

## TITAS 2023 Embracing Sustainability to Connect Globally and Build a Green Textile Future

Under the auspices of the International Trade Administration (ITA), Ministry of Economic Affairs (MOEA) and organized by the Taiwan Textile Federation (TTF), TITAS 2023 held its grand opening at the Taipei Nangang Exhibition Center Hall 1 on October 17. To show government support for the textile industry, Vice President Lai Ching-te made a special appearance at the opening ceremony. Among other special guests were Senior Advisor to the President Shen Jong-chin, MOEA Vice Minister Chern-Chyi "C.C." Chen, MOC Deputy Minister Sue Wang, ITA Director General Cynthia Kiang, and DOIT Director General Chyou-Huey Chiou along with TTF Chairman James Kuo, TTF Honorary Chairman Douglas T. Hsu, as well as representatives from textile associations and companies. During the ceremony, a runway show dubbed "Sustainable Fashion Show" was put on, which was a collaboration between Taiwan textile companies and designer brands and coordinated by the Ministry of Culture to showcase the marvelous outcome of Taiwan's fashion value chain.

TITAS is the most important event

for the textile industry in Taiwan. This year sees 381 exhibitors from all over the world with 952 booths in the Show. And more than 70 international brand buyers from 15 key markets came here to participate in more than 800 sourcing meetings, ushering in more business opportunities for the textile industry. In his opening remarks, Chairman Kuo said that although the international economic environment is rather difficult this year and Taiwan's export-oriented textile industry is facing unprecedented challenges, with the support of the industry, this year's exhibition has maintained a considerable scale, for which he was very grateful. Chairman Kuo also mentioned that climate change is becoming an increasingly severe challenge to business operations, and how to achieve sustainable development has become the concern of the global textile industry. When international brands declare their net-zero goals, Taiwan's textile industry, as their most reliable partner, is moving towards decarbonization and sustainability by investing considerable resources and efforts. And the results will be presented at TITAS 2023.

Vice President Lai said that after

decades of efforts, Taiwan's textile industry has made the industry's structural integrity. Sampling the performance of trade and production in 2022, the textile industry's foreign exchange earnings reached NT\$157.1 billion, becoming Taiwan's fourth largest foreign exchange earning industry and making a great contribution to the country as a whole. The Vice President also mentioned that Taiwan's performance in jersey for the Olympics and FIFA World Cup match is internationally renowned. As the era of global intelligentization is approaching, enterprises actively invest in smart manufacturing and digital transformation, and the success of the industry represents the future hope of Taiwan. The Vice President also hopes to build Taiwan into a country where the sun never sets economically. The Government will actively improve Taiwan's investment environment and welcome overseas Taiwanese businesses to return to invest in Taiwan. Taiwan will not give up on joining the regional economy so that Taiwan can truly establish a global presence and

market its products around the world to achieve the industrial development goal of Taiwan becoming a country on which the sun never sets.

After the ceremony, Vice President Lai accompanied by TTF Chairman Kuo, and Chairman Hsu, visited the booths of Formosa Plastics Group, Far Eastern New Century, Lealea Group, New Wide Group, Eclat, Zig Sheng, and the Taiwan Textile Research Institute to understand further the achievements of the textile industry in innovation and sustainability.

In line with industry and market development trends, TITAS 2023 presents the outcomes of Taiwan's textile industry in innovation and sustainability under three core themes: sustainability, functional applications, and intelligent manufacturing.



The Sustainable Fashion Show bridged the cooperation of suppliers & designer brands.



Vice President Lai Ching-te visited Lealea Group.



Vice President Lai Ching-te visited Formosa Plastic Group.



Vice President Lai Ching-te visited Far Eastern New Century.



## FORMOSA PLASTICS GROUP

Formosa Plastics Group's exhibition theme is "Let AI Take Flight Towards Infinite Green Possibilities." The theme embodies combining smart manufacturing with green technologies to bring about a new era of recyclable, renewable, and eco-friendly textiles. From raw materials to finished fabric products, their green textile products are manufactured using the newest

technologies and low-carbon emissions energy sources, allowing eco-friendly green energy to play an indispensable part in their lives.

The Formosa Plastics Group Pavilion features a collaborative exhibition put on by Formosa Chemicals & Fibre Corporation, Formosa Plastics Corporation, Nan Ya Plastics Corporation, and Formosa Taffeta Co.,

Ltd. The Pavilion is composed of seven main theme areas: Schoeller, Fashion and Feathers, Popular Sports, Outdoor Sports, Environmental Protection and Recreation, Industrial Materials, and Protection. These exhibits display the Group's main products utilized in multiple fields, including fashion, sports, outdoors, protection, and industrial materials, while highlighting the latest

developments in yarns and fabrics. The Group's vertically integrated production line produces seven fibers: rayon fiber, polyester fiber, nylon fiber, polypropylene fiber, elastic fiber, carbon fiber, and functional yarn, all of which are combined in use by Formosa Taffeta. The Group has led the market with innovative materials with the aims of implementing environmental protection, carbon reduction, and a high-quality product image.

Please visit the Booth M120.

