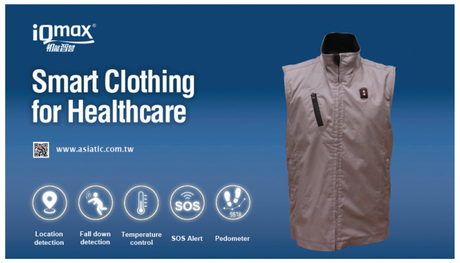
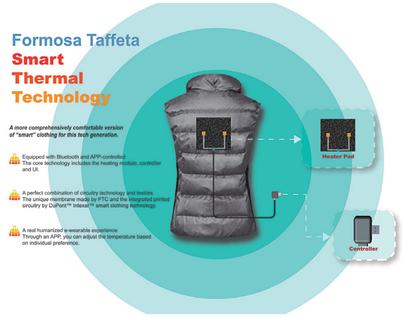




TITAS 2018 Launches Smart Textiles Pavilion

Textiles + Technologies = Future Innovation

This year for the first time, a Smart Textiles Pavilion is set up inside TITAS with exhibits covering from textile products to manufacturing equipment and solutions. In response to the incoming waves of industrial automation and intelligentization, we hope to inspire the realization of a smart textile value chain so as to fulfill future needs of the market.

Textile and electronics are two of Taiwan's largest foreign exchange earning industries. The two seemingly unrelated disciplines now link together through smart wearables and smart manufacturing. Following this new textile trend, a Smart Textile Pavilion is organized within TITAS with three major themes: smart textiles, smart manufacturing application and smart solution.

The pavilion highlights the current developments and future trends of smart textiles in three areas: display, interactive and presentation. The display area showcases smart textile products and facilities; the interactive area illustrates trends and directions; and the presentation area invites experts from textile, electronic, and textile machinery industries to share their solutions for product development and manufacturing process.

According to a study by Grand View Research, an American business consulting firm, the market for global smart textiles and clothing is expected to reach USD 9.3 billion by the year 2024. Another recent report by Indian market analysis firm Transparency Market Research pointed out that, although the smart textiles sector is still in a very early development stage, judging from its rapid growth and investment momentum, smart textiles has evolved to combine with nanotechnology, biosensors, new materials and miniaturized electronic components to be applied to day-to-day living as well as many other areas.

The focus of Industry 4.0, which is the industrial revolution of the 21th century, is on smart manufacturing. Based on the Internet of Things (IoT) concept and technology, smart manufacturing enables dynamic and flexible manufacturing solutions to link up materials, plant facilities, production lines, products and distribution networks, suppliers, etc. to form Cyber Physical Systems (CPS) to provide effective remote data-oriented, customized, and differentiated services through Big Data and Cloud Computing.

Similarly, the textile industry is also evolving by expanding the coverage of smart textiles to include smart manufacturing and smart solutions so as to shape up a complete system for smart textile value chain.

Smart Textiles Pavilion - A Crossover Platform

● Smart textiles

Under this theme are smart textiles and garments with sensors and monitoring functions for healthcare, sports, safety, fashion, entertainment, military, and aviation uses. Many TITAS's active participants present their latest developments in smart products, including Far Eastern New Century, TexRay, Formosa Taffeta, Eclat, Asiatic Fiber, as well as academic and research institutions such as National Taipei University of Technology (NTUT), Industrial Technology Research Institute, and Taiwan Textile Research Institute. Among them, Asiatic Fiber introduces smart thermal clothes that integrate temperature control and positioning functions, and TENS and EMS modules that integrate temperature control and electrotherapeutic functions for pain relief, well demonstrating an innovative thinking of combining advanced fibers with wearable device; NTUT showcases LED Arrays Display Clothes using ESTM(embedded smart textile module) to present a new garment image marrying art and tech; newcomer Sousveillance Smart Technology presents smart conductive textiles; and another newcomer City Bright offers smart textiles with temperature control and warning features.

