processing activities taking place globally.

"Initially, textile manufacturing was largely concentrated in the Americas and Europe, however, over the last decade textile manufacturing base has shifted to Asia-Pacific. Currently, around 60 per cent of global textile manufacturing capacity is concentrated in Asia-Pacific, on account of which the region dominated global textile chemicals market in 2014. The report anticipates Asia-Pacific to maintain its dominance over the next five years, on account of growth in countries like India and Vietnam, wherein textile manufacturing is increasing due to easy availability of raw materials and cheap labor.", said Karan Chechi, Research Director, with TechSci Research.

FESPA and ARED promote Turkish printing industry

Countdown for the third FESPA Eurasia exhibition that is set to take place from 10-13 December in Istanbul continues as the event brings together wide format digital printing, screen printing, signage, commercial printing and textile printing industries.

Following two successful editions, the partner of the event, ARED, the Sign Association of Turkey, has boosted its activities for both its members and the industry.

"Our members are interested in the event both as exhibitors and visitors. Participants are pleased that ARED and FESPA brings a focused audience to the event. The visitors – printers and sign-makers – report that they can find whatever solutions they need, and take advantage of free training activities during the exhibition," said İbrahim Demirseren, ARED Vice President & FESPA Eurasia Board Member.

"They are able to catch-up with the latest digital printing trends both in Turkey and worldwide, which helps them to develop their business via making calculated investments in printing and industrial advertising, as well as raise industry quality."

Russia, France sign textile machinery MoU

The French association of textile machinery manufacturers - UCMTF – and the Russian textile association, Soyuzlegprom have signed a memorandum of understanding to strengthen the ties between the two industries on a long term basis, UCMTF said in a statement.

The two sides will also organize joint activities, particularly on the occasion of exhibitions, forum, conferences and will develop modern forms of training for their employees, according to the MoU.

The signing ceremony took place during Legpromforum 2015 in Moscow. Legpromforum is a major event grouping representatives of the government, heads of regions and public sector organizations, the scientific community and the Russian textile companies, with the objective to deliberate on the strategy for the development of the Russian light industry, particularly textiles, for the next decade.

The MoU with the French side is particularly important as Russia has decided to modernize its textile industry to cut down imports. Russia can also benefit as France is the world's sixth largest exporter of high-tech textile machinery for both traditional and technical textiles.

UCMTF bats for French textile machinery in Uzbekistan

French textile machinery manufacturers' association UCMTF was recently invited by Ilkhom Khaydarov, Uzbek minister in charge of the textile industry and chairman of the board of the state joint-stock company for the light industry "Uzbekyengilsanoat", to organize two seminars in Uzbekistan, UCMTF said in a statement.

Christian Guinet and Mrs. Evelyne Cholet, vice-president international and secretary general of UCMTF, led the French delegation of seven companies.

The seminars which were very well attended by the Uzbek textile companies took place in Tashkent and Bukhara. The strategy of UCMTF is to organize such events as close as possible to the textile production centres.

It was not the first time the French machinery manufacturers came to Uzbekistan, they organized a pavilion at CAITME in Tashkent in 2005 (the first foreign pavilion to be organised in the fair) and already held two seminars in the Uzbek capital.

The new 2015 initiative was intended have direct contacts with the Uzbek producers at a turning point of their development. Uzbekistan which has been an historical cotton producer, one of the biggest in the world, is planning to increase the added value of this production thanks to the manufacturing of yarns, fabrics and finished goods. Therefore machinery for spinning, weaving, dyeing and finishing with state-of-the-art technologies and services are needed.

France is the 6th largest textile machinery exporter worldwide and UCMTF claims the French machinery is particularly well suited for the Uzbek cotton industries.

After the seminars the French delegation visited a few textile companies in Tashkent and Bukhara.

for use in hunting outfits, military uniforms, rainwear and skiwear.

