session was Mr Jean Claude Cannot from CTC, France and he spoke on "Study of the variation in Chromium VI content inside the Leather used in Footwear"

Mr Jean Claude Cannot informed at the beginning of his presentation that Leathers were mainly tanned with chromium and were widely used in the footwear industry and added that Trivalent chromium (CrIII) was employed for the tanning. He cautioned that, however, if the process was not perfectly mastered, some free CrIII radicals could be transformed into hexavalent chromium (CrVI), which was harmful. He stated that Several hypotheses had been advanced to explain the CrVI appearance and added that a few studies assessed the evolution within time of the CrVI content.

Mr Cannot stated that CTC had launched a research program where Four different bovine leathers had been defined: - Leather 1: tanned and finished with all the best practices known nowadays to avoid CrVI generation. - Leather 2: treated with the same recipe, except the fat liquors used, which are unsaturated. - Leather 3: tanned without applying the best practices. - Leather 4: treated the same way than the third, but with a vegetal retanning and for several months, they had been following their variation of the CrVI content, by studying particularly the influence of: - The homogeneity of the CrVI content on the hide (mapping) - The recipe applied to identify the best practices that are inescapable - The storage, of the light effect - The means to detect the CrVI (ionic chromatography) The aim of these works was to suggest a new ageing methodology, which was really representative of what was happening to the leather, during the footwear manufacturing and use, he informed. Mr Cannot stated that the efficiency of reducing agents, used for prevention of CrVI generation, applied on bath or on the back side of finished leathers was also assessed and stated that these research works had already shown the impact of the application of best practices.

Mr Jean Claude Cannot from CTC, France

Mr Cannot emphasized that the goal of their Research was to secure the supply chain In the world as more than 80% of the leather was tanned with Chromium and the first use of leather was for footwear manufacture. He informed that only trivalent chromium (CrIII) was employed for tanning but added that if the process was not perfectly mastered, some hexavalent chromium (CrVI) would appear in leather. He also informed that the European legislation specified CrVI's content in leather as not exceeding 3 ppm and added that to guarantee the absence of Cr VI in leather was the major concern for the footwear industry now.

Mr Cannot concluded by spelling out 3 major options to avoid Cr VI in leather footwear, which he listed as:

1. The tanning process should follow the good practices
2. We must fully understand the chemical reaction and avoid it
3. We must work with anti-oxidant chemicals that would stop the action of oxygen

☐ **The Third Speaker in this Session was Mr John Hubbard from SATRA, UK and he spoke on "Sustainability benefits for Shoemakers using SATRA Production Efficiency tools"**

Mr John Hubbard prefaced his presentation by stating that a modern footwear factory should have access to a range of efficiency tools and systems in order to ensure that material and production costs were kept under strict control and added that these tools would also result in sustainability benefits. He added that as more investors and customers were requiring statements and evidence to demonstrate a positive approach to environmental and sustainability reporting, he underlined that by using these types of systems footwear manufacturers could be part of a strong sustainability narrative for their products.

He informed that there were three main systems that could be utilized and each one would provide different cost and sustainability benefits. He highlighted that that "SATRASumm" was a pattern cutting programme that maximized the utilization of the primary raw material, leather. It took account of the flaws associated with this natural material and the complex shapes and size ranges of footwear uppers, he informed and added that this material saving reduced waste to landfill, and over time would lead to fewer transport deliveries and faulty products.

Mr John Hubbard from SATRA, UK

Mr Hubbard also informed that 'VisionStitch' was a sewing system that trained the stitching operatives and correctly optimized sewing machines and further stated that it had been shown that trained operatives using correctly adjusted machines would use less energy whilst improving the quality and accuracy of the stitching operation. He added that 'Timeline' was a system that balanced resources and skills and could be used to reduce work in progress in the factory. He elaborated that the systems were modular but compatible and could be a key to the real possibility of reduced costs, improved quality and increased sustainability.

Systems were selected primarily to achieve cost saving and increase production efficiency both of which impact positively on the long term sustainability of the products, Mr Hubbard continued and listed the major benefit as being a significant reduction of the materials and resources used. Oulining the additional benefits, he added that they included:

- Increased productivity
- Improved product quality
- Expanded knowledge

Mr Hubbard drew the attention of the audience to the benefits of the Leather Cutting Systems as being:

- Increased material utilisation
- Less scrap to landfill
- Reduced storage
- Less transportation
- Improved product quality

Highlighting the Benefits of a leather cutting system, Mr Hubbard stated that for a footwear manufacturer producing 3,500 pairs/day of men's shoes, they would use 2,275,000 square feet each year and by working with a best practice leather cutting system they could reduce this figure by at least 8%

He also underlined the Benefits of Stitching productivity, Benefits of Line Balancing and the Benefits of Lean Manufacturing. In conclusion, Mr Hubbard enumerated the Sustainability Benefits as being:

- Materials savings (Transport and waste)
- Energy use
- Right first time (Reducing waste)

- Fit for purpose (Durability)

and emphasized that Sustainability was now a key part of the global supply chain.

☐ **The Fourth Speaker in this Session was Mr Pasca Matteo from ARS Sutoria, Italy and he spoke on "Step 2 Sustainability"**

Mr Pasca Matteo from ARS Sutoria, Italy

Mr Pasca Matteo informed the gathering that the project "Step to Sustainability", co-financed by the European Commission, aimed at creating, designing, developing and piloting a new occupation and qualification profile with a corresponding training course. He stated that the overall objective was that businesses maximized energy efficiency and the use of their resources, while at the same time they increased the added value of their footwear in order to better satisfy consumers' demands, as well as our planet's needs, he added.

Mr Pasca said that based on the European Qualification Framework, two levels of occupational profiles had been developed, Level 4 – "Technician on Sustainable Manufacturing"- and Level 5 "Specialist Technician on Sustainability for Footwear Industry", and a variety of modules of both training programmes would soon be finalized. He continued and stated that in brief, footwear companies would have an expert on sustainable manufacturing among their staff, who could advise on multiple topics such as the optimization of materials and processes with regards the product and packaging, the restricted chemicals to use, the legislation and standards to respect. He also informed that the consortium had now opened a Call for Expression of Interest at the project website www.step2sustainability.eu, in which companies could apply to be part of the pilot exercise and follow training modules free of charge.

Mr Matteo queried as to 'How to Implement Sustainable Manufacturing in Footwear' and answered by stating that Sustainability applied to the industry affects the entire company at all working levels and was not restricted to only design and production departments, but also was applicable to the managerial level. He stressed that a multidisciplinary knowledge was needed in the company to develop a sustainable strategy and added that this knowledge did not currently exist, particularly at technical level and stated that the footwear sector in Europe was constituted mainly by SMEs, which generally lacked qualified resources in this field, and did not have the necessary resources for investing in training.

Mr Pasca then listed out the PROJECT STEPS:

- Step 1: Research On Training Needs
- Step 2: Development Of A New Qualification Profile
- Step 3: Design Of Training Program – Training Units
- Step4: Piloting E-Learning

In conclusion, he said that this would lead to a finalization of the e-learning platform through video lectures and assessments and the pilot would be run with selected European companies. He added that a case history of a sustainable footwear collection would be created and a Final Conference would be held to launch the online training courses. He emphasized that the Project would be followed and the contents would be updated and the culture of sustainability would be disseminated.