● Smart Manufacturing Application

Under this theme are facilities, equipment and systems that enable smart manufacturing. For instance, Ciya introduces the color measurement technology supported by software and hardware to detect minuscule color differences, breaking through the traditional thinking that colors of small sample can't be measured; All-Winning presents Zwick/Roell testing machines and systems for textile materials, which combine automation control, robotic arms, automatic software function and other high tech methods to improve testing efficiency, and the systems can upload testing messages and results to private clouds or databases for instant access through mobile device.

● Smart Solution

Software-based solutions adopting IT, AI, and RFID technologies are presented under this theme. Among them, Logic Art Automation, by bringing powerful software together with dyeing controllers and machines, provides total dye house integration from the lab to production, finishing and management software to optimize textile dyeing process based on intelligent automation; CBright's smart heating technology and textile EMS technology combine isolated microcontrollers with yarns and fibers to develop multi-functional textiles to fulfill consumers' requirements for different environments and mindsets; and GIGA-TMS's Scannel series, based on ultra high frequency, applies RFID technology to various textile factory systems such as automatic production, on-site production monitoring and warehouse management, serving as a major step for customers moving toward the era of Industry 4.0.

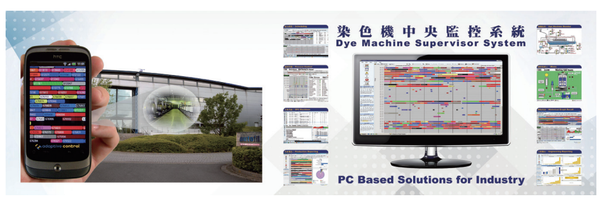
We look forward to your participation in our Smart Textiles Presentation ! (Booth : L502)

Session 1 (Oct. 16)

Time	Subject	Company	Presenter
14:00-14:10	iQmax Smart Textile Modules & 2018 Innovative Products	ASIATIC FIBER	Mr. Hank Lee Vice President of Medical Device Department
14:20-14:30	Intelligent Textile Technology	CITY BRIGHT	Ms. Lisa Liu General Mamager
14:40-14:50	Endless Connectivity	SOUSVEILLANCE SMART	Mr. Lim Chee Kiong Sales Manager
15:00-15:10	Fully Automated Dye House	LOGIC ART	Mr. Wing Chen Sales Representative
15:20-15:30	LED Arrays Display Clothes	NTUT	Mr. TZU-WEI CHOU Project Manager Mr. CHIH-SHAN HSUBrand Designer

Session 2 (Oct. 17)

Time	Subject	Company	Presenter
11:00-11:10	Smart Clothing for Elderly Care	AiQ Smart Clothing	Ms. Nadia Kang Chief Marketing Officer
11:20-11:30	Smart Color Control	CIYA ENTERPRISE.	Ms. Alice Lee General Mamager
11:40-11:50	When Apparel Meets RFID	GIGA-TMS	Mr. THOMAS CHEN Sales Representative
12:00-12:10	Washable Conductive Thin Film and Its Application in Textile	ITRI	Mr. Wen Hsien Sun Ph.D. Project Manager



Event Information

NTUT

Time: Oct. 17 14:00~14:30
Subject: Tech meets Art
Content: LED Arrays Display Clothes using ESTM (embedded smart textile module)
(Booth : L502)

India Pavilio

Federation of Indian Chambers of Commerce & Industry- showcasing the best of India in Fibres, Filament and Yarns, Fabrics, OEM/ODM Apparels, Trimming & Accessories, Textile related Technologies & Services.
(Booth : L102)

TAIPEI INNOVATIVE TEXTILE APPLICATION SHOW 2018台北紡織展
OCTOBER 16-18

TITAS

Day 1 Show Daily

TITAS 2018 Underscores Smart Textile Value Chain

Smart Textiles, Sustainability, Functional Applications

Organized by the Taiwan Textile Federation (TTF) and under the auspices of the Bureau of Foreign Trade, Ministry of Economic Affairs, Taipei Innovative Textile Application Show (TITAS) now enters into its 22nd year as one of the most important textile events in Asia. This year participants are from 12 countries and regions including France, Turkey, Switzerland, Sweden, Germany, Japan, Korea, India, Hong Kong, Singapore and China as well as Taiwan with a total of 456 exhibitors in 1,003 booths.