Schoeller Technologies in Switzerland has copied the self-cleaning properties of the lotus leaf in its development of NanoSphere – a finishing process which is said to be one of the most functional and sustainable water repellent treatments on the market, as well as being one of the safest. It has also developed ecorepel – a water repellent finish made from long chain paraffins which are biodegradable.

Schoeller Technologies has also looked to pine cones for inspiration in the development of a product called c_change -- a windproof and waterproof hydrophilic membrane with a flexible polymer structure which reacts independently to changing temperatures. At high temperatures, when body moisture levels rise, the structure of the membrane opens to allow excess heat and moisture to escape. At cooler temperatures the structure contracts, thereby helping the body to retain heat and prevent chilling.

Researchers in the textile industry have also taken inspiration from the ability of birds and polar bears to remain warm in cold or even freezing temperatures in the design of thermal insulation garments.

One team of scientists has even created a self-repairing water repellent fabric for use in the manufacture of garments which are designed to be worn by fishermen and sailors. The fabrics surface features microcapsules containing a glue-like substance. When the fabric is damaged, the microcapsules rupture and the substance is released and subsequently hardens, thereby repairing the damage.

Other properties inspired by nature include antimicrobial efficacy, bioluminescence, camouflage, drag reduction, dry adhesion -- inspired by the toe pads of the gecko -- and high strength. These discoveries will no doubt pave the way for the introduction of new types of fabrics and garments which are "smart" and sustainable.

Korean research team turns textiles into sensors

A Korean research team has opened a way to turn textiles into sensors, the country's media has reported.

The Electronics and Telecommunications Research Institute (ETRI) announced last week that it has successfully developed a technology to make a washable, flexible, and highly-sensitive textile-type gas sensor.

The technology can be utilised to coat graphene using molecular adhesives to textile like nylon, cotton, or polyester so that textile can check whether or not gas exists in the air. When graphene oxides meet the NO2 included in methane gases at room temperatures, their resistivity changes based on the gas density.

As a result, when putting out a fire or entering a small area in which the condition of the air cannot be identified, it will be possible for firefighters to check the condition of the air through a connected device by wearing work clothes with gas sensors made from textiles.

"The gas sensor can maintain its function after being washed or bent, even 1,000 times," explained the ETRI in a statement, adding, "Since the sensor is made from μm or mm thick threads or textiles, it can be utilized by putting a detecting substance on it. On top of that, it does not need additional power to operate."

The ETRI is going to expand the kind of detectable gases, and plans to transfer the manufacturing technology to a flexible electronic device maker, a wearable device supplier, or a company related to textile-type filters.

Global textile chemicals market to grow at over 3%

Increasing per capita textile consumption coupled with growing textile production in developing countries are expected to drive global textile chemicals market through 2020, global market research and consulting company TechSci Research has said in a report.

According to the report titled, "Global Textile Chemicals Market Forecast & Opportunities, 2020", global textile chemicals market is projected to grow at a CAGR of over 3 per cent during 2015-20. Growth in the market is anticipated on account of increasing per capita textile consumption coupled with rising demand for high quality textile products.

Moreover, increasing industrialization, surging consumption of textile in engineered products, and rapidly rising awareness about the benefits of using technical textile in workplace, are anticipated to propel the global textile industry, thereby driving global textile chemicals market over the next five years.

Textile chemicals are used during the processing of textiles, and are broadly classified as auxiliaries and colorants. Auxiliaries are chemicals used during each and every step of textile manufacturing process to provide specific characteristics to the fabric, while colorants are used to impart color to the textile product. During manufacturing, a fibre undergoes various chemical intensive processes, in which more than 100 textile chemicals are used. Consequently, textile chemicals market is strongly dependent on textile manufacturing and

World Textile News

Shima Seiki to hold private exhibition in Barcelona

The Spanish subsidiary of Japanese computerised knitting machine manufacturer Shima Seiki is holding a private exhibition in Barcelona, Spain on June 30 and July 1, 2015.

