Hong Kong International
Visual Arts Education Symposium 2026
香港國際視覺藝術教育研討會

Commendable Award

優異獎

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Next-generation Sportswear with Polylactic Acid, Auxetic Knitting Structure and Ergonomic Design

Fashion Design

This advanced sportswear integrates polylactic acid (PLA) fibres and an advanced auxetic knitting structure (AKS) to replace petroleum-based fibres. Its ergonomic design enhances muscle shaping, mobility and athletic performance. The ergonomic sportswear solution uses polylactic acid (PLA), a natural eco-substitute for polyester, combined with AKS textile engineering. This combination delivers improved shaping, support and fit without using Lycra or polyurethane, enhancing antibacterial properties, UV protection, flame retardancy, and temperature and moisture management. The ergonomic construction maximises athletic performance by aligning with muscle groups, allowing full-range motion and effective temperature regulation. PLA is 100% sustainable, and the auxetic knitting structure ensures superior shaping, elasticity and support. By using PLA and AKS, our solution offers better protection against bacteria. The ergonomic design provides a better-contoured fit, improving protection against injury and offering better body support. Our solution improves environmental sustainability in textile production waste management and sportswear functionality. It enhances performance for athletes and physically fit individuals who exercise rigorously. It also improves the exercise experiences of individuals in less-than-perfect physical condition by providing better safety, functionality, support and fit.

全球大學傑出設計獎

University Worldwide Outstanding Design Award