Continuing its theme from last edition, TITAS 2018 will again showcase core products of functional, sustainable and smart textiles. For the side activity, there will be more than 1,000 one-on-one business meetings between show exhibitors and over 100 invited representatives from international brands/retailers. In addition, in order to offer a more comprehensive one-stop service to both exhibitors and attendees, in collaboration with the Taipei Sewing Machines Association (TSMA), this year TTF has also invited TSMA members to present the latest development in smart manufacturing including automatic sewing machines and smart sewing systems and solutions.

Major business platform for both domestic and international vendors

In addition to key players in Taiwan's textile industry such as Formosa Plastics Group, Far Eastern New Century, Shinkong Synthetic Fibers, Shinkong Textile, TexRay, Tainan Spinning, Yi Jinn, New Wide Group, Eclat, Jintex, DingZing, Everlight , Kingwhale, Grandetex, Grand, Sunny and Tri Ocean, Industrial Technology Research Institute, Taiwan Textile Research Institute, Southern Taiwan Textile Research Alliance, MIT Underwear Innovation Alliance, Taiwan Technical Textiles Association and other 15 textile related associations representing various segments of Taiwan's textile chain will also exhibit at TITAS 2018.

On the oversea part, a considerable considerable proportion of vendors are from Japan, South Korea and China. Mikiriken Industrial exhibits at TITAS for the second year, while Unitika and Japan Textile Evaluation Technology Council both are first timers from Japan. From Korea, Daegu Gyeongbuk Textile Industries Association continues to participate together with two newcomers Dain Sky and Ibigeng. There will also be the Mainland China pavilion. Among other oversea participants are ISKO from Turkey, Polygiene from Sweden, bluesign technologies from Switzerland, EMTEC from Germany and Protechnic from France.

On top of that, Federation of Indian Chambers of Commerce and Industry (FICCI) from India will be leading a group of 10 members to exhibit at TITAS with the intention to enhance business contacts and cooperation with their Taiwanese counterpart. A visiting delegation organized by VITAS, Vietnam will attend TITAS to seek further cooperation with Taiwan's textile enterprises.

A new pavilion for smart textiles

TITAS serves as a core platform to promote innovative textiles centering on functionality, sustainability and smart textiles. With the development of advanced technologies such as IoT and AI, the textile industry is also evolving to incorporate smart manufacturing and smart solution into the coverage of smart textiles. In response to this emerging smart trend, for the first time, a Smart Textile Pavilion is organized within TITAS this year with three major themes: smart textiles, smart manufacturing application and smart solution, as a first step to welcome the incoming industrial automation and intelligentization to inspire the realization of a smart textile value chain.

In the new pavilion, visitors will be presented with products and solutions like smart thermal clothes integrating temperature control and positioning functions; LED Arrays Display Clothes using ESTM(embedded smart textile module) to present a new garment image marrying art and tech; textiles with temperature control and warning features; the color measurement technology breaking through traditional thinking to detect minuscule color differences; software-based solutions adopting IT, AI, and RFID technologies; and the textile technology combining isolated microcontrollers with yarns and fibers to enhance the applications of multi-functional textiles.