## NAN YA PLASTICS (NPC)

### ● SAYA Recycled Yarn

SAYA, an eco-friendly sustainability brand under the Nan Ya Plastics Corporation, creates a safeguarding circularity by implementing the BPA-Clear project. SAYA is focused on developing polyester recycling techniques that fully integrate market and industry resources from developing diverse recycling channels to a rich variety of applications for recycled materials.

### ● BPA-Clear Bisphenol A Removal and Regulation Technology

SAYA Lab developed its leading BPA-Clear Bisphenol A Removal and Regulation Technology, which can effectively ensure that Bisphenol A levels meet international standards (less than 1ppm) during the production of eco-friendly recycled textile products

through modifications to manufacturing equipment, innovative implementation of Bisphenol A removal technologies, and strict regulation of sources for recycled materials.

### ● SAYA Lab

SAYA Lab carries out research into implementing eco-friendly sustainability concepts, breaking through technological barriers and high industrial cost restrictions. It has developed certified high-quality products, and recycled PET can be used in more diverse applications. Apart from being a provider of functional fabrics, it also includes buckles and accessories, synthetic down, and functional films. SAYA aims to set up a OneHub full-service integrated recycling station, achieving an important milestone for the brand's sustainability and recycling technologies.

## FORMOSA PLASTICS (FPC)

Tairyfil carbon fiber is a carbon fiber developed independently by Formosa Plastics Corporation from precursor spinning to carbon fiber carbonization. The fiber is widely used in sports equipment, wind turbine blades, and industrial applications. Tairyfil carbon fiber works well with both thermosetting and thermoplastic resins. The carbon fiber TC780 produced from a new "dry jet wet spinning" process possesses high strength, making it suitable for high-pressure cylinders. The FPC continued to improve their dry jet wet spinning technology and has

introduced the high-strength intermedia modulus TC880 carbon fiber, intended for use in next-generation pressure cylinders and aerospace high-strength carbon fiber applications. The FPC has collaborated with customers to produce innovative new products such as Lazuli colored carbon fiber diving fins. The FPC cooperates with the world-renowned badminton brand VICTOR to jointly develop badminton rackets and badminton shoes. In the second half of 2023, they will launch revolutionary products DX-10METALLIC racket and classic badminton shoes P9200TTY. These products help them create mutually beneficial relationships with their customers.



## FORMOSA CHEMICALS & FIBRE (FCFC)

### ● Successfully Mass-Produced Nylon 6 Recycled Chips

The FCFC continues to use recycled marine waste fishing nets as raw materials through chemical dispersion technologies to mass-produce Nylon 6 recycled chips to mitigate the severe pollution of the global environment caused by marine waste. They have adopted the chemically extracted recycled CPL with a quality similar to the newly-produced CPL and works with Formosa Taffeta Co. to turn this yarn into dyed fabrics which are provided by brands for the production of ready-made garments to create a vertically integrated production line for outdoor and sportswear.

### ● Moisture Absorbing and Elongation Functional Yarns

In 2022, the FCFC collaborated with TTRI to develop moisture-absorbing and elongated functional yarn with fiber tows. In 2023, they developed organic hydrophilic cooling and functional nylon chips, providing fiber spinners with direct-spun fibers, and developing

## FORMOSA TAFFETA (FTC)

### ● Biomass Elastic Yarns

The FTC produces Spandex from biomass materials made by fermenting non-food use industrial corn. This Spandex has the same properties as ordinary Spandex, and when combined with biomass polyester with nylon fabrics, can be turned into a series of elastic biomass textiles with superior elasticity and texture.

### ● Biomass Polyester and Nylon Fabrics

The FTC has launched a new generation of biomass fabrics: Biomass nylon 56, nylon 410, and nylon 11, produced from biomass materials refined from plants. By applying different processing techniques, this nylon can be made highly splash-resistant or water-repellent. They produce biomass polyester fiber by turning agricultural waste materials, such as corn stalks, hay, sugar cane scraps, and discarded

various functional fabrics that will better the needs of consumers for fashionable, comfortable, and healthy clothing.

### ● Develop White Polyester Yarn

The FCFC has collaborated with Chung Hsing Textile to develop white polyester yarn, mainly produced by directly adding brighteners during polycotton manufacture. This reduces carbon emissions from dyeing after polycotton manufacturing. This technique can be applied to the manufacture of socks and towels.

### ● Graphene Rayon Fiber

The FCFC has developed graphene rayon fibers in order to promote personal health protection and environmental sustainability. Graphene, when used in fibers, has the unique characteristic of being an extremely good conductor of heat, and is also able to release long-distance infrared rays. Additionally, the Corporation's rayon is produced from FSC-certified natural wood pulp, making it silky to the touch and biodegradable, among other advantages.

scraps from processing fruits and vegetables, into ethylene glycol.

### ● Biomass-Based Nylon 11 Waterproof Breathable Film

Composed of 48% biomass material, extracted from natural castor oil. The castor plant is an ideal petroleum substitute as a raw material.

### ● Carbon Capture Eg Polyester Fabric

Carbon capture EG polyester fabric is produced using unique carbon capture and biomass fermentation technology. This technology turns the waste gas—carbon dioxide—created during industrial production into ethanol and ethylene glycol, serving as the base materials for creating new polyester fabrics. These materials are used to create products woven from polyester fiber through direct carbon reduction methods.