"The exhibition will showcase the company's latest Wholegarment knitting machine, based on its flagship MACH2X series," a Shima Seiki press release informed.

According to Shima Seiki, featuring SlideNeedles mounted on four needlebeds, MACH2XS is the world's first four-bed machine equipped with its original spring-loaded moveable sinker system.

"This allows unprecedented capability in Wholegarment knitting, especially in producing 3D fabric structures and knitting, which can be applied to brand new ideas in knit fashion," it added.

It will also show the SSR112 shaping machine with features like the patented Digital Stitch Control System (DSCS), spring-loaded moveable sinker system, stitch presser, yarn gripper and cutter and takedown comb.

Demonstrations will also be performed on Shima Seiki's SDS-ONE APEX3 3D design system that is at the core of the company's 'Total Knitting System' concept.

APEX3 integrates knit production into one smooth and efficient workflow from yarn development, product planning and design to machine programming, production and even sales promotion.

"Especially effective is APEX3's capability to improve on the planning process with virtual sampling," the computerised knitting machine manufacturer informed.

"Photo-realistic simulation capability minimises the need for sample-making, effectively reducing time, material and cost from the sampling process," it explained.

Biomimicry inspires the development of environmentally sustainable performance apparel

Designers of performance apparel are being urged to look to nature for inspiration when developing their ranges, according to the latest issue of Performance Apparel Markets from the business information company Textiles Intelligence.

This process, known as "biomimicry", is being driven in part by the need to make performance apparel items more environmentally sustainable and, in particular, recyclable at the end of their useful lives. This is not easy at present as performance apparel is becoming increasingly sophisticated and is being manufactured from a variety of polymeric fibres and other materials.

Advocates of biomimicry point to the fact that animals, insects, plants and other living organisms have survived and adapted in dynamic environments by evolving over billions of years, and many natural adaptations have proved to be more effective than man-made solutions.

The wing of the morpho butterfly, for example, has inspired developers to produce fabrics in vivid colours without the use of pigments or dyes. In Japan, Teijin Fibers has developed a chromogenic fibre called Morphotex by arranging polyester and nylon fibres in 61 alternating layers.

Many plants and insects have surfaces with water repellent properties which have provided inspiration for the development of water repellent and stain repellent materials

high standard products in textiles and carpet manufacturing.
"Therefore, Iranian textile industrialists have to invest in state of the art technologies and they are ready to do it and, in fact, already have very precise plans," the French trade body observed.
A memorandum of understanding (MoU) too was signed between UCMTF and the Association of Iranian Textile Companies to strengthen their ties on a long term basis.

India keen to cooperate with Iran on textiles

Textile and steel are two important sectors in Iran's Isfahan province where India and Iran can cooperate for mutual economic development, Indian ambassador to Iran DP Srivastava said.
The ambassador's remarks came in a meeting with head of Isfahan Chamber of Commerce. He expressed India's readiness to develop trade with the province.
Referring to investment opportunities in tourism industry in Isfahan, the ambassador said that Tata Company, as one of Indian multipurpose investment companies can be active in the sector of hotel building in Isfahan.
He said that India purchased $30 billion of crude oil from Iran last year and that New Delhi is willing to augment trade volume with Tehran.
Head of Isfahan Chamber of Commerce Seyed Abdol-Vahhab Sahlabadi said that Isfahan accounts for 70 per cent of country's steel production and the existence of 2000 textile units in the province provides a good ground for cooperation with India.
Sahlabadi said that India's textile and steel machinery prices are higher than those of the Chinese and Europeans and suggested that Indian manufacturers should price their products suitably to attract Iranian buyers.