☐ **The Fifth Speaker in this Session was Ms Patricia Pineiro from Spanish Federation of Footwear Industry, Spain and she spoke on "Footwear Carbon Footprint Calculation"**

Ms Patricia Pineiro from Spanish Federation of Footwear Industry, Spain

Ms Patricia Pineiro defined the calculation of the Carbon footprint which consisted in quantifying the greenhouse gas emissions (GHG) of a product throughout its life cycle and added that it was an indicator of a product's environmental quality and allowed the implementation of GHG emission abatement measures, sustainability improvement and compliance with regulations that fight against climate change. She stated that there were numerous generic tools available for carbon footprint calculation, but none was specific for footwear. Furthermore, the selection of one methodology or another could noticeably affect the results so it was therefore necessary to find a harmonized methodology for the footwear sector, she opined.

Ms Pineiro informed that the "LIFE CO2Shoe Footwear Carbon Footprint project" was launched to address this issue and it was mainly aimed to develop a carbon footprint calculation tool specific for footwear. She stated that the project was supported by the European Union under the LIFE programme and was coordinated by the Spanish Footwear Technology Institute (INESCOP), with

the collaboration of the European Confederation of the Footwear Industry (CEC), and the Federation of Spanish Footwear Industries (FICE), among other partners. She elaborated that the calculation tool had been developed and successfully tested on different commercial footwear styles and added that for its operation, the international standards relative to Life Cycle Analysis (ISO 14040/14044), Carbon Footprint (ISO 14067) and the Product Category Rule "Leather Footwear" had been taken into consideration.

Ms Pineiro gave a background of Global warming & climate change and also spelt out the Life Cycle Assessment of a Shoe. She then detailed the 'Footwear carbon footprint calculation' by stating that there were a wide range of methodologies for calculating the carbon footprint (over 40) and that there was not a specific methodology for footwear and added that there were difficulties in the application of the existing methodologies in specific sectors as it was difficult to compare results across different methodologies, scopes, materials which led to consumer confusion.

She stated that the Main objective was to develop a carbon footprint calculation tool specific for footwear to quantify the greenhouse gas emissions of a pair of shoes to improve the environmental situation of the footwear companies. She said that the scope of the work was the Quantification of the GHG emissions produced by each pair of shoes inside its box defined within the system boundaries of Cradle to grave. She also briefly outlined the Footwear carbon footprint methodology and the Footwear carbon footprint stages including the Verification.

In Summary, she concluded that the Carbon footprint was an indicator used to assess the environmental behaviour of products or organisations (continuous improvement) and that today, there was a calculation tool available that allowed the specific calculation of the carbon footprint of footwear. She underlined that this tool had been verified and it allowed the reduction of the carbon footprint, thus Reinforcing the product, trademark as well as the company image.

☐ **The Sixth Speaker in this Session was Mr William Wong from GODDESS, Hong Kong and he spoke on "Green Factories for the future"**

Mr William Wong from GODDESS, Hong Kong

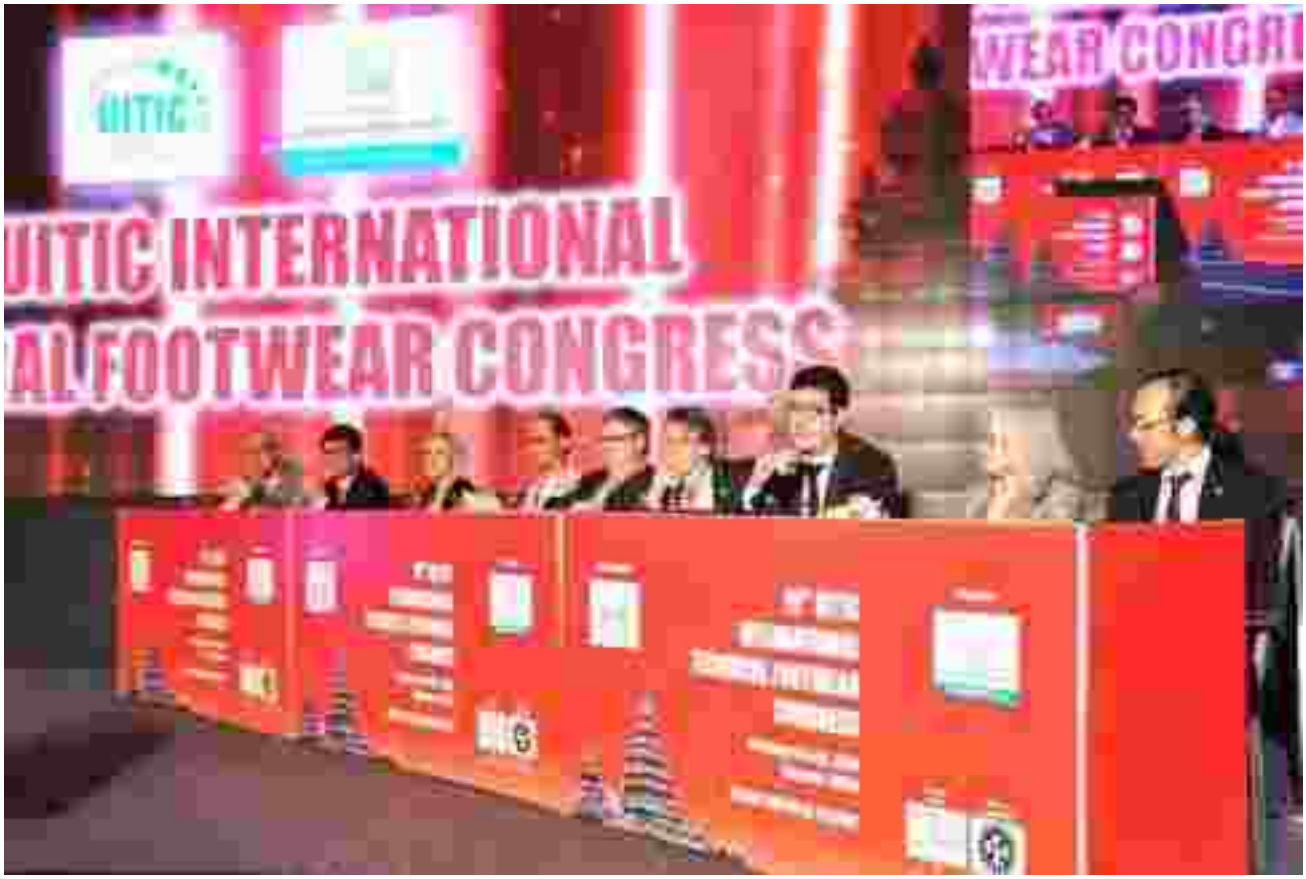
Mr William Wong sought to focus on production energy and green energy, social compliance and safe working condition, wastage control, recycle and reuse and shared his views on products and sustainable products especially vis-à-vis the Green Consumer and the Green Supply Chain.

Elaborating, Mr Wong stated that during Production, the factors that needed focus were 1. Green Energy which could be either Solar, Hydro, any Green Process which would Minimize Impact to Environment and Workers with Social Compliance; 2. Wastage Control which he advocated through the policy of Recycle and Reuse.

As far as the Products were concerned he emphasized that they should be Natural and Bio-degradable. He strongly reinforced the concept of Recycling and pointed out the Factory Owners needed to have a Heart and Mind to absorb these Green Concepts, make suitable Investments in ensuring these and also inculcate the idea of "Green Factories' in the Hearts and Minds of their workers.

He also urged the Consumers to be 'Green Consumers' and advocated that the Supply Chain should have a large component of Localization with would minimize migrant work and also benefit the local market.