Major side event: one-on-one business meetings

This year more than 100 international brands and retailers from 19 countries are invited to have over 1,000 business rendez-vous with TITAS exhibitors. Among them are many professional outdoor and sports brands including first timers Outdoor Research, leading hunting and fishing gear retailer Cabela's, outdoor clothing brand Khangri from USA; sports and outdoor group Boardriders from France; UK cycling clothing brand Endura and football apparel & gear brand Umbro; cycling and triathlon apparel & gear specialist Louis Garneau from Canada. Delegates from Chinese leading athletic apparel and footwear brand Li-Ning will also be present.

Insightful seminars and product presentations

All together there will be 11 seminars this year to talk about the latest development in innovative textiles, website retailing and business strategy, as well as presentations on new fibers and technologies. Seminar topics include The Evolution Tendency of Smart Textiles, Japanese Functional Finishing Mark, ISKO ARQUAS™ and ISKO Responsible Innovation Approach, ZDHC & Functional Testing of Textile Products and Latest Trend of Innovative Textiles.

TITAS 2019

We look forward to seeing you again next year on October 15th-17th.

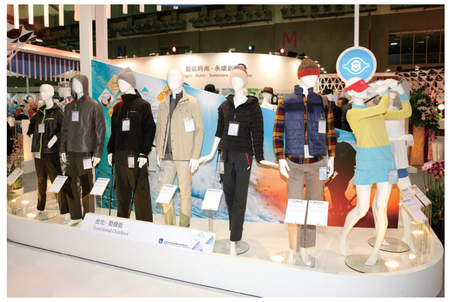
2019-2020 Fall and Winter Fashion Trends

Sponsoring Authority BUREAU OF FOREIGN TRADE

Organizers Taiwan Textile Federation 紡拓會 TAITRA

Ad by Bureau of Foreign Trade Implemented by TTF

Highlights of Exhibition



Formosa Plastics Group　Smart Fashion with Sustainability

For TITAS 2018, Formosa Plastics Group (FPG) carries the theme of Smart Fashion with Sustainability" for its exhibits to reflect its determination to implement a green policy while presenting high-quality, high-tech and high-value textiles.

The FPG pavilion at TITAS 2018 is a joint exhibition from Formosa Chemicals & Fibre, Formosa Plastics, Nan Ya Plastics and Formosa Taffeta. The pavilion features five image areas – Fashion and Down, Sportswear In Style, Outdoor Activity, Leisure Life and Industrial Materials – all to highlight the Group's latest textile collections and their comprehensive applications. FPG's fiber lines cover polyester, polypropylene, rayon, elastic, carbon, polyamide, and functional fibers, all serving as materials for Formosa Taffeta to develop into sophisticated fabrics by incorporating advanced green and performance technologies. Just take a stroll in the Pavilion and you will witness the superior quality and technology the Group has to offer. For more information, please visit the Booth M120.

Formosa Plastics (FPC)

● Tairyfil carbon fiber is a carbonized filament series that has good conductivity and is stronger than steel, lighter than aluminum, and acid and alkali resistant. It has a wide range of applications covering sports goods, wind turbine blades, automobile, aircraft, vessel, CNG tank, cable core and construction reinforcement. With an annual capacity of 8,750 tons, FPC offers Tairyfil in a full range of specifications including filament tow from 1.5K to 48K, and tensile modulus from normal to high.

● FPC brought in a dry spinning technology from Asahi Kasei to produce spandex which keeps Asahi's registered brand name ROICA®. Spandex, also known as elastane, has high elasticity and stretch like that of rubber, while its tensile strength and stress, abrasion resistance, aging resistance and chemical resistance are superior to rubber. Textiles incorporating just 5 - 20% of spantex can get the desired stretch effect, enabling the material to be widely used in a variety of textile products including garments, undergarments, laces, socks, home textiles and medical textiles.

Formosa Chemicals & Fibre (FCFC)

● Fiber grade PP pellets by FCFC, produced with gas-phased processing technology introduced from Chisso, Japan, feature high crystallinity and narrow molecular weight distribution, and are used to produce fine denier PP multifilament, PP/PE composite staple fiber and nonwoven fabric.