## FAR EASTERN NEW CENTURY

As a leader in the global polyester fiber industry and a pioneer in textile technology and sustainable concepts, FENC® has always been committed to sustainable social responsibility. At TITAS 2023, FENC® expands its sustainable products from sports to international fashion trends, continuing to build a green supply chain.

### ● FENC® TOPGREEN® BIO3

By integrating upstream environmentally friendly raw materials with downstream textile and dyeing development technology, this product incorporates the concept of "green fashion" into its design and has received the prestigious Red Dot Design Award.

### ● Ocean Recycled Anti-Bursting Jersey

In the major sports events of 2023, the "Ocean Recycled Anti-Bursting Jersey" trend continues to flourish. These jerseys are worn by 16 teams in

the FIFA Women's World Cup and the UEFA Champions League, showcasing remarkable achievements in sustainable functional textiles.

### ● Innovative carbon-negative technology products

FENC®'s Filament SBU, with its innovative carbon-negative technology products, has gained favor not only with fashion brands like ZARA and H&M but also partnered with adidas to launch a series of Australian Open tennis jerseys.

### ● FENC® TOPGREEN® rTEX Spun Yarn

Using a purely mechanical process without any chemical additives, FENC® transforms fabric waste into 100% regenerated spun yarn. Saving water, energy, and reducing carbon emissions, at the same time, it breathes new life into discarded fabrics, creating fashionable and design-oriented denim styles. Please visit the Booth M106.

## SHINKONG SYNTHETIC FIBERS

Shinkong Synthetic Fiber has specialized in recycled polyesters for decades, focusing not just on quality but also on sustainability. Their mission is to continuously develop a more diverse range of reusable resources, mature recycling technology in the production process, and provide materials with various functional possibilities. This year, they will showcase several projects that have been realized from end to end.

### ● Recycled materials from fabrics

Through collaboration between

Shinkong and Ambercycle, Cycora® provides waste regeneration.

### ● New material made for recycled system

TPEE (Thermoplastic polyester elastomer) makes an easier recycling system. It has a nice performance on elongation and recovery.

### ● Issue of NET ZERO

LanzaTech's CarbonSmart™ transforms CO<sub>2</sub> from industrial emissions into elements of polyesters.

All products are environmentally friendly. Please visit the Booth M409a.

## YI SHIN TEXTILE

Yi Shin Textile Industrial is a leading functional yarn (DTY/ACY) manufacturer in Taiwan. Their products are suitable for various types of textiles used in apparel (sportswear, underwear, blouses, dresses, jackets, suits, jeans, etc.), shoes, bags, furnishings, medical fabrics, automotive upholstery, and more.

Yi Shin markets their products under their trademark "Magic Yarn". The product series includes Magic Recycle-WTG (waste to goods), which is composed of GRS-certified recycled yarn made from pre-consumer textile waste and post-consumer plastic bottles, providing a sustainable alternative. Magic Bio, Magic BES, Magic CAC (Cellulose Acetate Comfort). Please visit the Booth M620.

## LEALEA GROUP

With a premium focus on climate change, natural resource conservation, industrial pollution reduction, and product safety issues among global consumers, LIBOLON has developed the green circulation concept through Water Circular Economy, Green Recycle CRZ (LIBOLON Recycling Technology), and sustainable development based on a supreme standard brand-new vision.

LIBOLON is an integrated platform encompassing polymer, spinning, texturing, secondary processing, knitting/weaving, dyeing, and post-finishing to meet product demands from various business sectors and achieve widespread application. This ensures not only the fastest and most efficient

product delivery, but also enhances their production in "sustainability", "digitalization", and "sophistication". They combine the overseas integrated production of yarn, weaving, and knitting from PT. INDONESIA LIBOLON FIBER SYSTEM and implement the strategy of "Taiwan for R&D, Overseas for Production". LIBOLON also expands the production of BOPA for material use in the electronic and functional film industry.

LIBOLON's first overseas business expansion will be showcased, aiming to offer diversified products and fulfill the concept of an eco-friendly circular economy within the enterprise, moving towards sustainable business.

Please visit the Booth M608.

## ZIG SHENG INDUSTRIAL

Zig Sheng Industries demonstrates its commitment to ESG sustainable business strategies by successfully developing Bluecircle, a 100% textile recycling yarn, and N66 Soufflex, a low-fiber-shedding and stretchy yarn. They continuously optimize the quality of mono-material recycled yarn and promote the efficient recycling of limited resources. This differentiated product aims to provide customers with versatile applications to offer more comprehensive services and continue

creating greater value.

The Bluecircle textile recycling yarn has increased its recycle composition to 50% through continuous efforts, ultimately achieving 100% full textile recycling. This effectively reduces carbon emissions by 95% from recycled raw materials, mitigating adverse climate effects. Furthermore, process optimization and investment in new equipment have been employed to improve production efficiency, maximizing resource utilization.

Please visit the Booth M419a.