At the end of the Session, Mementos and Certificates were presented to the Chairpersons and Mementos to the Speakers by Shri PR Aqeel Ahmed, Convenor of the 19th UITIC International Technical Footwear Congress and the Regional Chairman (South), Council for Leather Exports, India and Certificates to the Speakers were presented by the Chairman of the Session Mr Sergio Dulio from ATOMLab, Italy.


UITIC
UITIC INTERNATIONAL
AL FOOTWEAR CONGRESS


UITIC
19 UITIC INTERNATIONAL

Session IV 5th February 2016

The title for this Session was

"Attractive Footwear Factories and New Way of Management"

This Session was chaired by Ms Francois Nicolas from CTC, France and Mr Miguel Angel Martinez from INESCOP, Spain

☐ The Introductory Presentation in this Session was by Dr Ferenc Schmel from TECHNORG, Hungary who spoke on "Human Drive of the Future Shoe Industry"

by Dr Ferenc Schmel from TECHNORG, Hungary

Dr Ferenc Schmel postulated that while the Shoemaker of the past had refined manual skills, the future shoe factory would feature high intelligence and knowledge. He informed that Smart materials, automation and robots, IT controlled processes would be liberally used in the future footwear manufacturing plants requiring highly educated staff capable of managing these high-tech and extended production networks. He stated that Global competitiveness would rely on sophisticated management able to coordinate fashions as well as marketing and technology that require continuous and adequate training. He emphasized that Knowledge generation and application would be key factors in operating shoe factories of the future.

Dr Schmel outlined the Human needs reliant on invention and knowledge and spelt out the various kinds of footwear required for specific purposes and gave the examples of 'Protective Footwear for the Workers, Facilitation Footwear for Sportspersons and Aesthetically beautiful footwear for the Fashion Conscious. He also gave a glimpse of future footwear with exquisite sole solutions and exposed the audience to Energy generating footwear, Shoe technology development, Sewing machine development and Shoe lasting machinery.

Defining Smart materials as having one or more properties that could be significantly changed in a controlled fashion by external stimuli/conditions, Dr Schmel outlined the Development trends as being focused on Brands and services with a Specialization on products and markets with an emphasis on outsourcing and logistics control. He also stated that use of information technology was very vital especially in the areas of CAD/CAM/CÍM and Virtual Reality which involved use of Real-time/on-line production management systems. He further stated that Application of smart/intelligent materials, Application of biotechnology and Integration and automation of operations (e.g. 3D printing) were emerging areas and these needed to be judiciously coupled with the Social aspects of Pollution control (waste management), Occupational safety and health (OSH) and Corporate social responsibility (CSR).

Touching on the PROBLEMS OF PRESENT TRAINING SYSTEMS he opined that there was a Geographic unbalance between Europe and Asia and there were gaps in the requirements in knowledge and skills and emphasized that teaching should be a full profession and concluded by saying that The FUTURE of

PROFESSIONAL EDUCATION & TRAINING lay in it being Modular, Self/Distant, e-Learning and Publicity.

☐ **The First Speaker in this Session was Shri Raja Chidambaram and he spoke on "Benchmarking and Beyond: A Web supported Business Excellence Model for the Footwear Industry"**

Shri Raja Chidambaram

Shri Raja Chidambaram commenced his presentation by stating that the customer Needs of footwear industry today have transformed, characterized by less volumes, more varieties, and shorter lead times from concept to shelf. Besides this, he added, the customers expect compliance with regulatory requirements too. He said that to be productive and competitive in this environment, the footwear companies have to be process oriented, focussing on QCD (Quality, Cost, Delivery) and improve each process continually.

Shri Chidambaram informed that 'Benchmarking' was a powerful tool for improving productivity and competitiveness in this context and added that Bench marking fostered process orientation and facilitated establishing appropriate performance measures for each business

process. He stated that Benchmarking assessed the capability and maturity of processes evaluating them across five levels of excellence: 1-No process 2-Repeatable processes 3-Measured process 4-Managed Process 5-Bench Markable process.

He informed that participating companies in his consultancy assignments appreciated that Benchmarking had helped them to understand which processes they were strong in and processes that needed improvement. Most of these companies felt that Benchmarking should be complemented by a Process Improvement Program.

Laying down the Framework for Footwear Business Process Improvement Model, Shri Chidambaram spelt out that one must align the company's strategic goals with the functional Objectives and process Objectives, Establish Process Performance metrics aligned with objectives covering Q-C-D, Carry out Periodic measurement and also do a Root cause analysis. He added that there should prevail a Preventive culture and the company should come out with pointed action plans which they should Evaluate after Implementation and map their effectiveness and business impact.

Mr Raja explained the Bench Marking process and Model and informed about the BEAM- Business Excellence Assessment Model which enabled individual process Assessment, overall business Assessment and Bench Marking and added that BEAM assessed Process Artifacts and Process results concurrently. He informed that the Process Artifacts were assessed in terms of Sub Processes, Practices and Tools and the Process Results were assessed in terms of performance measures covering Q- C-D.

Outlining the BEAM Scoring Scheme, he explained that the Process Assessment (Artifacts) was done on a 5 point rating scale for each business process and the Result Assessment was done on a 5 point rating scale for each business process. He also stated that the Overall Business Assessment was done on a 5 point rating scale as a composite of process assessment and result assessment.

He elaborated that the need now was to move up from Benchmarking to sustained process improvement leading to overall business improvement and for this purpose a Process Improvement model was envisaged where the BEAM model was superimposed on Process Improvement elements.

Shri Raja stated that such a model would encompass:

- Business Vision and Mission
- Policies and Strategies
- Business Plan and Objectives
- Processes and Process Objectives
- BEAM Assessment
- Gap Analysis
- Action Drivers and Action Planning

In Conclusion, he said that Benchmarking should be followed by a sustained Process Improvement Program and the best way to enable this was through self-assessment by the companies so that they could do it year on year and added that the self-assessment by the companies could be supported by a web application.

☐ **The Second Speaker in this Session was Mr Ivan Kral from UNIDO and he spoke on "Future Professional Training in Leather Based Industries"**

Mr Ivan Kral from UNIDO

Mr Ivan Kral queried the audience as to "Where do knowledge and skill come from?" and added that this was a question which was raised during various congreses, conferences, event blogs and articles during the last couple of years. He informed that there were still many training and R&D Institutes capable of providing training in different locations other than industry and manufacturing units. He added that perhaps the question could be rephrased to read as "How Knowledge and Skills would reach the trainees?" Dr Kral opined that Globalization had opened for Technology Development and training as there was an Internationalization of production of all kinds of goods.

He explained the dichotomies involved in Increased Production which lead to the Needs For Skills Development which in turn threw up Training Needs which again led to Increased Productivity. He also underlined that Shrinking Subsectors needed an infusion of efefficiency over a longer duration which could prevent the Regional shift in the industry. He admitted that there was a severe lack Of Service Institutions, Trainers and Trainees and urged for greater Technology Development to develop unique Training Tools. He added that the New Approach was the 'TOT' concept which involved the Training of Trainers.

He explained that there needed to be Innovation and an Innovative approach with infusion of Technology to develop Animated Visual Training Tools, popularize eLearning and provide Remote assistance.

Dr Kral concluded by stating that Trainers and trainees considered blended courses as very useful and efficient. He also stated that New learning and training tools improved the quality of training and the trainers were more confident as training kits were prepared in a professional way including notes and narratives. He added that this allowed trainees and practitioners to improve their knowledge base and learn new skills. He informed that the Training tools developed by UNIDO would be an integral part of the training and learning methods and tools. He stated that all learning material were available online

and students had access to training material with a possibility to prepare their assignments.