● High denier rayon fibers are excellent materials for sweaters. After carbonization, they can be used for insulation for aviation industry featuring heat insulating, soundproof and biodegradable.

● Rayon fibers exclusively for nonwoven use are ideal for disposable under garments, linings, backing material for plastic fabric and hygiene products.

● Colorful rayon fiber CRAYON® is suitable for wipes, garments, lining, backing material for plastic fabric and hygiene products. Heat-resistant high denier black rayon fibers can withstand up to 350℃. Combined with polyester and acrylic fibers, the material is heat insulating, soundproof and shockproof.

● By a breakthrough in polymer technology, FCFC has developed a directly extruded fine denier functional nylon filament with long-lasting performance, suitable to make lightweight fashionable fabric to fulfill market needs.

● The deep-dyed nylon filament yarn by FCFC is suitable for fabrication involving general nylon filament yarns to enable a bi-color gradient effect on fabric with just one single dyeing process.

● FCFC has developed four health-oriented functional nylon filaments with long-lasting performance: nano energy fiber, heating fiber, cooling filament, and hydrophilic filament.

● FCFC continues its development in recycled nylon textiles. Its recycled nylon fabric, a joint effort with Formosa Taffeta, is a practice of FCFC's social responsibility toward ecological sustainability.

Formosa Taffeta (FTC)

● FTC's Ultra Lightweight fabric series made with 7-15D nylon or polyester filament delivers super water repellent, wind breaking, down proof, and silicon-coated waterproof functions, suitable for ultralight windbreakers, down jackets and sleeping bags.

● Lyocell is an eco-friendly regenerated cellulosic fiber that has silky luster, soft feel, excellent drape and cooling touch. Lyocell is made using petroleum-free solutions and the fiber is biodegradable.

● Econy® is a regenerated nylon developed by Italian company AQUAFILL. Instead of using industrial waste as resource, as common recycled nylon does, this new-generation material is made with nylon waste from landfills and oceans around the world such as fishing nets and carpets.

● FTC's 3-layered ultralight waterproof moisture transferring fabric is made by laminating 10μm membrane with 10D nylon fabric and 10D knit fabric. This soft, lightweight functional fabric is an ideal choice for outdoor, sports and leisure jackets.

● AQUAOFF* Pigment Print is an innovative waterless processing technology developed by FTC. No steaming and washing processes required after dyeing and printing, it is an excellent green solution that saves water and reduces waste water emission.

● BOOMETEX® is an green fabric series that uses recycled polyester and cationic dyeable polyester and nylon as materials. Processed with FTC's special finishing treatments such as PFOA/PFOS Free water-repellent or moisture wicking and water proof lamination technologies, this series creates high added value for end products.

● FTC's functional yarn collection BODYTEK® encompasses a wide variety of innovative and high value-added functional yarn products made with different kinds of fibers. Categorized by performance and application, BODYTEK® consists of four series, namely healthcare, eco-friendly, functional and protective.

Nan Ya Plastics (NPC)

● LuminMax is a high performance light storing polyester filament which glows in the dark. Currently, blue and green lights are available.

● CHROMUCH is a dope dyed polyester which retains a color fastness higher than grade 4 even after heating process, solving the problem suffered by the traditional dope dyeing process of not being able to retain color fastness and color saturation concurrently.

● CHROMUCH-lux can be used as warp yarn for filament yarn woven fabric to create an elegant gradient effect. Using CHROMUCH-lux as weft yarn with nylon as warp yarn to produce woven fabric and treated with acid dyes, the fabric will look more colorful and interesting.