## CHAIN YARN

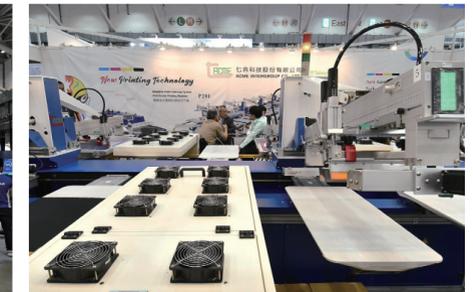
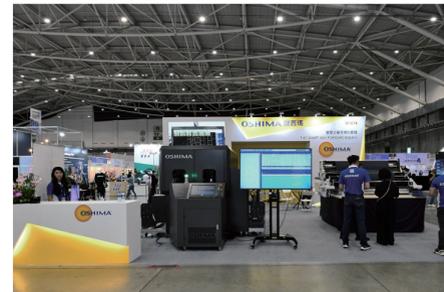
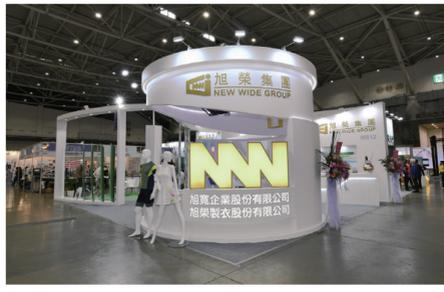
Chain Yarn has been committed to innovation and development in the field of nylon fiber for 35 years. By introducing high-speed filament production equipment, the company utilizes its expertise in manufacturing nylon raw and processed filaments. Upholding the principles of integrity and quality excellence, the company delivers stable, high-quality products to the market and meets ever-diversifying demands through customized research and development capabilities.

In the global market for high-quality nylon fibers, Chain Yarn maintains a

leading position, consistently standing at the forefront of the industry alongside its customers. Innovative R&D Products of 2023:

- FUN-MAX® EG Collagen Series
- FUN-MAX® AM Oyster Shell Series
- FUN-MAX® HL Light Heat Series
- FUN-MAX® PL Graphene Series
- GREENLON® Bio-based Nylon Series

Please visit the Booth M727.



## ECLAT TEXTILE

Eclat specializes in the design, development, engineering, and manufacturing of athletic knitwear materials and garments. They are committed to continuous innovation for the champions of athletic culture and lifestyle, aiming to be the preferred global partner for material technology and garment solutions.

At Eclat, their purpose is to bring new ideas that inspire and endure to the world while promoting health and well-being. With a focus on innovation and technology, their integrated solutions enable seamless production from

concept to ready-to-wear. Amid the pandemic, Eclat embraced a circular mindset and collaborated with like-minded partners. Through upstream cooperation, they developed Softform - a revolutionary, inherently soft material that serves as a green alternative to peached materials. Softform offers a lean process with simple solutions, reducing production time and conserving energy by eliminating traditional peaching. The collection now features various textures, ensuring year-round comfort for sports and daily wear. Please visit the Booth M820.

## NEW WIDE GROUP

New Wide has taken concrete steps in energy conservation, carbon reduction, and sustainable manufacturing through "Smart Manufacturing" and "Digital Display and Statistics." Sustainability concepts are deeply integrated into product processes and designs. With a global supply chain network spanning Asia, Africa, and the Americas, New Wide has also earned recognition through its self-developed IT systems, leading to the acknowledgment of the Harvard Business Review's Ding-Ge-Digital-Transforming Award. In terms of design, New Wide utilizes 3D modeling, physical simulations, intelligent 3D garment design, and virtual 3D showrooms. Additionally, a digital cloud platform connects the supply chain, guiding both upstream and downstream transitions toward "Intelligent Textiles."

New Wide adheres to the principles of "Reduce, Reuse, and Recycle" in water resource utilization. The factories have set up real-time monitoring systems for wastewater to ensure continuous and efficient treatment. New Wide has also equipped facilities with automated warehouses and an Intelligent Data Control Center (IDCC) to optimize production schedules and address abnormalities, leading to a 20% increase in overall efficiency.

New Wide responds to global trends by showcasing functional fabrics with cooling, moisture-wicking, antibacterial, and breathable properties at the 2023 TITAS exhibition. With the increasingly blurred lines between the virtual and real worlds, New Wide has meticulously planned four major thematic zones both online and offline: "Solar Escape", "Future Breath", "Nature Engineering", and "Rule Mixing".

Please visit the Booth M812.

## TEX-RAY INDUSTRIAL

Tex-Ray Industrial, with global production bases and offices located in North America, Africa, China, and Southeast Asia, is prominent in the textile and garment industry for its unprecedented vertically integrated supply chain services, spanning design, R&D, functional yarns & fabrics, lamination for garments, and home textiles. Innovation has always been the foundation of Tex-Ray's business philosophy. For years, Tex-Ray has been dedicated to research and development, especially in fields

such as smart textiles, and functional, antimicrobial, and sustainable materials, aiming to incorporate functionality and technology into daily life products under the athleisure lifestyle trend and to cope with different environmental and user scenarios within an eco-friendly methodology. They create clothes not just as fashion garments but as a medium for a smarter and more futuristic lifestyle. The topic of exhibition this year will focus on the following: Eco Trans, Ecoloration, "T-Fresh Antimicrobial Materials Series", T-Cool® yarn fibers, RAYS Functional Materials Series. Please visit the Booth M912.