Dr Ivan Kral then spelt out the Advantages of blended course and added that Footwear manufacturing was a mix of tacit and explicit knowledge and practical part of the training supplemented by theoretical training was essential. He added that Standardized training and learning material with animated visual content was easier to understand and easier to be used for training by trainer (even for the less experienced) and elaborated that Remote assistance - as part of the course was online and trainees were completing assignments at home, it was possible to provide guidance and assistance to trainees either by instructors or trainees/students could interact and assist with questions or various assignments.

He summarized his presentation and stresses that there should be Flexibility so that the participants could prepare their assignments during their convenient time. He also pointed out that there were Costs benefits as remote assistance and online courses allowed access to learning material in remote areas without the necessity to travel. He informed that with current ICT it was possible to have interactive sessions, but also added that practical and face to face training was at the moment difficult to replace but could be a good supplement however.

☐ **The Third Speaker in this Session was Mr Syed Masood Nizam from APEX Footwear, Bangladesh and he spoke on "Factory and Worker Management-Successful Case Study"**

Mr Syed Masood Nizam from APEX Footwear, Bangladesh

Mr Syed Masoos Nizam stated that 'People' were the integral power of any organization and nowhere was it more apt than in the shoe factory. He added that the second oldest profession in the world had historically tracked newly emerging large and low cost labour pools across the world from old Europe to USA to Japan to Korea to China to Vietnam to India & Bangladesh to Myanmar to Ethiopia. But the shoe factory of the future, he added, had also changed in the nature of the people that it needed to survive and grow. Core manufacturing competence and specialist knowledge needed information technology and marketing savvy as well to be effective, he opined and in his presentation shared some of the learnings over 25 year of how the narrative had moved from cheap labour to global supply chain and how they needed to create new teams and new kinds of leaders if they wished to be part of that chain.

He spoke about APEX – The People Power and outlined the reasons for manufacturing in BANGLADESH which in his opinion was due to Source Diversification, Competitive Labor Price (1/5th of China, ½ Of India) and Preferential Market Access – EU, USA, Japan, Korea, Australia, India, China. He informed that Bangladesh made 300 Mn SqFt domestic leather every year, possessed 1.7% of global livestock and had an enviable emerging supply chain which included - Packaging, Lasts, Adhesives, Outsoles. He also informed that it had been declared a 'thrust sector' with a host of policy support with the TED CETP to be in operation soon and the Trans-Asian Highway connecting the East Asian Countries to the Sea Port to be commissioned soon.

Mr Nizam also informed that Bangladesh was the 4th Fastest Growing Economy of the World with a steady GDP Growth over the last 8 years, Low Inflation Rate, 5% Predictable Wage Growth for workers and a steady 2% appreciation of BDT against USD (2011 - 2015). He also added that it was the 2nd Largest RMG Exporter with a 2015 Export Value of US$25 bn and a 2021 Estimated Value of US$50 bn

He stated that this was the new US$ Billion Industry with a 200 acre Tannery Estate Dhaka (TED) with central ETP to be completed by 2016 housing 134 Export oriented Leather Goods & Leather Footwear Factories.

Mr Nizam then traced the Apex Family Tree and History of Shoes and informed that in 2015 they had achieved ISO14001 standard for the Apex Tannery. He also added that they had obtained the LWG Bronze Rating for Apex Tannery and were the 1ST to achieve such standard in BD. He informed that their factories were aligned to International Standards with high output of DESIGN, DEVELOPMENT and DELIVERY through its 16 lasting Lines, 20,000 pairs/day, from Ladies to Gents; from Formal to Casual

He said that APEX was the story of its people and it was the 'People's Company' adding that it was the people who made it and it would be the people who would carry it to the future. He informed that they were compliant with globally accepted environmental, social and product standards and were a vertically integrated operation – from leather to final product.

☐ **The Fourth Speaker in this Session was Ms Aura Mihai from Gheorge Asachi Technical University of IASI, Romania and she spoke on "Creative Transfer of Skills and Competence in 3D Footwear CAD"**

Ms Aura Mihai informed that their presentation had been developed in the framework of the INGA 3D project - Creative Transfer of Competence in 3D Footwear CAD to VET Professionals (www.inga3d.eu). The project aimed to transfer and extend innovative software solutions and 3D technologies for Footwear Computer Aided Design, she said and added that the project brought together universities, research and training centres, adult education providers and IT companies from Romania, Spain, Portugal, and UK. She said that the project products introduced innovative solutions for e-learning in order to

Ms Aura Mihai from Gheorge Asachi Technical University of IASI, Romania

test and to validate new teaching methodologies and approaches suitable for vocational training. The INGA 3D training content, its supportive guide as well as the online learning platform was designed, developed, tested and evaluated in line with the best practices identified by partners in their institutions and countries, she stated.

Ms Mihai stated that the INGA 3D project contributed to developing skills and competencies of VET teachers, trainers, tutors, in order to face the future challenges raised by the necessity of adding to the actual curricula in VET institutions ICT skill sets that will enable their graduates to work with highly specialized footwear CAD technologies. She informed that the project had been funded with support from the European Commission, through ANPCDEFP Romania, within the framework of Lifelong Learning Program- Transfer of Innovation.

Ms Mihai highlighted that the aim was to transfer and to extend the Icad3d+ innovative software solutions and the 3D technologies for footwear CAD with the objectives of transferring the INNOVATION from Spain to other countries, namely Romania, Portugal, and UK. It also helped to develop skills and competencies in 3D Footwear CAD, she added. The development of new training content and supportive e-learning tools based on units of learning outcomes led to the setting up of an Online Learning Platform, she added.

She outlined the Peer Learning Scenarios in Footwear CAD which, she informed, were to analyse the needs for skills and competencies in footwear CAD. Elaborating, She stated that, the Training program in Footwear CAD was intended to create footwear prototypes on virtual lasts, including accessories and components; to obtain accurate virtual models using the rendering software and to prepare technical sheets.

She also flagged the four important modules as:

Module I: Footwear CAD

Module II: 3D CAD – applications to Basic Footwear Constructions

Module III: 3D CAD – applications to Orthopaedic Footwear

Module IV: 3D CAD – applications to Fashion Footwear

In conclusion, she highlighted that the Online Learning Platform was successfully launched with 12 complete units that included 40 lessons that had been transformed into e-learning format and were enriched with more than 50 videos.

☐ **The Fifth Speaker in this Session was Ms Elisabeth Rouiller from ISC, Pirmasens, Germany and she spoke on "The Importance of Training and Further Education"**

Ms Elisabeth Rouiller propounded that "Man does not live by bread alone" and went on to explain that we all worked to gain our living but what made a company an attractive employer was a question that was long researched and added that the results were unsurprising and merely common sense: People do not want to be squeezed like lemons but they would readily face challenges if they felt respected and supported.

Ms Elisabeth Rouiller from ISC, Pirmasens, Germany

Ms Rouiller emphasized that giving employees the chance to acquire and extend professional skills and know-how was one of the most important levers for a company to make their "human capital" feel supported and added that an initial training was the solid foundation for career development, which needed to be continued, supplemented, and updated by further education (life-long learning).