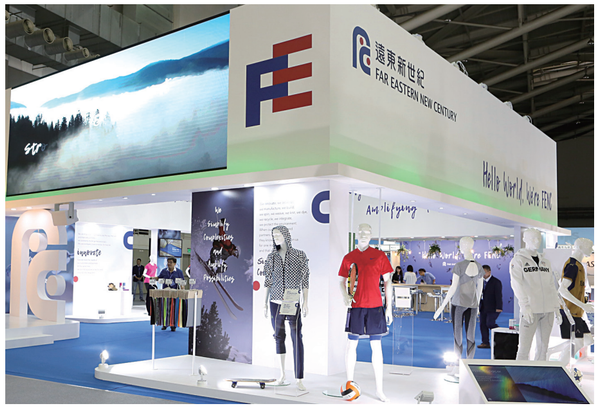
● Comfortable elastic materials:

◆ By using a special filament yarn spinning technology, SPANFIT features a spiral structure to give fabric a dull luster, better elasticity and a softer touch.

◆ TOPFIT is a mechanical stretch filament yarn developed for knits. Besides better stretch, the yarn provides knits with better snag resistant and UV proof properties.

● ECOGREEN is a polyester made with recycled PET bottles. Now offering more diversified specifications, approximately 99% of the yarn composition can be reused.

● Differing from other antibacterial polyesters that lose their function after dyeing, TOPFRESH is dyeable and still maintains excellent antibacterial function against Staphylococcus Aureus and black mildews after dyeing treatment. Moreover, the material is odor proof and features excellent washing durability. Fabric made from TOPFRESH can still retain good antibacterial feature after 50 washes.



FAR EASTERN NEW CENTURY

R&D Innovation is Famous in the World

Far East New Century has been developing various new products for many years and at TITAS 2018 presenting its substantial achievement.

● FENC® Water Free Dyeing

Since 2013, FENC® has pioneered the use of supercritical carbon dioxide ($scCO_2$) for a water-free dyeing process for polyester. In 2018 FENC® launches the world's first water-free dyeing technology for nylon. The water free dyeing technology not only eliminates waste water but also significantly reduces the energy and time consumption in fabric dyeing process.

● FENC TopDry® Filament

The PFC-free TopDry® hydrophobic PET filament is one of the uniquely developed products by FENC. It is an eco-friendly product fully complied with ZDHC standards. This material shows excellent quick dry performance on fabrics without additional dyeing and finishing treatment. FENC TopDry® filament is your best choice for applying to moisture management textiles!

● FEFC® Stretch & Comfortable Nylon 6,6 Filament

Innovative nylon 6,6 filament with soft stretch property can be used to produce stretch woven fabrics without the addition of spandex fiber while providing strengths of lightweight, softness, high color fastness and dimensional stability. Circular knit fabrics made with this superior filament are bulky, comfy and stable.

● FENC® Wicking Yarn

FENC® Wicking yarn is a new polyester spun yarn with improved wicking and low-pilling performance without using any harmful chemicals. It also gives the fabric a soft and cottony touch.

● OTIZ® NY66 Solution Dyed Products

OTIZ, a FENC subsidiary, has developed a high tenacity Nylon 6,6 spun dyed yarn to fulfill the automobile tire goods market demand, of which the production process effectively reduces the cost and pollution during the dyeing phase.

● FENC 100% Lyocell ™ Bed Linens

These linen products work well in a wide variety of climate, and are breathable with excellent moisture absorbency, keeping the body cooler and inhibiting the growth of bacteria. The silky softness of the fabric gives you a comfortable and better sleep quality.

● FENC supports worldwide sporting events:

◆ 2018 Australian Open

High performance wicking technology provides better cooling and drying comfort to tennis jersey. The unique airflow design of the jersey helps enhance body extension, and players can reach best physical coordination in the tournament through cloth deformation.

◆ 2018 World Cup

Jerseys made with recycled polyester yarns and with airflow design effectively reduce wind drag and facilitate maximum comfort. The superior wicking performance of those jerseys helps keep players' body dry and comfortable during training and games. For more information, please visit the Booth M106.