Iran develops GM cotton

Iran has unveiled the first sample of genetically modified cotton, which has been produced through indigenous technology by Iranian specialists.
The unveiling took place during the First International and 9th National Biotechnology Congress of Iran, the Tehran-based PressTV reported.
According to Persian media, Dr. Mostafa Ghane'i, who heads the First International Biotechnology Congress of Iran, said the technology for the production of genetically modified cotton has been developed by an Iranian biotechnology research institute in Alborz Province, west of Tehran.
"This technology has been developed in about five years by Iranian researchers and suits the country's conditions," he added.
The official noted that the genetically modified cotton is considered as a solution to existing problems with the quality of cotton produce in South Khorasan Province.
He added that by taking advantage of the new technology, the cotton crop harvested across provincial farms has been increased 5-7 times.
Explaining on the legal aspects of the issue, Ghane'i said taking advantage of any new technology in farms would need permission from the Iranian parliament's biosafety committee.

Tehran, Moscow to Remove Barriers to Exports of Iranian Carpet

In a meeting between the Chairman of Iran's National Carpet Center Hamid Kargar and Russian trade representative in Iran Andrei Lugansky, the two sides explored avenues for facilitation of carpet trade.
At the meeting, Kargar explained features of Iranian hand-woven carpet, and called on the Russian side to tackle the problems in temporary release of Iran's carpets to be exhibited in Russian fairs.
Lugansky, for his part, referred to the interest of Russian people in Iranian hand-woven carpets, saying that Russian embassy in Tehran is keen to facilitate the exports of carpets to the country.
"Russian people purchase Iranian carpets in a very high price, and we are eager that ... our citizens have access to a variety of Iranian carpet in a reasonable price," he said.
Lugansky at the same time noted that this would not happen unless the existing barriers are removed and Iranian exporters increase their presence in Russia.
The two sides also conferred on the solutions suggested for the problems, and agreed that the issue be dealt with in future correspondence between them.
Earlier in April, Iran's First Vice-President Eshaq Jahangiri announced that Tehran has started a series of bilateral talks with Russia to boost its non-oil exports.
An Iranian council for non-oil exports has been established to remove obstacles in the way to increase exports, Jahangiri said at the time.

Iran Textile News

Registration in 8th Int'l Iran Nano Expo 2015 Starts

The Eighth International Nanotechnology Festival and Exhibition will be held in Tehran International Permanent Fairground on 5-8 October 2015.

Iran Nano Festival and Exhibition is held annually by Iran Nanotechnology Initiative Council, and it is considered as the largest and most credible national exhibition in the field of nanotechnology. It is also the second largest nanotechnology exhibition in Asia.

Among the objectives of the exhibition, mention can be made of finding research and industrial potentials, strengthening cooperation between industry and university, adoption of developed nanotechnology applications by industries, provision of opportunity for nanotechnology companies to participate in the international markets, improving public knowledge about nanotechnology, and awarding top researchers in the field of nanotechnology.

In Iran Nano 2015, various entities will be present, including promotional institutes such as Nano Students' Club, specialized bookshop, university societies, educational companies, scientific centers, including laboratories, universities, research centers, incubators and technology parks, industrial companies in the 12 pavilions of device manufacturers, automobile, water and environment, health and hygiene, building, agriculture and packaging, nanomaterials, textile, petroleum and related industries, commerce, consultant and service providing companies, technology agents and international section.

Innovation stalls will also present their selected projects and prototypes for the third year in order to attract investors.

French textile machine producers host seminars in Iran

The French Textile Machinery Manufacturers Association (UCMTF) organised four seminars in Iran at various Iranian textile hubs like Tehran, Kashan, Ispahan and Yazd.

"The French delegation was led by UCMTF vice-president Ameline Guinet and its secretary general, Evelyne Cholet," a UCTMF press release said.

Raeiszadeh, general manager of the Association of Iranian Textile Companies said that during rainy days, the French machinery manufacturers tried their best to support their Iranian customers.

"These Iranian customers in return, will not forget their friends when sunny days come back," he added.

According to UCTMF, French manufacturers maintained sales, after sales support and supplied spare parts since the sanctions were implemented.