She gave an insight into the apparently successful and appreciated vocational training system upon which the German footwear industry could build and which served as a model for implementation of the dual vocational training system in numerous other countries. She elaborated that in this context they would like to illustrate the evolution of footwear-related training pathways in terms of initial vocational training as well as further education courses offered and she referred to two research projects ISC Germany was currently involved in: "DualTrain" and "Step to Sustainability." The "DualTrain", she informed, was about adapting and transferring the dual vocational training system to Portugal and Spain and the "Step to Sustainability" was an example of the creation of a new qualification profile enabling shoe technicians to specialise in sustainable manufacturing methods through a b-learning programme.

She demonstrated the pyramid of human needs where at the bottom of the pyramid were placed the most fundamental needs:

1) PHYSIOLOGICAL NEEDS (health, food, sleep)

2) SAFETY NEEDS (shelter, not being exposed to danger)

3) BELONGING (love, affection, being part of a group)

4) ESTEEM (from oneself and from others)

5) SELF-ACTUALISATION (find self-fulfillment / realising one's potential)

She added that an Employees Needs

1. MAKE A DECENT LIVING = Earn enough to be able to live in decent conditions (necessities + if possible additional luxuries)
2. SOCIAL SECURITY = Be covered by health and old age social security / insurance coverage
3. BELONG TO A TEAM = Be on good terms with colleagues / gain recognition & respect / belong to a group of SKILLED professionals
4. ESTEEM = Be acknowledged & rewarded for exceptional performance
5. PROFESSIONAL DEVELOPMENT = Get the opportunity for further professional development, i.e. improve skills and know-how / advance career-wise

She then queried as to how could employers respond to those needs?

And answered it by saying that we need to develop a pertinent strategy of how to treat their most important asset, their HUMAN CAPITAL. She also dwelt on the 'Importance of Skill Development' and highlighted the 'Educational Pathways' available in Germany of the particularity of the dual training system where the apprentices were guided by internal tutors – experienced skilled workers who imparted their expertise and know-how.

Ms Rouiller stated that during this UITIC congress, we had been able to catch a glimpse of what the FUTURE FOOTWEAR FACTORY could look like and the Technological progress was exciting and fascinating but cautioned that no matter what technological revolution was there to come ☐ we were still far from a completely automated footwear production.

In conclusion, Ms Rouiller emphatically stated that one thing was for sure that Shoes would always be conceived BY PEOPLE FOR PEOPLE and that the demand for expert knowledge would never cease and added that Empowering of the workforce to acquire the necessary skills and competences would always be crucial for any company's future success.

☐ **The Sixth Speaker in this Session was Shri Md Sadiq from CSIR-CLRI, India and he spoke on "The Travel of India in Fashion forecasting for Leather"**

Shri Md Sadiq emphasized that in a globalizing economy, design was being perceived as a new engine of economic and industrial growth and added that Design and breakthrough innovations could play a pivotal role in positioning of Leather and Leather Product industries in the global arena by value addition apart from enhancing competitiveness. He stated that:

☐ Leather had emerged as a fashion product.

☐ Colour, texture and other highlights added to the fashion values of creatively designed leather products. These added 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, was crucial," he opined and stated that "Success in being able to work with high-end customers required building design capabilities that enabled us to offer exciting collections that could compete internationally."

Shri Sadiq stated that 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.

Shri Md Sadiq from CSIR-CLRI, India

He elaborated that the "Travel of INDIA in 'fashion forecasting' for leather" was 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 was to strengthen the Indian leather product design capabilities which would be reflected in product quality enhancement, he added.

He prefaced his presentation with a Graphical video depicting the journey traversed by the Indian Leather Industry: A totally traditional industry few decades back, the leather and leather based industry had transformed itself into a vibrant, modern and forward looking one in this rather short period...

He queried as to "What Innovation Dimension was the INDIAN LEATHER INDUSTRY in?" and Where do we slot the Innovation in the INDIAN LEATHER Industry?

He answered that in a globalizing economy, design was being perceived as a new engine of economic and industrial growth and that Design and breakthrough in-

novations are pivotal role in the positioning of Leather and Leather Product industries in the global arena. He added that Colour, texture and other highlights added to the fashion values of creatively designed leather products and added significantly to the value realization from leather products.

From 'concept' to 'market' encapsulating the stages of SHOE Engineering in a value chain.

He demonstrated a "Value Chain" and highlighted that Design and brand driven value chain needed to be developed as core strengths of Leather Products Manufacturing Industries whichwais currently focused in the middle pie of the value chain engaging in pattern development, engineering and sample prototype development. He surmised that the time to move up the value chain had come and advocated that to achieve this one had to build not only in-house design capabilities, but also work in consultation with design companies internationally that had a deep understanding of lifestyle and fashion trends in Europe and the US, which would continue to be primary markets for the foreseeable future for up market products.

Shri Sadiq also emphasized that 'Merchandizing' would be another crucial area of attention and synergies would have to be built with international agencies to master this art and added that 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.

Presenting a CASE IN STUDY, he demonstrated that the Travel of INDIA in 'fashion forecasting' for leather was 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, he stated, was to strengthen the Indian leather product design capabilities which would be reflected in product quality enhancement.

He then heighted the MODEUROP endeavour and gave a brief background stating that MODEUROP was an International Institution founded in 1960 in Zurich / Switzerland by the most important institutions of the leather and footwear industry and it forecasted fashion and trends in Leathers, Colours and Materials for the International market, three seasons ahead.

He also highlighted the Indian success at MODEUROP in Winning Colours, where he informed us that,

almost 70% - 80% of the colours chosen, featured from Indian proposals. The challenge and opportunity today, he emphasized, was to capitalize on the winning colours and translate them into fashion products. To give a feel of the MODEUROP Roundtable and Colour Club Meeting, he played

a video of the Taj Modeurop for the SS 2015 held in Agra, India and stated that the MODEUROP initiative has been very successful in catapulting India into the

foreyards of fashion. He also flagged the recognition received from OXFORD UNIVERSITY acknowledging the publishing of a journal article entitled "From Fashion Forecasting' to 'Value Engineering' for Leather & Leather Products", that was listed in the Thomson Reuter's Web of Science database.

He proudly informed the gathering that GLOBAL COLOUR SHADE CARD is first released in India giving a tremendous lead time over the competition and the potential of INDIA was recognized and it was conferred with the Presidency of MODEUROP recently and added that the official MODEUROP Colour Cards are now 'Made in India' with suitable acknowledgements to the contribution of CLRI/CLE as well as to the contributing tanners; thereby enhancing the marketability of Indian Leather in International markets.

He then described the transition of the Indian leather Industry as it metamorphosed from the "Black and Brown Story" to a "Colour Story" and opined that any Development can result in success only if it was "sustainable" and added that the Indian Leather Industry offers tremendous potential for sustainable development, both on export front and in domestic market. He underlined that this was why the Leather Industry has been included as a Focus Industry under "Make in India" programme launched by Hon'ble Prime Minister of India in Sep 2014.

The targets for Indian leather industry under Make in India are :

He concluded by stating that we must believe in Technology partnerships with Global majors for decided advantages in the integrated developmental plan of design co-operation as this was the way forward! And concluded very aptly by saying that : Think Leather.... Think India!

At the end of the Session, Mementos were presented to the Chairpersons and to the Speakers by Shri Puran Davar, President, AFMEC, India and Certificates to the Chairpersons were presented by Mr Yves Morin, President, UITIC. Certificates to the Speakers were presented by the Chairpersons of the Session Ms Francois Nicolas from CTC, France and Mr Miguel Angel Martinez from INESCOP, Spain.