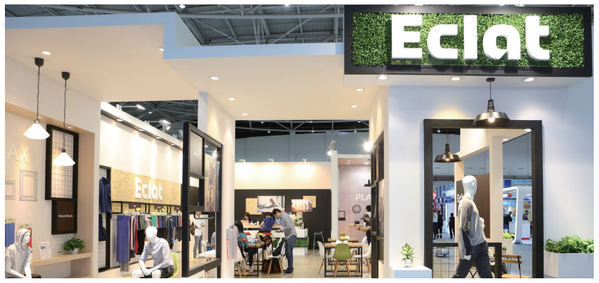
JINTEX　Promote Green Chemistry without Spare

Greenpeace International has been firmly committed to the promotion of pollution control and care of their planet for many years. The non-profit organization also advocates toxic-free production and discharge as well as protection of the environment and human health. This whirlwind of detoxification has already reached the textile industry. The toxic-free fashion concept is receiving growing attention worldwide.

JINTEX has made dedicated efforts in the field of green chemicals for many years. Various non-toxic, green products that conform to EHS (Environmental friendly / Health / Safety) principles have been released in quick succession. JINTEX also launched the miDori® series eco-friendly biomass agents by adopting the Swiss BST (Beyond Surface Technology). The company is never slow in introducing new high-end processing aids such as odor eliminating and sterilizing agents, cool sensation agents, and mosquito repellents.

To meet green consumer demands, brands must offer green products. JINTEX will keep making dedicated efforts to realize the goal of Green Chemistry" .

For more information, please visit the Booth M830.



ECLAT TEXTILE

The Latest Functional Fabrics are Attracting Attention

Eclat is a multinational enterprise that focuses on the development of knitted fabrics & apparel for sports and day-to-day wear. Equipped with an integrated supply chain including its own knitting, dyeing and apparel making factories, together with high quality R&D and technology, Eclat is able to offer innovative products and services through responsible manufacture processes toward a sustainable business.

At TITAS 2018, Eclat introduces its first ever Eclat® series knit fabrics and a brand new visual identity centering on the five elements of functional knit: Quick Dry, Air Permeation, Moisture Control, Light Weight, and Flexibility.

By combining texture design with automation, Eclat aims to demonstrate how technology and craft are incorporated to create fashion and performance in consumer clothing without compromising comfort and sustainability.

For more information, please visit the Booth M820.

NEW WIDE GROUP

Highlights of the Five Major Pavilions

At TITAS 2018, New Wide's exhibits are divided into five sections: Urban Casual, Athleisure, Functional, Outdoor and New Development. In response to the mix and match fashion trend and the increasingly blurred borderline between sports and leisure categories, New Wide presents a range of exquisitely designed sample clothes using innovative fabrics and underscoring the interchangeability of material, style and color, not to mention the comfort and good touch, which nowadays is a major requirement from brands and buyers.

The environment is becoming a regular concern of consumers, plus the fact that major fashion and sports brands have all announced to use Recycle Poly materials in full swing before 2022, New Wide therefore also showcases fine knit fabrics made with Eco-Poly and Recycle Poly for buyers' selection.

As a balance to a turbulent and highly technical modern environment, people start to seek reconnection with nature, which in turn has led to a dramatic increase for the past two years in the demand for natural materials, whether it's pure, blended, interwoven or chemical spun-like. For more information, please visit the Booth M810.

Giftstart　Developed Reflective New Products

By taking advantage of its patented technology, Giftstart has recently rolled out yarns, fabrics and accessories that can generate altogether colorful-reflection, glowing-in-the-dark and pattern-varying visual effects in the products they constitute.

The technology was applied to make a gigantic traffic sign mounted on an entrance truss of the 2018 New Taipei Sky Lantern Festival early this year, after absorbing light, can reflect, radiate light and generate pattern-varying visual effect, making the sign more energy efficient and eco-friendly than the LEDs used at the same festival one year earlier.

For more information, please visit the Booth N1303.