"Several companies had even opened warehouses to stock spares supply them very quickly, due to which lines supplied by French companies operated smoothly even during the sanctions period," it too added.

Most of the Iranian textile companies seemed interested in technology from NSC Schlumberger, Laroche, Superba, Aesa, Stäubli, Dollfus & Muller, Rollin-Trelleborg and other companies.

New technologies, after sales services and spare parts availability were the main topics discussed at the seminars, alongside which B2B meetings are also held parallel with the seminars.

UCMTF is of the opinion that Iran has been well known for its

press release

DOMOTEX Turkey provided an international gathering at the center of carpet

Organized in Gaziantep, the center of machine-made carpet manufacturing, DOMOTEX Turkey brought industry leaders together from 25 to 28 May once again with the support of Gaziantep Chamber of Commerce (GTO), Southeastern Anatolia Carpet Exporters' Union (GAIB) and Gaziantep Chamber of Carpet Producers (GHO). The exhibition which featured 198 companies and occupied 22 025 sqm this year, stood out with increasing international participation as well. 33 of the 198 exhibitors came from different countries including Bangladesh, Belgium, China, France, Germany, India, Iran, Jordan, Saudi Arabia, Sri Lanka and Uzbekistan to expand their business to new markets.

Alexander Kühnel, General Manager of Hannover Fairs Turkey, said, "Organized with the participation of leading companies in the industry, DOMOTEX Turkey showed the power of Turkey in machine-made carpet manufacturing once again. On the other hand, it also proved its success to become an international platform for the Eurasian region with increasing number of international exhibitors and visitors this year. Totally 8 734 people from targeted countries, mainly from Middle East, visited the exhibition where exhibitors showcased their unique designs and new collections produced with state-of-the-art technology."

Thousands of designs at one platform during the show, the prominent companies of carpet and flooring industry displayed their wide product range under the DOMOTEX brand. Among them, one of the eye-catching products for visitors was a self-cleaning carpets developed by using the nano-technology. The visitors watched the live demonstration of impermeability of nano-technological carpets, where the technology for the production of luxury cars is adopted to the carpet manufacturing.

Dr. Meriç Bebitoğlu, General Manager of Atlas Halı, explained the nano-technology: "This year, we exhibited the new and more stain resistant version of our nano carpet innovation which we launched in 2013. We are delighted for making a global invention. As it is known very well in the market, the nano carpet cleans itself continuously with the energy from light and indoor lighting. We are very pleased for bringing this upgraded version of our invention with the consumers at the exhibition this year."

Also, diversified designs that are developed based on consumer trends attracted attention during the fair. The visitors found the opportunity to see thousands of modern or traditional carpet designs made of different materials such as wool, silk, cashmere, bamboo fibers, and polyester.

On the other hand, various machinery technologies were also exhibited for the carpet manufacturing. The products demonstrated technological superiority of the industry renewed with robotic equipments.

Patrick Rieth, Area Sales Manager of SUPERBA which is one of the global leaders in yarn continuous heat setting, expressed their opinion about the exhibition: "DOMOTEX Turkey is a very good exhibition for us and Gaziantep as the place for DOMOTEX is ideal because most of the companies are here. For us, so far the exhibition is very interesting. We had very good contacts. There are some projects emerging in 2016. So over all it is very interesting for us."

DOMOTEX Turkey provided a more comprehensive platform in terms of product variety, as well. Besides machine-made carpets, the other product groups in the flooring industry such as rugs and hand-made carpets, mats and resilient floorings and laminate were showcased in the show.

The exhibition has put in a strong performance, consolidating its position as the leading trade fair for the carpet industry in Turkey and Middle East which offers an important opportunity for companies to improve their business volume. As a result of fruitful four days, the majority of exhibitors expressed their willingness to exhibit at the show next year, again.