Remarks by Shri Puran Dawar, President, AFMEC,India

Shri Puran Dawar, President, AFMEC waxed eloquent about the conduct of the Congress. He expressed his immense joy at being able to participate in a meeting of such a high technical calibre and which was conducted with such metronomic throroughness.

He complimented Shri M Rafeeque Ahmed, Chairman of the 19th UITIC International Technical Footwear Congress and Chairman of the Council for Leather Exports (CLE), India and Shri PR Aqeel Ahmed, Convenor of the 19th UITIC International Technical Footwear Congress and the Regional Chairman (South), Council for Leather Exports, India for their able stewardship and credited them with excellent planning and execution which, he opined, had resulted in making the UITIC Congress such a huge success.

Shri Dawar complimented the speakers for their superb presentations and acknowledged that he had learnt a lot from the presentations made despite being in this Industry for over 40 years. He also thanked Mr Yves Morin, President, UITIC for having this event in India.

Closing Ceremony

5th February 2016

Remarks by Shri PR Aqeel Ahmed, Convenor of the 19th UITIC International Technical Footwear Congress and the Regional Chairman (South), Council for Leather Exports, India

Shri Aqeel Ahmed stated that this ceremony had brought us to the end of the Leather Week 2016 which commenced on 30th January 2016 with the hosting of the Golden Jubilee (50th) LERIG in CSIR-CLRI, followed by the India International Leather Fair, the 1st Designer's Fair and culminating with this Mega Event – the 19th UITIC International Technical Footwear Congress. He said that every day of the leather Week was very exciting and he expressed optimism that we would be back with the Leather Week 2017 which would be just as exciting.

He thanked the Team behind the successful Congress under the leadership of Shri M Rafeeque Ahmed and Mr Yves Morin and wished all the participants a safe travel and hoped that they would all come back to India soon.

Remarks by Shri M Rafeeque Ahmed, Chairman of the 19th UITIC International Technical Footwear Congress and Chairman of the Council for Leather Exports (CLE), India

Shri Rafeeque Ahmed very philosophically said that "All Good Things have to come to an end" and so it was with the 19th UITIC International Technical Footwear Congress. He elaborated that it was very useful one and a half days of gaining knowledge and he found the presentations very stimulating and enriching. He added that all thos who attended the Congress were going back with renewed vigour and full of hope brimming with ideas for the future which would help them to restructure to attain better results.

He said that it was an honour to be amidst the global congregation of Technical Experts who had addressed many challenges both online and offline. He said that he had learnt many ideas to tackle the challenges to be faced and he was going back energized.

He thanked all those who had accepted CLE's Invitation to attend this Congress and hoped that they all had a comfortable stay in Chennai and wished that they all have benefitted from the Congress deliberations.

He thanked Team CLE and Team UITIC for their co-operation and wished all Thank You! Thank You! Thank You!

Remarks by Mr Yves Morin, President, UITIC

Mr Morin thanked the organizers - Council for Leather Exports, India, all the speakers, Chairpersons of the different Sessions, UITIC members, and all delegates, for participating, to this 19th UITIC International Footwear Congress themed as the "Future Footwear Factory."

He hoped that everybody had a good time, learning new concepts, getting new ideas and making new friends,

He said that in Summary he would like to deliver a personal message to the Indian delegates and stated that during the last few years he had been visiting several footwear countries and only a few of them had the " Footwear spirit" and he was extremely happy to say that India had it. He added that when you talked to people in this industry you can feel it, you can understand that footwear is not just a business, but something more here. The passion is palpable, he said.

He continued and said that he had been visiting several footwear countries and only a few of them had a "smart management," and again he was happy to say that India had it.

He elaborated that the companies that he had visited in India during the Factory Visits, had an outstanding organization, with ISO 9001 or ISO 14001 systems and also SA 8000 certification, 5 S Management and also Lean Management which is quite a sophisticated standard and stated that even in his own company, CTC, they did not have this standard as yet.

He stated that he had been visiting several countries and only a few of them had great leaders and yet again it was a pleasure to say that 'India had it' and added that during these last 4 days in India he had met people from Delhi, Chennai, Kanpur, Agra, Calcutta and Mumbai and all of them had a vision for their company and a huge ambition for their home country.

In conclusion, Mr Morin said that in France as you know they like cocktails and so if you added in the same country, "footwear spirit", "smart management" and "great leaders", then I can tell you that the Indian footwear industry has a "promising future".

Remarks by Ms Francois Nicolas, General Secretary, UITIC

Ms Francois Nicolas thanked all the Speakers, the Members of the Scientific Committee and the delegates attending for sparing their valuable time in preparing for the Congress. She also thanked Shri M Rafeeque Ahmed, Shri PR Aqeel Ahmed and their team for organizing the Congress so professionally and was sure that all of them were going back with fond memories of the Congress and of their stay in India.

Presentation of Mementos to Chairman, CLE and Convenor, 19th UITIC

Mr. Yves Morin, President, UITIC presenting memento to Shri M. Rafeeque Ahmed, Chairman, CLE

Ms. Francoise Nicholas presenting memento to Shri P.R. Aqeel Ahmed, Convenor, 19th UITIC

Shri M. Rafeeque Ahmed, Chairman, CLE and Shri P.R.Aqeel Ahmed, Convenor, 19th UITIC felicitating the CLE officials associated with UITIC event.

Poster Session

4-5 February 2016

The Posters presented at 19th UITIC are:

Sl. No.	Topics	Name	Country	Title Of The Poster
1.	Consumers & marketing	Muthusamy Aravendan	India	An Empirical Research on the Consumers? Brand Preferences towards International Footwear Brands in India
2.	Consumers & marketing	MISBAHUDDIN	INDIA	DESIGN INCUBATORS AND BRAND BUILDING - The future of Indian shoe brands
3.	Consumers & marketing	S Ramar,MD Sadiq,K Dayalan,GauthamG	india	EFFECT OF BRANDING ON CONSUMER BUYING BEHAVIOUR-A STUDY RELATION TO FASHION INDUSTRY
4.	Consumers & marketing	DR GIRIYAPPA KOLLANNAVAR	India	Indian Leather Trade Target of $ 27 Billion by 2020- Role of Informal Sector
5.	Consumers & marketing	Alejandra Alicia Silva Moreno	México	Development of semi-customized footwear for population groups with feet health problems.
6.	Consumers & marketing	Jose Martin Sanchez Careaga	MEXICO	"Developing Shoes for obese children, by means of optimized properties of anthropometric and baropodometric studies?
7.	Consumers & marketing	Margarita Centeno Partida	MEXICO	Hand-crafted Sandals from Cottage industries in Mexico. A socially responsible project for the modern small factory.
8.	Consumers & marketing	Pallavi Jha	India	Ergonomic Design Considerations to develop Suitable Footwear for Pregnant Women
9.	Consumers & marketing	MANI RAVINDRAN	INDIA	DESIGN INNOVATIONS ON HEEL REGIONS OF FOOTWEAR FOR OVERWEIGHT AND OBESE
10.	Consumers & marketing	Gautham Gopalakrishna, Md Sadiq, K Dayalan, Jebasingh R, KJ Sreeram, Bhabendra Nath Das	India	Design and Development of Children's Shoes
11.	Consumers & marketing	Suresh Kumar D	India	Dynamic Orthosis using pneumatic system as a gait trainer for the children affected with cerebral palsy ? A case study
12.	Consumers & marketing	SURIYA PRAKASH.S	India	Footwear: As a prophylactic device to reduce ulceration in diabetic population.
13.	Consumers & marketing	Aura Mihai	Romania	CUSTOMIZED COMFORT IN FOOTWEAR FOR THE ELDERLY FEMALE POPULATION
14.	Consumers & marketing	Gnanasundaram Saraswathy	India	Assessment of Therapeutic Footwear for Patients with Diabetes
15.	Management & testing	Carlos Amador Meza Moya	México	Development of an international proficiency testing by interlaboratory comparison applied to test methods for mineral tanned leather
16.	Management & testing	Raja Sreenivasan	India	New way of Management particularly with reference to new Generation
17.	Manufacturing and Supply Chain Management	HECTOR CORDOVA GOMEZ	México	Innovation in Supply Chains in the Mexican Footwear sector.
18.	Manufacturing and Supply Chain Management	Malathy Jawahar	India	Computer Vision System for Identifying Leather Surface Defects

