

Introduction to

TECHNICAL TEXTILES

MORNING SESSION

9:00 AM - 12:30 PM

9:00 AM - 9:30 AM

Registration and Welcome

- Participants registration
- Introduction to the course and objectives
- Overview of the day

9:30 AM - 10:15 AM

Introduction to Technical Textiles

Charles Wood

- Definition and scope
- Importance and applications in various industries
- Categories of technical textiles (e.g., medical textiles, geotextiles, protective clothing)

10:15 AM - 11:00 AM

Fibers and Materials Used in Technical Textiles

Ian Smith

- Overview of fibers: natural, synthetic, and high-performance
- Key properties and characteristics of technical fibers
- Examples of commonly used technical fibers (e.g., aramid, carbon, glass)

11:00 AM - 11:15 AM

Coffee Break

11:15 AM - 12:30 PM

Manufacturing Processes

Prof Lei Zeng , Charles Wood

- Overview of textile manufacturing methods
- Specialized techniques for technical textiles (e.g., 3D weaving, Weaving , knitting 3D and Multiaxial)

12:30 PM - 1:30 PM

Lunch Break

02 DEC 2026

The Midland Hotel, Manchester, UK

A practical learning day

Join The Textile Institute for this practical one-day learning event and gain an introduction to the fascinating world of technical textiles.

COURSE FEES

Early Bird

Member: £250

Non-Member: £300

Standard Rate

Member: £300

Non-Member: £350

Student: £200

The Early Bird delegate rate is valid until **15 September 2026**.



The Textile Institute

For information please visit:
textileinstitute.org

AFTERNOON SESSION

1:30 PM - 5:00 PM

1:30 PM - 2:15 PM

Functional Finishes and Coatings

Ian Smith

- Introduction to functional finishes and coatings
- Types of finishes and coatings (e.g., water repellency, flame retardancy, antibacterial)
- Application methods and techniques

2:15 PM - 3:00 PM

Testing and Quality Control

Ian Smith

- Importance of testing and quality control in technical textiles
- Common testing methods and standards
- Examples of quality control measures

3:00 PM - 3:15 PM

Coffee Break

3:15 PM - 4:00 PM

Nonwoven Case Studies and Applications

Adrian Wilson - Remote

- Real-world examples of technical textiles applications
- Success stories and innovative projects
- Group discussion on potential new applications

4:00 PM - 4:45 PM

Future Trends and Innovations

Charles Wood

- Emerging trends in technical textiles - ENERGY STORAGE, DATA CENTRES, PCB CIRCUIT BOARDS
- Technological advancements and their impact
- Opportunities and challenges in the industry
- Innovations in manufacturing processes

4:45 PM - 5:00 PM

Q&A and Closing Remarks

- Open floor for participants questions and feedback
- Summary of key takeaways
- Closing remarks and thank you

MEET THE TUTORS ...



Mr Charles Wood CText FTI

Charles Wood is Managing Director of Baltex, a leading textile manufacturer specialising in innovative knitted textile solutions, including warp-knitted and 3D spacer fabrics for markets across Europe and beyond. Passionate about innovation and excellence in technical textiles, Baltex serves the medical, healthcare, military, aerospace and protective sectors, providing high-quality, durable and functional fabrics that meet specific customer needs and industry standards. With its own dye house and operations in both the UK and Poland, Baltex has the capacity and flexibility to fulfil key supply chains and deliver value to its customers. Under Charles's leadership, Baltex has achieved significant industry recognition, including three Queen's Awards for Enterprise and a Global Innovation Prize. Charles holds the prestigious CText FTI professional qualification from The Textile Institute, the world's leading professional body for textiles, clothing and footwear. As World President of The Textile Institute, Charles represents the Institute globally, supporting engagement with members, industry partners and textile communities around the world.



Mr Ian Smith CText FTI

Ian is a Textile Consultant working with companies around the world on Textile Wet Processing. A technical dyer with specialisation in the Wool and synthetic fibre sectors. He has run training courses on textile wet processing for buyers and designers of several high street brands, as well as recently developing a technical training course for the Carpet manufacturing sector. He works as a consultant to the World Bank, and other NGO's as well as major processing and chemical organizations on a global basis, with an emphasis on cleaner production and sustainability.



Dr Lei Zeng CText FTI

Dr Lei Zeng is a Lecturer in Fashion Business and Technology at the University of Manchester, specialising in textile technology and materials. She obtained her PhD from the University of Manchester in 2020, focusing on textile-based composite materials. Prior to joining the University as a lecturer, she worked as a Post-Doctoral Research Associate within a collaborative research group developing an innovative Jacquard textile colour system.

Her research interests span a broad range of textile technologies, including sustainable textile materials, functional fabrics, and textile colouration. Her work is driven by an interest in developing innovative and sustainable textile technologies and translating research outcomes into practical applications. She is a Fellow of Advance HE (FHEA) and holds the CText FTI professional qualification from The Textile Institute. At the University of Manchester, she teaches undergraduate and postgraduate units covering textile manufacturing, colouration, textile testing, materials, and sustainability.



Mr Adrian Wilson CText FTI

Adrian is an analyst and writer specialising in the technical textiles, nonwovens and composites industries. He is the owner of AWOL Media and the consulting editor for Sustainable Nonwovens, International Filtration News and Technical Textiles International, while contributing to many other industry titles. He is also the author of numerous reference books on these industries.

ENROL NOW!

Take this opportunity to enhance your professional knowledge.



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