Applications by Martin Rademacher, Sales Manager & Ingo Mahlmann, Senior Manager Product Management Nonwoven, Oerlikon Neumag (Germany)

• Nonwoven Production Lines Installed by a General Contractor by Johann Philipp Dilo, General Manager, Dilo Group (Germany)

The second session explores added value ingredients and finishing for nonwovens:

• Spin Finishes and Additives in the Production of Nonwovens by Stephan Reil, Marketing Manager Nonwoven, Pulcra Chemicals (Germany)

• Added Value Through Selected Functionalisation of Nonwovens by Michael Bildhauer, Head Technical Service Fibre Auxiliaries & Robert Zyschka, Head Technical Service Coating/Finishing, CHT R. BEITLICH (Germany)

• Advantages of Ultrasonic in Web Splicing Applications by Pierre Croutelle, Sales Manager - Nonwoven/Textile & Plastic Division, Spoolex (France)

• Striking Colors and Performance for PP SpunMelt Nonwovens by Francis Baud, Global Fibre Marketing Head, Clariant (Switzerland)

• The Nonwovens Industry and Markets in Numbers by Jacques Prigneaux, Market Analysis and Economic Affairs Director, EDANA (Belgium)

In addition to the forums, ITMA participants can gain valuable insights on new technologies and research at the Research & Innovation Pavilion's Speakers Platform. ITMA 2015 will also feature the World Textile Summit, a high-level knowledge sharing platform on 13 November. Co-located with ITMA 2015 is the Digital Textile Conference on 15 November.

To register or for more information on conferences at ITMA 2015, please visit *www.itma.com* or contact Angelica Madrid at *angelicamadrid@mpinetwork.com*.

press release

Space application for ITMA ASIA + CITME 2016 opens

Space application for ITMA ASIA + CITME 2016 has been launched. The fifth edition of the combined show will be held from 21 to 25 October 2016 at the new National Exhibition and Convention Centre (NECC) in Shanghai.

According to the show owners, CEMATEX, China Textile Machinery Association, the Sub-Council of Textile Industry, CCPIT (CCPIT-Tex) and China Exhibition Centre Group Corporation (CIEC), ITMA ASIA + CITME is the leading marketing platform for textile machinery manufacturers seeking to tap the China market.

Said Mr Charles Beauduin, President of CEMATEX, "Asia is the world's largest textile machinery market and China accounts for more than half of the total textile and garment machinery installed during the last 10 years. Hence, we expect that the response to the 2016 combined show will be extremely strong."

Mr Wang Shutian, President of China Textile Machinery Association (CTMA), commented, "We anticipate that ITMA ASIA + CITME 2016 will be the biggest showcase in the series. It is expected to take up 180,000 square metres with participation from some 1,600 exhibitors. The new venue in the Hongqiao business district of Shanghai, together with the new October dates have generated excitement among industry players."

Co-built by the Ministry of Commerce of China and the Shanghai Municipal Government, NECC will be the largest single-building exhibition complex in the world with a total construction area of 1.47 million square metres. It is easily accessible as it is located near the Hongqiao Transportation Hub, and connected to Hongqiao Airport and Hongqiao Railway Station via the city's metro. Facilities at the NECC include exhibition halls, a commercial centre, office buildings and a hotel.

ITMA ASIA + CITME 2016 is organised by Beijing Textile Machinery International Exhibition Co Ltd and co-organised by MP Expositions Pte Ltd. Japan Textile Machinery Association is a special partner of the show.

The last ITMA ASIA + CITME show in 2014 grossed 150,000 square metres. There were around 1,600 exhibitors from 28 economies taking part in the exhibition. The show attracted a trade visitorship of around 100,000 from 102 economies.

Space application is now available on the show website. It will close on29 February 2016. To apply for space or for more information, please visit *www.itmaasia.com* or *www.citme.com.cn*.

press release

Textile Colourant and Chemical Leaders Forum and Nonwovens Forum at ITMA 2015 draw strong industry support

ITMA 2015 has attracted various industry groups to initiate activities that address critical sectorial concerns, as well as challenges faced by the textile, garment and fashion industry. The exhibition, billed as the world's largest textile and garment manufacturing technology showcase, will be complemented by a wide range of knowledge sharing events that will feature discussions on issues that impact the industry's sustainability.