## EVEREST TEXTILE

Starting with product design, Everest uses environmentally friendly raw materials, develops energy-saving technologies, employs green energy, and leverages cross-industry alliances to create green ecological supply chains, green manufacturing, and green products. This effectively reduces the carbon footprint of products while using digital precision manufacturing and AI technology to improve production efficiency and enhance the sustainable competitiveness of Everest ESG.

Everest possesses an advanced technology research institute and

a closely integrated development department. Guided by a sustainable business philosophy and a steadfast commitment to environmental protection, this year's innovative products include bio-nylon made from corn, recycled nylon sourced from recycled tires and fishing nets, and polyester fiber made by collecting factory waste gas. E-2000 Recycled Polyester Composite Bio-based Polyester Eco Yarn : these products not only provide customized functions but also emphasize recycling and the circular economy.

Please visit the Booth M1020.

## GRANDETUX DEVELOPMENT

GrandeTex is a functional textile expert that offers a wide range of functional fabrics for workwear, athleisure, outdoor, and indoor products. With the development of human civilization and global climate issues, topics like "Sustainability" have become mainstream in various economic models. This is what GrandeTex continuously works on, realizing that products with BlueSign, Oeko-Tex, and GRS certificates are not the only way to show our commitment to the earth.

In order to achieve their sustainability goals, Secao® yarn is the product GrandeTex would like to present to their customers. This project is a collaboration with ATRI (Agricultural Technology Research Institute). With the idea of recycling and reusing cacao husks from local organic agricultural industries, they aim to reduce agricultural waste. Through the combination of waste husks with their own technology, the decomposing effect of the yarn has been proven by testing.

Please visit the Booth M511a.

## SINGTEX® GROUP GRAND TEXTILE

SINGTEX® Group provides comprehensive integrated services from environmentally friendly innovative yarns, fabric research and development technology, breathable and waterproof fabric processing to garment design and manufacturing.

For the TITAS 2023, SINGTEX® Group has chosen "YOUTOPIA" as its theme. YOUTOPIA was inspired by the idea that an ideal world is in the hands of everyone. Replacing "U" with "YOU" in UTOPIA means that everyone is capable of shaping the future. In other words, YOU are in control of creating a utopia and a sustainable world. Reaching YOUTOPIA consists of three parts: Wonderland, Tempest, and Null Island. They look forward to meeting you at TITAS to discuss industry trends and share new business opportunities.

Please visit the Booth M429a.

Grand Textile was founded in 1987. They are one of the synthetic fabric suppliers capable of producing both knit and woven fabrics. Grand Textile has obtained several patents for its innovations, including : Stone Cold® (Cooling Technology) : Coffee Charcoal® (Thermal Regulation) : Color Max (Dyeing technique creating spray dye/ tie dye effect) : Triple-dye-in-one-bath.

They also focus on sustainability, as they recognize that the textile industry generates a significant amount of pollution worldwide. On the other hand, they invest in machines and technologies related to sustainability in the production area: Low-bath ratio dyeing machines, Direct digital printing machines, TPEE membranes, and Water-based PU coating.

Please visit the Booth L132.

## PAI LUNG MACHINERY

Renowned global textile machinery manufacturer Pai Lung is proud to showcase the theme "Knit Beyond Boundaries" at the 2023 TITAS. This highly anticipated event will reveal Pai Lung's latest technological achievements, including the groundbreaking AlterKnit™ innovation and a series of intelligent weaving solutions that are poised to revolutionize the textile industry.

The exhibition's focal point will be Pai Lung's AlterKnit™ technology, a truly revolutionary transformation in circular knitting. AlterKnit redefines traditional weaving processes, offering unprecedented design outcomes. Simultaneously, its flexible design capabilities provide creators with unparalleled freedom, opening up limitless possibilities. AlterKnit signifies a major leap forward in the textile industry and embodies Pai Lung's commitment

to innovation and forward-thinking. Furthermore, AlterKnit has collaborated with internationally renowned designer Justin Chou to co-create a stylish and functional fabric application series.

Additionally, Pai Lung's series of smart knitting solutions will also take center stage. Through the integration of data analysis, automation, and smart control, this solution series will propel textile manufacturing into the era of intelligence. Whether enhancing production efficiency or reducing energy consumption, these smart knitting solutions will assist enterprises in achieving sustainable development while maintaining competitiveness in the market.

Pai Lung cordially invites all industry stakeholders to visit their booth and personally experience innovative technology and solutions.

Please visit the Booth L118.

## ACME INTERGROUP

Emphasizing a user-centric approach and considering the best space planning and practical applications, ACME INTERGROUP integrates the needs of buyers and the desire for new technology in their core strategy. This approach breaks traditional thinking and gives their products a transcendent positioning, offering consumers a new and diverse experience.

For their first-time participation at the Taipei Textile Exhibition, ACME INTERGROUP will bring a brand-new digital printing experience. With machine design originating in Taiwan, they combine the technical advantages of "traditional industries" and apply them

to the digital needs of "world trends." This digital printer adopts the latest VSDT technology of the EPSON print head, allowing ink droplets of different sizes to combine into detailed drawings and soft images after calculation. It also greatly improves the beautification effect of color gradients and solves the technical problem of insufficient traditional colors. This machine adheres to the MIT lightweight and high-quality design concept. It breaks old barriers, creates a new design from the user's perspective, removes complicated internal structures and functions, and helps users operate more easily.