Sl. No.	Topics	Name	Country	Title Of The Poster
19.	Manufacturing and Supply Chain Management	Victorien Picolet	France	Developing the attractiveness of companies by improving and objectifying working conditions.
20.	Manufacturing and Supply Chain Management	Roberto Muñoz Almaguer	México	Innovative integrated modular conveyor system for reducing production costs in the footwear industry.
21.	Manufacturing and Supply Chain Management	Shakila Shobana	India	LEAGILE SUPPLY CHAIN FOR FOOTWEAR INDUSTRY: A FUZZY QFD BASED MODEL
22.	Manufacturing and Supply Chain Management	Varun Gupta	India	THE IMPACT OF SMART INCENTIVE SYSTEM IN LEATHER CLICKING DURING FOOTWEAR MANUFACTURING
23.	Manufacturing and Supply Chain Management	Vishva Kumar M	India	New methods for skill development to enhance the production in shoe upper making
24.	Product	Rohit Kumar verma	India	The Expressive Bloom- Footwear Design Research Project
25.	Product	Antonio M. Ruiz Mariscal	Mexico	Foot anthropometric studies in Mexico and the transfer of their results to the modern footwear factory
26.	Product	Asutosh Kumar	India	THE BREATHING SHOES- footwear Design Research Project
27.	Product & material	Estrada-Monje	México	Antifungal Insole of Urethane Based Composite Materials
28.	Product & material	Narayanan Govindarajan	India	Design and Development of EVA based Rubber Prosthetic Foot
29.	Product & material	Sanjeev Gupta	India	DEVELOPMENT OF CORROSION RESISTANT LEATHER USING NOVEL MULTI-FUNCTIONAL NANO-FINISH FORMULATION BASED ON MAGNESIUM OXIDE NANOPARTICLES
30.	Product & material	Asma Yasmin	India	BACK TO THE BASICS IN SHOE DESIGNING
31.	Product & material	JOSE DE JESUS SANDOVAL PALOMARES	México	Portable system for monitoring the microclimate in the interface of foot and shoes
32.	Product & material	Naveen Raj	India	SWITCH IN FRACTION- A Footwear Design Research Project
33.	Product & material	JEAN-MARC PEDEBOY	FRANCE	INTRODUCING THE 3D Footwear Information Model (3D FIM)
34.	Product & material	R. Priyadharshini	India	Standardization of Foot Sizes of Patients with Diabetic Foot Ulcer through Anthropometric Survey
35.	Sustainability	Kezia Kancharla, Florina V B	India	Future Sustainable Manufacturing: Upcycled 3D Printed Footwear with Leather Composites
36.	Sustainability	THANGARASU LOGANATHAN	INDIA	BIODEGRADABILITY STUDY OF FOOTWEAR SOLING MATERIALS
37.	Sustainability	Maria José Ferreira	Portugal	Contributions to footwear sustainability - New biodegradable materials
38.	Sustainability	Ms.B.Kanimozhi	India	Green Quality Function Deployment (GQFD) Methodology for Eco-Friendly Footwear
39.	Sustainability	Geethalakshmi Balaji	India	Green Marketing and Eco-Labeling for products/ services: an effort towards Environmental Excellence
40.	Sustainability	Jaideep Kohli	India	Global Requiremnmets - Sustainability & regulatory trends.

Posters Presentations

Exhibition

4-5 February 2016

Exhibitors at 19th UITIC

National Institute of Fashion Technology (NIFT)
Versatile Enterprises Pvt. Ltd.
Unisol India Pvt. Ltd.
AFCAMMI
Texon India Pvt. Ltd.
Abraaz Malaspina Soles Pvt Ltd.
Romans Cad Software By Strategies
India Cartons
Suolificio Linea Italia (India) Pvt. Ltd.
GTFC Limited
SGS India Pvt. Ltd.
Gaitonde Leather & Accessories Pvt. Ltd.
Sarisons Shoes Tech Pvt. Ltd., (Saba Group)
Sanghavi Shoe Accessories Pvt. Ltd.
Liberty Leather Stores
BASF India Limited
Council for Leather Exports (CLE)
CSIR-Central Leather Research Institute (CSIR-CLRI)
Footwear Design & Development Institute (FDDI)
CTC



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P.A.Footwear Pvt Ltd
Texon (India) Pvt. Ltd.
NM Zackriah & Co
Ram Fashion Exports Pvt. Ltd.
TATA International Ltd
Dawar Footwear Industry
Gupta Overseas (I) Pvt. Ltd.
OOM Exports
Arvind Footwears Pvt. Ltd.
Al-Fauz International
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Expression of sincere gratitude by Team CSIR-CLRI

Team CSIR-CLRI Shoe Design & Development Centre (Md Sadiq, Gautham G, K Dayalan) would like to profusely 'THANK' the Council for Leather Exports for the opportunity given to co-ordinate 19th UITIC

Factory Visit of UITIC Delegates

On the occasion of 19th UITIC International Technical Footwear Congress, Council for Leather Exports organized visit of UITIC delegates to the manufacturing units located in Chennai, Ambur and Ranipet on 1st and 3rd February, 2016.

Visit to factories on 01.02.2016

On 1st February, 2016, the 22-member AFTIC French Footwear Delegation, headed by Ms. Francoise Nicolas, Executive Secretary, UITIC and accompanied by Council's Officials Mr. Vijaya Kumar. C, Export Promotion Officer and Mr. M. Krishnaiah, PRO visited the following Ambur-based manufacturing units.

1. M/s N.M. Hashim Shoes
2. M/s Aston Shoes Pvt. Ltd.
3. M/s Faizan Shoes Pvt. Ltd.
4. M/s Florence Shoe Company Pvt. Ltd.

In all the four factories, the delegates were offered traditional welcome by the company owners\managers at the entrance and after having brief discussions/presentations in their conference rooms, visit to manufacturing facilities were arranged. The AFTIC Delegation presented mementos and certificates to the Indian companies and group photos were taken.