Among the exciting events are the Textile Colourant and Chemical Leaders Forum and Nonwovens Forum @ ITMA 2015.

Textile Colourant and Chemical Leaders Forum

Launched at ITMA 2011, the forum was a success, drawing lively participation from colour and chemical professionals, and fashion and sports brand owners from around the world. This year, the agenda will focus on sustainability in dyeing and finishing processes and participants will be updated on industry opportunities and best practices. Covering a comprehensive range of issues, such as current challenges, solutions and future trends, the one-day forum on 14 November is divided into three sessions:

• The issue: topics related to chemical pollution and environmental issues and how these impact the market place

• The solution: how does the supply chain respond

• The future: what are the trends and/or game changers moving forward

Alessandro Gigli, board member of the Association of Italian Textile Chemists and Colourists who chairs the forum programme committee, said: "Topics to be covered include the chemical/colourant suppliers' response to current environmental issues, updates on REACH regulation, new dyeing and printing technologies and their impact in a more sustainable supply chain.

"We have received many paper submissions as there is strong interest in sustainability issues impacting the textile and garment industry. We hope the forum will be a focal point for meaningful dialogues which will contribute to improvements in this sector."

Besides Mr. Gigli, other members of the committee are:

• Andrew Filarowski, Society of Dyers and Colourists

• Enrique Meltzer, Latin American Federation of Textile Chemists

• Jan Marek, The International Federation of Associations of Textile Chemists and Colourists

• Janak Mehta, The Dyestuff Manufacturers Association of India

To-date, the confirmed speakers include

• Alberto Gallina from Benetton Group srl. who is representing the ZDHC Group

• Prof. Giuseppe Rosace from Department of Engineering and Applied Science, University of Bergamo

• John Mowbray, owner and founder of UK-based B2B publisher, MCL Global

• Prof. Marc VanParys, President at UNITEX

Nonwovens Forum

To be held on 16 November, the Nonwovens Forum @ ITMA is jointly organised by EDANA and MP Expositions. The forum will address pertinent issues, challenges and opportunities in the rapidly evolving world of nonwovens. Pierre Conrath, Sustainability & Public Affairs Director, EDANA (Belgium) who will kick-off the forum with an introduction on the nonwovens industry, said: "The programme is built around the theme - 'Nonwovens: A World of Growth and Opportunities'. Presentations on the latest applications and finishings will benefit ITMA visitors who are involved in or have the intention to move into nonwovens manufacturing. Participants will find it very useful to be able to visit the ITMA exhibition and view many of the technologies on show at the exhibition."

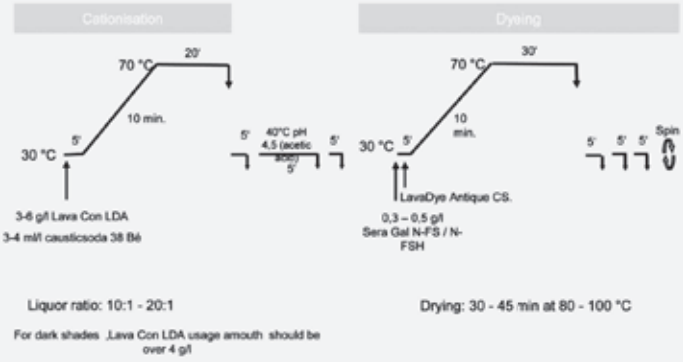
The first session will focus on applications and technologies for nonwovens:

• Overview of Nonwoven Production Technologies and Applications by Laurent Jallat, Head of Marketing Department, ANDRITZ Nonwoven (France)

