



工業技術研究院
Industrial Technology
Research Institute

工業技術研究院 低碳永續 紡織引領綠生活

工研院推動「2030 技術策略與藍圖」之「智慧生活」、「健康樂活」及「永續環境」等三大方向、並擘劃「2050 淨零永續」策略，以協助臺灣邁向「2050 淨零碳排」為目標。2023 年以「**低碳永續 紡織引領綠生活**」為參展主題，規劃三大領域：

- 1.紡織材料:** 微纖維抑制纖維材料、微生物靛藍染料、光反應淨化紡織品、農業用副產物低碳潔淨應用、低碳循環圓編紡織品、綠色紡織化學品及可染 PP 紡織品、高回彈率 TPEE 纖維及抗菌抗病毒織物應用技術、織物回收用纖維智慧分選技術等。
- 2.循環材料:** 聚酯化學回收應用技術、PPS 綠色材料。
- 3.水再生材料:** 廢水處理與再生系統等，期望能將工研院材化所近年研發之多元化創新技術及產品，與產業界及國際品牌商進行深度交流。



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Sustainable Textile, the Greener Future Starts Here

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 as means 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:

- 1. 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.
- 2. Recycled materials:** chemical recycling of polyester; eco-friendly polyphenylene sulfide (PPS).
- 3. 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.