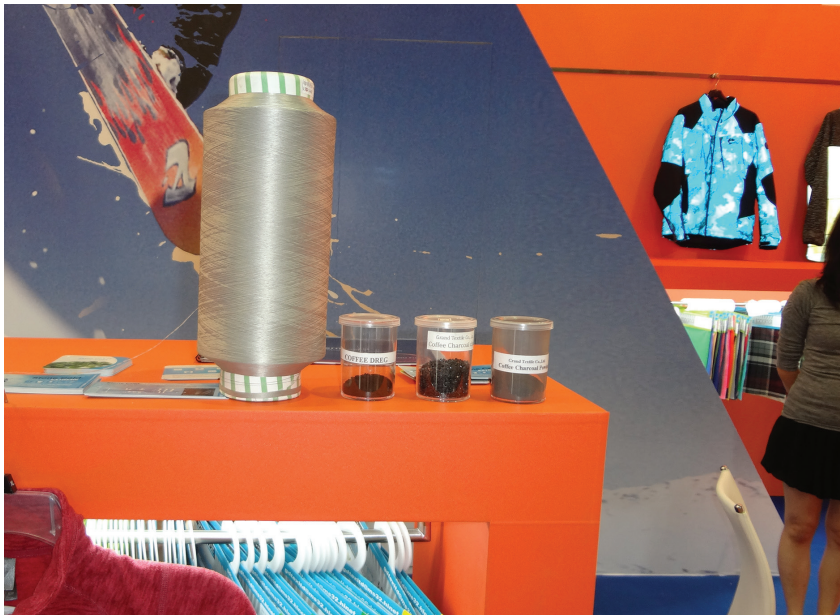


Smart fashion

Continued innovation in performance textiles drew a record-breaking crowd to TITAS 2015, Taiwan's annual functional fabrics fair. Future Textiles' **James Wilson** was at the show to see the latest trends leading this booming market



Grand Textile produces functional textiles from carbonised coffee dregs

Taiwan's investment in the technical textiles industry has seen the region's innovations skyrocket in recent years, strengthening its integration across the supply chain and setting the benchmark for future trade.

This positive influence could be felt at the 19th Taipei Innovative Textile Application Show (TITAS) which welcomed "fervent" participation from both domestic and foreign visitors keen to discover the latest developments in performance fabrics.

Held from October 19-21 at the Taipei World Trade Centre, and organised by the Taiwan Textile Federation (TTF), TITAS featured nearly 800 booths by 370 global exhibitors drawn mainly from the regions of Taiwan, China, Germany, India,

Japan, Singapore, South Korea, Sweden, Switzerland and the US. Plus a record number of buyers from international brands and retailers who added to the busy and vibrant business atmosphere.

Returning to TITAS was the environmental theme of 'function + greenness'. Some of the main energy and waste-reducing concepts discussed were recycled PET bottle textiles, biodegradable textiles, solution-dyed textiles, and PP, cooling and bamboo fibres.

This year, more fashion and design elements were incorporated into products to fulfil customers' aesthetic requirements, meaning more colours, dimensions, and prints and finishing effects. While the focus on smart

textiles was stronger than ever before, presenting smart clothes with embedded sensors designed for numerous application areas.

Such innovative concepts were demonstrated by a range of products and technologies during the show, exhibited by the following companies.

Chia Her presented its functional wool brand NwoolTec, developed for the sports, outdoor, leisure and fashion markets. NwoolTec is categorised into six core items: TENCEL wool, an eco-friendly textile with excellent water affinity; CoolVisions wool, a lightweight, breathable and soft textile with cotton-like comfort; Cordura Combat fabric, with high abrasion resistance to prevent pilling; Outlast wool, regulating body temperature through absorption, storage and release of excess heat; Coolmax All Season wool, which works to keep the wearer cool in summer and warm in winter; and Sorona wool, which boasts comfortable stretch and anti-wrinkle manageability.

Exhibiting under the theme of 'Environment-friendly and innovation', **Eclat** showcased its premium quality functional knitted fabrics that are designed to minimise the damage on the environment while maintaining sustainable growth.

Far Eastern New Century (FENC) took the opportunity to introduce three innovative materials – Sunex, an

anti-static and heating fibre; TopLumins, a luminous fibre for night time detection; and TopDry, a uni-directional quick-dry fabric that was jointly produced by 3M Company. FENC has also collaborated with other industries to develop smart garments with conductive coatings that can detect a user's physical condition.