• From Melt to Nonwoven: Spunbond Lines for Technical

company that continued its operation in the country. Kaiser Company is responsible for technical services such as finishings and providing latest fashions in denim technology. It also undertakes handling and improving sales process to Iran due to sanctions and its complications. "DyStar is expert in denim technology, providing a range of service and products from manufacturing fabrics to technical finishing of denim products and fashion production on a world scale. DyStar is producer of Indigo Vat 40%, that is simple to use and increases high quality production", said Eng. Dehghan. "DyStar is also the sole manufacturer of reactive dyes such as Levafix and Lava Dye with good light fastness for cotton fabrics. The technical division of Kaiser Company offers various processes and methods for producing latest fashion by denim fabric at the final finishing stage; fashion that is presented to the popular brands in the world", He said.Eng. Dehghan added: "Environmental protection is so important for DyStar. It takes observing environmental standards into serious account in manufacturing process; in other words, DyStar products do no harm to human body or environment; besides, the company's products make Oeko-tex standard 100 accessible across textile industry". Based on Royan Chemie Co. manager, ever-expanding communications capabilities and people's knowledge about fashion encourage manufacturers to make quality and more diverse products. In the same context, DyStar Company deals with special finishings such as using jojoba and aloe vera plant, various vitamins, etc.

Eng. Dehghan concluded, "We hope to take an effective step towards promotion of denim technology in the country through cooperation and synergy among domestic and foreign experts". The conference program continued by Mr. Berk Director of Auxiliaries of DyStar Company by introducing new technologies and achievements of the division under his management. He noted that besides supplying colorants and auxiliaries, presenting applied solutions to remove problems of dyeing process has also been included in his agenda. Mr. Berk Ocalmaz also highlighted other aspects of the industry such as various resins being used in denim garment industry in order to achieve required finishings compatible with existing conditions of different products, resin additives for making various subordinates available, enzymes for denim finishing, for optimization of production process, reducing time and energy consumed, with a focus on environmental issues and concern for maintaining a safe environment for all.



Mr. Cem Ozkeskek, CEO of Kaiser Company, was the next speaker who introduced the range of colorants in dyeing denim garments including Lava Dye and Lava Dye Antique for colored denim with fashionable wash effects. The conference concluded by Mr.Hakan Keciyokusu and Mehmet Necatin displaying Kaiser Collection 2015.

A Report on Denim Finishing and Apparel Tech Conference

A specialized conference on denim finishings and the latest fashion trends was held by Royan Chemie Co. with the collaboration of DyStar and Kaiser companies for the owners and professionals of the industry in Tehran, Homa Hotel.

Eng. Nasser Dehghan, manager of Royan Chemie Co., began his opening speech by welcoming the participants: "Royan Chemie Co. as an advisor and partner of Iranian craftsmen, pursuing the goal of serving textile industries, promoting knowledge and information of the stakeholders at textile industries by taking advantage of modern technologies at international level and organizing denim conference, seeks to transfer the relevant international knowledge to Iran."

"Iran is one of the leading countries in achieving significant progress in textile industry; whereas, many years ago, no one has ever heard about textile industry in China, Turkey, Japan and …", said Eng. Dehghan.

He expressed hope that the statesmen would pay more attention to this industry, bearing in mind that after oil industry, the textile sector has the potential to generate the highest number of jobs in the country. For instance, a petroleum engineer could only create employment for 10 persons; whereas, based on world statistics, a textile engineer is capable of creating jobs for 300 people.

"One of the commitments of Royan Chemie Co. is to transfer modern technology to the textile manufacturers and we are not to play the role of a mere agent for distribution or sales of textile colorants and auxiliaries", he added.

Eng. Dehghan introduced the international companies that Royan Chemie Co. was representing and said: "DyStar Company is a merger of former Hoechst, Bayer, Mitsubishi, BASF, ICI and Rotta companies, responsible for producing a full range of dyes and auxiliaries by 20 manufacturing units in 11 countries, providing services through more than 50 registered agencies all over the world. Notwithstanding sanctions against Iran, it is the only international