

What's Beyond a Woven Textiles World?

---Nonwovens and Technical Textiles

非織造材料的發展機遇

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Nonwovens represent a wide range of technologies which convert fibers directly into fabrics in large scale at very attractive economics, and which provide the basis for a large, versatile industry of technical textiles. The ability to integrate fiber forming and fabric composite in a single step provides abundant opportunities not only for low cost production, but also for sophisticated polymer modifications and material structural synergy. In this presentation, we will highlight world-leading fabric tactile properties accomplished through fiber compositional modifications in a simple, commercially competitive process. Such ability to achieve balanced properties in nonwovens may be extended to medical and industrial fabrics. We would further explore what other properties, functions, or smart responses may be added, or transplanted from fibers, to fabrics in a more expeditious way through the use and power of nonwovens, thereby challenge us in delivering advanced fabrics in a more efficient way.

Dr. Xin Ning is a graduate of the Peking University where he received his BS and MS degrees in Chemistry. He earned his PhD degree in Polymer Science and Engineering from the Case Western Reserve University in Cleveland, Ohio, the USA. Dr. Ning has had a long career with the Kimberly-Clark Corporation in the USA, working in progressive technical and management roles in fundamental research, technical development and commercialization globally. He has participated and led many global projects on materials, processes and products on matters of technology, strategy execution and commercial operations. Among those projects are bi-component spunbond nonwovens, hollow fiber nonwovens, elastic laminates and medical fabrics which were commercialized in the US, China, Korea, Australia and other countries respectively. In 2011-2014, he was the Chief Technical Officer (CTO) and General Manager for the Jofo Group, a leading nonwoven producer in China. Dr. Ning's current research areas are nonwoven materials and equipment, technical textile composites, hygiene and medical fabrics, polymer drug delivery systems, environmental engineering materials.