Please visit the Booth M804.

## OSHIMA

Innovation isn't merely a buzzword at Oshima; it's their driving force. As they move forward, their goal remains the same: to offer their customers the best in production optimization while upholding their commitment to a greener planet.

Oshima's 2.0 AI fabric inspection machine provides you with a more extensive database, a competitive offer, and even more precise fabric fault detection. In addition to their AI fabric inspection machine, which they are excited to present at TITAS this year, Oshima is also proud to demonstrate their fabric-spreading machine, featuring

full real-time monitoring capabilities that enable you to watch your production line from anywhere.

Oshima's dedication extends beyond innovation. In an era where sustainability is vital, they are leading the way toward greener production. Their machines are not only designed to maximize industrial efficiency but also to reduce waste, resource consumption, and the overall carbon footprint. Embracing sustainable manufacturing is more than a choice for them; it is an obligation. If you share the same values and would like to learn more.

Please visit the Booth M1014.

## EDUCATIONAL SESSIONS DELIVER INNOVATIVE TECHNOLOGY

Industry experts will share their knowledge in a series of talks informing visitors about cutting-edge technology that will help businesses work more sustainably to meet the demands of upcoming legislation, from functional fibers and low-carbon yarns to innovations in recycling and supply chain transparency. There will also be examples of how AI is transforming fabric development and design and collaboration on business processes. The event will also host a fashion show, new product launches, and trend forecasts in the stage area. These seminars and microevents are excellent platforms for conveying the latest knowledge, networking, and discovering industry market intelligence.

## CONNECT WITH GLOBAL BRANDS

While international brands are destocking and purchasing power has not yet returned to pre-epidemic levels, TITAS has invited over 71 brands from 15 countries to attend the show, including COLUMBIA, REI, UNDER ARMOUR, RALPH LAUREN, VAUDE, NORRØNA, HUGO BOSS, CAPE UNION, MIZUNO and MONTBELL. The event will see more than 800 business meetings with exhibitors take place to help Taiwan's textile industry continue to connect with international buyers.

This year's TITAS is expected to have international buyers from critical markets such as the US, Canada, Germany, Italy, Norway, South Africa, Australia, Japan and South Korea pass through its doors, ushering in more business opportunities and vitality for Taiwan's textile industry.



## Keeping up with the trends and linking industries for market contest

The 27<sup>th</sup> TITAS brings together 24 textile-related associations and research units, including the Taiwan Spinners' Association, Taiwan Man-Made Fiber Industries Association, Taiwan Wool Textile Industrial Association, Taiwan Weaving Industry Association, Taiwan Silk & Filament Weaving Industrial Association, Taiwan Knitting Industry Association, Taiwan Regional Association of Filament Fabrics Printing Dyeing & Finishing Industries, Taiwan Textile Printing Dyeing & Finishing Industrial Association, Taiwan Garment Industry Association, Taiwan Sweater Industry Association, Taiwan Towel Industry Association, Taiwan Glove Manufacturers Association, Taiwan Hosiery Manufacturers' Association, Taiwan Hat Exporters' Association, Taiwan Zippers Manufacturers Association, Taiwan Nonwoven Fabrics Industry Association, Taiwan Dyestuffs and Pigments Industrial Association, The Silk Association of the Republic of China, Taipei Sewing Machines Association, Taiwan Technical Textiles Association, Southern Taiwan Textile Research Alliance in R.O.C., Taiwan Underwear Innovation Alliance, Taiwan Textile Research Institute, and Industrial Technology Research Institute. These organizations invite

hundreds of members to showcase the highest quality textiles and innovative technologies.

### TAIWAN GARMENT INDUSTRY ASSOCIATION (TGIA)

Covid-19 has accelerated the digitalization of global industries. Taiwan's garment manufacturers continue to introduce various smart applications to improve production efficiency and output value. They are also actively using innovative technologies to establish a green supply chain. This year, six TGIA members - Minkwood, M&J Textile, Happy Plastic, TAHSIN, TEXMA, and Hansc - closely follow the three core themes of TITAS to showcase various high-tech products.

Minkwood specializes in manufacturing evening wear and wedding dresses. M&J Textile focuses on "efficiency, professionalism, and quality" and has successfully integrated the process from fabrics to finished products, particularly in outdoor & casual wear. Happy Plastic, known for its "breathable raincoat" sold throughout Taiwan, has launched a new series of "airy raincoats" to continue the concept of comfort and protection, meeting the needs of waterproofing, comfort, and fashion. TAHSIN has become an expert in outdoor functional clothing, producing a wide range of products,

including Gore-Tex clothing, hunting clothing, bicycle soft-shell clothing, ski clothing, waterproof clothing, sailing clothing, insulated jackets, and fishing vests. TEXMA, with over 30 years of experience in manufacturing woven womenswear, has a strong customer base and offers quality clothing for today's pink-collar workers. Hansc, focused on shirt manufacturing for many years, promotes product innovation and has built a natural green energy factory dedicated to developing eco-friendly materials and low-energy consumption processes, continuously investing in sustainable products and services. Please visit Booth N304.