Visit to factories on 03.02.2016

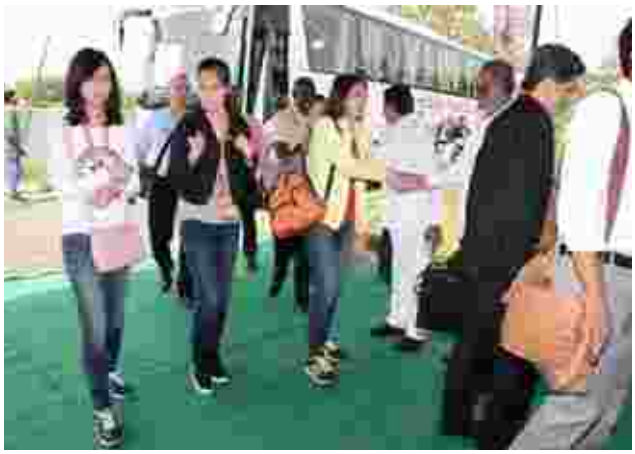
On 3rd February, 2016, the 96-member UITIC delegation (including French delegates), visited the following Chennai/Ranipet-based factories. The delegates were from the Countries like France, Pakistan, Spain, Tanzania and China etc., and accompanied by the Council's Officials.

1. M/s Kenmore Shoes Pvt. Ltd., Chennai
2. M/s BBK Shoes Pvt. Ltd., Ranipet
3. M/s KH Group (Tannery Division), Ranipet

After visiting Kenmore Shoes Pvt. Ltd., Chennai, on their way to Ranipet based factories; the delegates visited the Ranipet Testing Lab, where coconut water and other refreshments were served. The delegates also visited the testing facilities at the Lab.

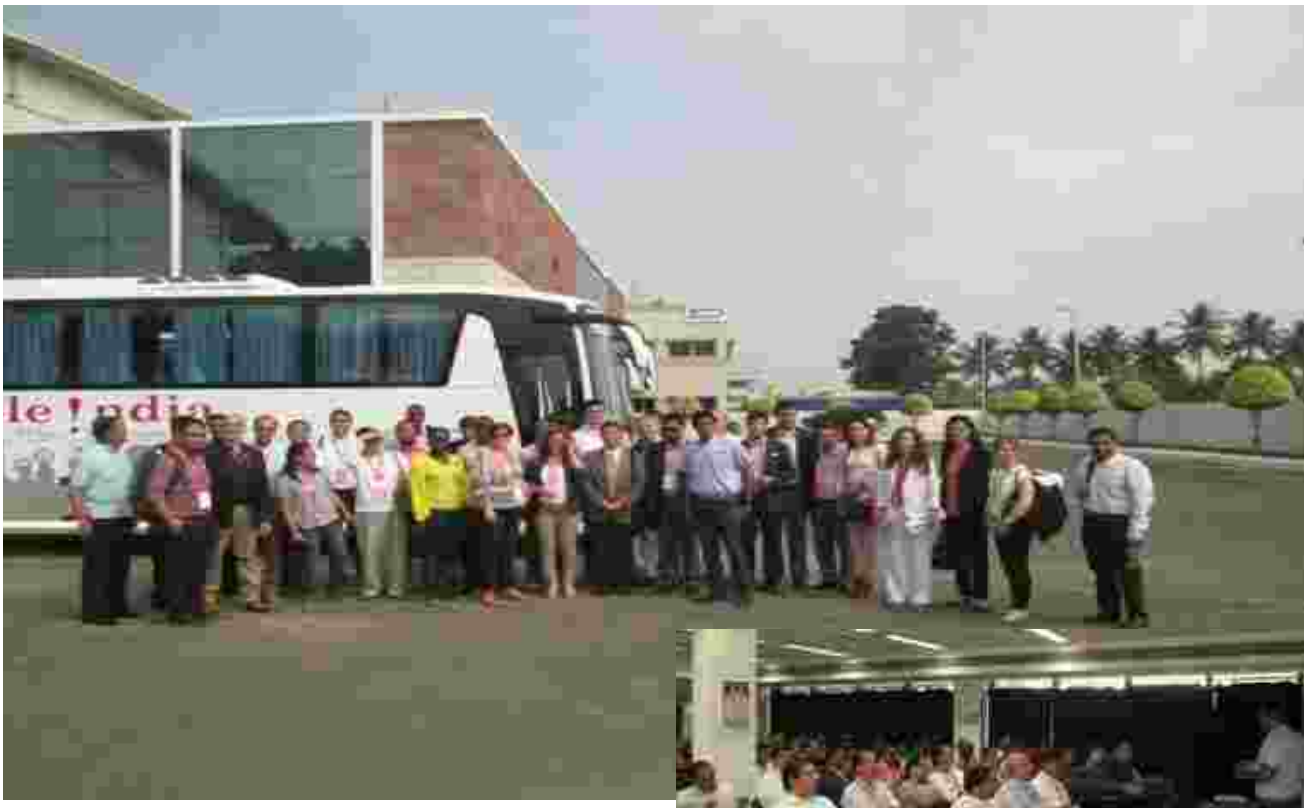
The UITIC delegates were offered traditional welcome at the entrance of the factories, thereafter, group presentations were organized in the conference rooms and then they were guided to the manufacturing facilities. Owners and senior managers of the companies were available to explain about the manufacturing process and facilities available. The AFTIC Delegates presented mementos and certificates to the three companies they visited and group photos were taken. The delegates took lunch at Hotel GeeKay Millennia, Ranipet.

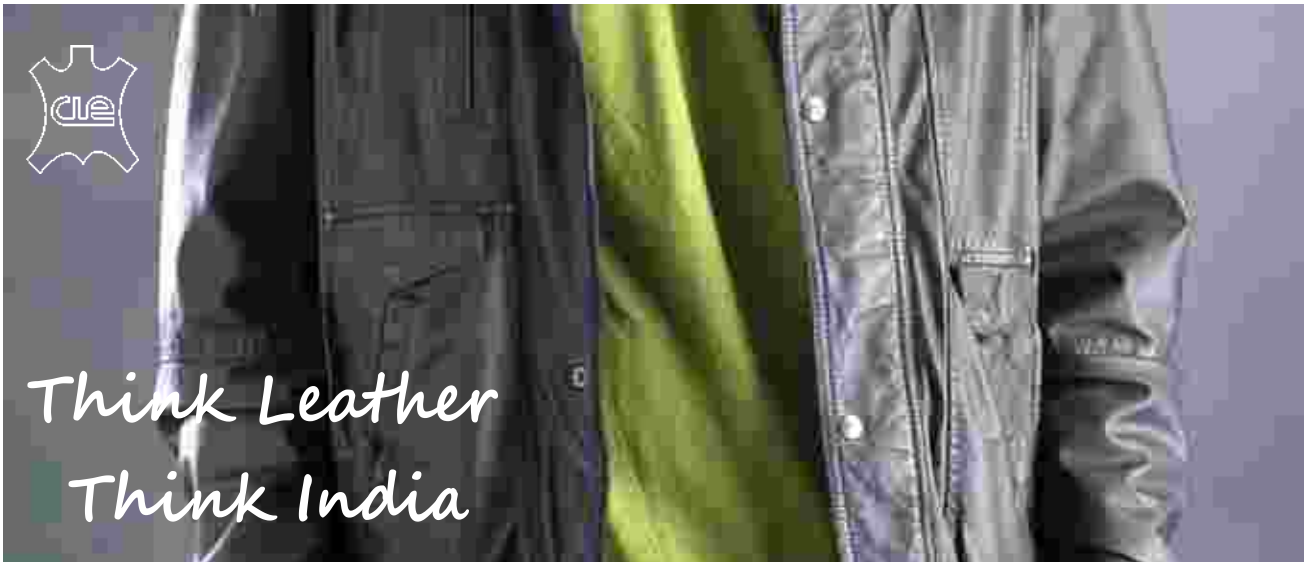
The UITIC delegates were quite happy to see the manufacturing facilities and appreciated the quality of products and hospitably extended.





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