Formosa Plastic Group featured innovations from its three subsidiaries Chemicals and Fibre, Taffeta, and Nan Ya Plastics (NPC). The former displayed Formotex, a permanent flame-retardant rayon fibre, and high-graded polypropylene (PP) pellets developed for Denier multifilament, PP/PE composite cotton, and nonwoven fabrics. While Formosa Taffeta presented four newly developed concepts, including its 4-7D ultra-lightweight fabric Ultra Light, Aqua Off waterless eco-dyed technology, cooling fabric Permacool and thermal fabric Permawarm. NPC group showcased its anti-static fibre Destatic, UV-resistant Suncool fibre and biomass eco-friendly fibre Biopet.

Grand Textile's exhibit centred on its Coffee Charcoal technology, which produces functional textiles from carbonised coffee dregs without any chemical additives. As a result, treated fabrics are eco-friendly, thermal, quick dry and UV-cut, with odour control. Alongside this, Grand Textile showcased its new-generation Stone Cold Extreme fabric and innovative reflective prints.

Performance wear manufacturer **Kingwhale** presented its new-generation LIT (Low Impact Technology) yarn that can effectively reduce the water, electricity, steam and colourants used in the dyeing process. The newly developed Recycle Wool combines natural fibres made from sustainable resources.

New Wide Group showcased functional products for numerous sports

markets, such as running, yoga, climbing and basketball to highlight the company's R&D strengths. This year, New Wide's exhibits centred on the theme of 'Healthy Life', presenting functional textiles made from special materials, such as biotech composite fibres and antibacterial knitted fabric containing silver nanoparticles.

Heading up the cosmetics category was **Umorfil Beauty Fiber**, a functional fibre with skin-friendly properties. Umorfil uses nanotech to integrate ocean collagen peptide into Rayon fibre, providing moisture and a soft texture similar to that of silk, cashmere and linen. It is a biotech recycled polymer-based fibre that is biodegradable, and the collagen peptide within the fibre enables Umorfil to keep active even after washing. The fibre can be interwoven with numerous materials, such as cotton, wool and synthetic fibres, making it suitable for textile products like yoga clothes, functional accessories, denim and bedding.

Yuantex discussed its Solar Protex 5 in 1, a multi-functional fabric designed to protect wearers against UV and IR rays. Its dual protection fibres reflect heat to keep the fabric cool, while a moisture management construction ensures that the wearer stays comfortable in hot weather. In addition, the fabric is produced from natural nanometre powder and is spun in fibre, delivering an eco-friendly and durable product.

Alongside the main exhibitions, various seminars and presentations addressed new product and technology trends and key developments in smart clothing and bonded coatings.

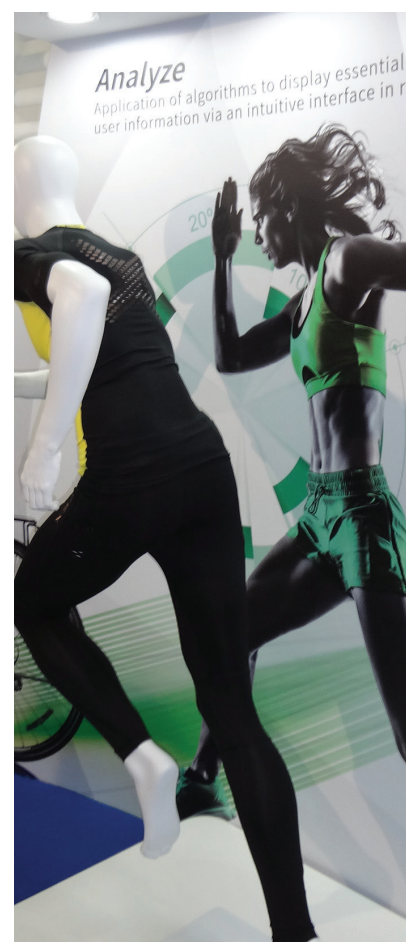
For the fifth time, TITAS joined forces with the International Cotton Advisory Committee (ICAC) to organise a one-day seminar entitled The Development of Textile & Apparel Industry under

the Regional Economic Integration on October 20, featuring Julia Hughes, president of the United States Fashion Industry Association (USFIA), as the speaker. While Dhyana Van der Pols, head of textile innovation and manufacturing at the World Federation of the Sporting Goods Industry (WFSGI), explored innovative textile materials with representatives from the likes of Nike, Adidas, Teijin and Far Eastern Century.

Such a successful 19th edition of the show paves the way for TITAS' 20th anniversary celebration in 2016, which hopes to see continued support from participants, visitors, brands and retailers from around the world.

TITAS 2016 will take place October 17-19.

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TITAS 2015 witnessed a rise in smart clothes with embedded sensors