### TAIWAN DYESTUFFS AND PIGMENTS INDUSTRIAL ASSOCIATION

The Taiwan Dyestuffs and Pigments Association was established in 1970. Our earliest membership consisted of only 13 members, and we have grown over the years to a total of 65 members as of June 2023. The main products of our members include Dyestuffs, Pigments, Intermediates, Auxiliaries, Surfactants, and Sponsors.

TITAS 2023 focuses on the three core themes of "Sustainability, Functional Applications, and Intelligent Manufacturing." We have invited member companies to showcase their latest technologies and sustainable

environmental products. Below is a brief introduction of the participating exhibitors: Everlight Chemical (L727a), T&T Industries (L828), Jintex (M1204), and Acme Intergroup (M804).

### THE SILK ASSOCIATION OF THE REPUBLIC OF CHINA

The Silk Association was founded in 1974 and has overseen the transformation of Taiwan's sericulture from "the most advanced sericulture area in the subtropics" to the development of high value-added silk products such as silk fabrics and skin care products. It is dedicated to promoting the long-term development of Taiwan's sericulture. With the vision of promoting healthy and high-quality silk products to consumers, the Association aims to stimulate business opportunities for cross-field industrial cooperation and actively promote the all-round development of Taiwan's sericulture industry.

The Association has invited 7 members to showcase high-quality products at TITAS, including: Cyuanjing Sericulture (M1219), DANEE Silk (M1219), Ruyei Fa (M1327), Lark International (M1229a), Sheng Shung Fiber (M1227a), Chemtax Far East (M1227), and Sun-East Resin (M1231a).

## TAIWAN TEXTILE RESEARCH INSTITUTE (TTRI)

At the Taipei Innovative Textile Application Show in 2023, the Taiwan Textile Research Institute (TTRI) showcases R&D achievements in high-end textiles, digital innovation, environmental sustainability, and testing and industry intelligent information.

### • High-end textiles

Deodorization polyester masterbatch and fiber, AquaBreath® textiles, microporous lightweight polyester fiber, iS MORE® nanofiber breathable membrane, functionalized graphene, three-dimensional composite fabric for high-end industry, 2-in-1 auxiliary apparel for motion detection and rehabilitation, haptic feedback for textiles.

### • Environmental sustainability

Technology development of processing on recycled fabric, polyester oxidation separation and recovery technology, nylon recycling and remanufacturing technology for moisture permeable membrane, carbon fiber/PC

remodeling fiber composite, 2DF high color fastness dope dyed fluorescent fibers, dye-like digital printing textiles, digital environmental sustainability assessment and improvement.

### • Digital innovation

Radio frequency identification (RFID) yarn, textile pattern comparison and identification development technology, precision pattern comparison and identification technology, digital fabric virtual design service, textile equipment and process optimization technology, business intelligence module, textile professional information system, information retrieval standardization and edge computing technology.

### • Industry Service

Thermal shielding effectiveness testing and verification, contact resistance performance detection and verification technology, microfiber shedding resistance testing and verification, textile NET (Tnet) in Taiwan, Tnet textile academy.

Please visit the Booth N102.

## INDUSTRIAL TECHNOLOGY RESEARCH INSTITUTE (ITRI)

The Industrial Technology Research Institute (ITRI) launches the "2030 Technology Strategy and Roadmap" initiative (which includes "Smart Living", "Quality Health", and "Sustainable Environment") and plans the "2050 Net Zero and Sustainability" strategy to help Taiwan move towards the goal of "2050 net zero carbon emission". In 2023, ITRI showcases in TITAS with the theme of "Sustainable Textile, the Greener Future Starts Here" with the following three major areas:

### • Textile Materials

Microfibers Prevention technologies; Ecolindigo microbial indigo dye; Photoreactive purification of textiles; Upcycling Agricultural By-products; Low-

carbon circular knitted textiles; Green Chemical for Sustainable Textiles; dyeable polypropylene (PP) fabric; highly rebound thermoplastic polyester elastomer (TPPE) fiber; antibacterial and antiviral fabric.

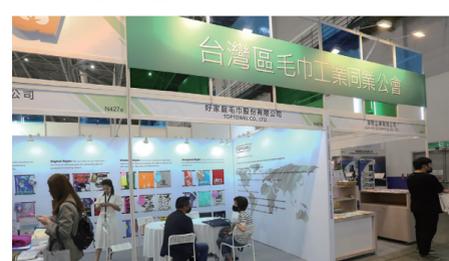
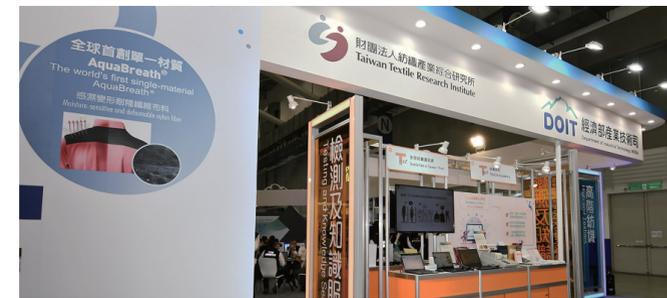
### • Recycled materials

Chemical recycling of polyester; eco-friendly polyphenylene sulfide (PPS).

### • Water regeneration materials

Wastewater treatment and regeneration systems; ITRI aims to continue to diversify and innovate its technology and product portfolio, and have in-depth exchange with international industry and business partners.

Please visit the Booth M920.





## WORLD COTTON DAY IN TAIWAN

October 7 has been designated as World Cotton Day by the United Nations. To celebrate World Cotton Day in Taiwan, the ICAC and Taiwan's Ministry of Economic Affairs are jointly organizing a special showcase at booth #M830 in TITAS 2023. The area features cotton's sustainable and innovative solutions, applications, and design with on-site product displays. Six organizations, including Baby Baby Cool Ltd., Be Be Cotton Knitting Co., Ltd., Cell-Mat, Hermin Textile Co., Ltd., Tuchen Textile Co., Ltd., and Xinterra, are showcasing their achievements in cotton sustainability, innovative solutions, technology applications, and various value-added products. Join us to celebrate the world's most important natural fiber! Please visit the [Booth M830](#).

## ITALIAN NATIONAL PAVILION

The Italian textile machinery industry is renowned for its commitment to innovation, reliability, and quality. Italian textile machinery companies will be showcasing their products at TITAS 2023 in a pavilion organized by the Italian Trade Agency in collaboration with ACIMIT, the Association of Italian Textile Machinery Manufacturers. In 2022, Italy achieved textile machinery exports exceeding € 2.3 billion, with 44% of these destined to Asian markets. This impressive achievement demonstrates the industry's strength and proficiency. Visitors to the Italian pavilion will have the opportunity to explore the world of Italian textile machinery excellence, enjoying a unique platform for exploring potential synergies, fostering collaborations, and considering investment prospects.

The Italian National Pavilion invites you to experience firsthand the excellence of Italian machinery for textile manufacturing. Together, let's shape a promising future in textiles! There are a total of six manufacturers in the Italian National Pavilion this time: Danitech Engineering and Solutions Spa, Ferraro spa, LGL Electronics Spa, MS printing solutions & JK group (Dover Industries Italy Srl), Reggiani Macchine Spa, Unitech Industries Srl. Please visit the [Booth L330](#).

## SRTEPC IS PARTICIPATING IN TITAS 2003

The Synthetic & Rayon Textiles Export Promotion Council (SRTEPC), India, is participating in TITAS 2003 in Taiwan. Six Indian companies are participating through SRTEPC with the active support of the Ministry of Commerce & Industry, Govt. of India. Indian participants in the fair will display various products, including knitted yarn and fabrics, all types of yarns, recycled polyester chips, PP nonwoven fabrics, and PU-coated textile fabrics.

Major suppliers of MMF textiles, including technical textiles to Taiwan, were China, Vietnam, the USA, Indonesia, Japan, Turkey, Korea, Spain, and the UK, among others. The primary objective of organizing the participation of Indian companies in this event is to showcase the fabulous range of Indian man-made and technical textiles to Taiwan-visiting buyers, facilitating the sourcing of their specific requirements for textiles from India. SRTEPC plays a crucial role in assisting overseas buyers in forming enduring and profitable business relationships with Indian exporters of man-made and technical textile items. It offers a wide range of services to overseas buyers absolutely for free. Please visit the [Booth M1305a](#).



## COTTON COUNCIL INTERNATIONAL

The U.S. Cotton Trust Protocol is the only fiber sustainability system that provides quantifiable, verifiable goals and measurements and drives continuous improvement in six key sustainability metrics. The Trust Protocol aims to set a new standard for more sustainably grown cotton that provides brands and retailers with critical assurances that the cotton fiber used in their supply chain is more sustainably grown with lower environmental and social risk.

Please visit the [Booth M520](#).

## EMTEC ELECTRONIC GMBH

Germany's leading manufacturer of specialized measuring and testing equipment, Emtec Electronic, promises to revolutionize the way textile manufacturers measure and manage textile haptics. Emtec Electronic GmbH develops, produces, and distributes worldwide testing and measuring devices for the detection of relevant processing properties of paper, board, nonwo-ven, and textile materials. Emtec presents its innovative new TSA Tactile Sensation Analyzer, designed to accurately measure and digitize the feel of textiles, taking production and quality control to new heights. The TSA now features:

- Surface thermal conductivity and thermal insulation measurement
- An improved design for measuring springback behavior
- An integrated high-resolution camera
- A cloud-based Virtual Haptic Library

Please visit the [Booth M705](#).

## DAEGU GYEONGBUK TEXTILE INDUSTRIES ASSOCIATION

The Daegu Gyeongbuk Textile Industries Association was founded in Daegu, a traditional and prominent region of the Republic of Korea. Our association supports both domestic and export businesses, aiming to promote the growth and advancement of the textile industry. Our main project is the international textile fair 'Preview in Daegu (PID)' held every March. In 2024, the PID will be held from March 13th (Wednesday) to March 15th (Friday) in Exco, Daegu, targeting the 2025 Summer/Spring season. In this edition, PID will showcase advanced composite materials, eco-friendly materials, related digital items, and automation techniques with diverse business and marketing content. Additionally, attendees can enjoy various events, including the PID online showroom, seminars and forums, fashion shows, design awards, experience zones, gift events, and more.

Please visit the [Booth L623](#).

