

The Journal of The Textile Institute

Special Issue on
Digital Textile and Fashion Innovation

Call for Papers!

Today's textile and fashion supply chain is multi-continental and intertwined with diverse elements scattered in all over of the world. The best option, probably the only option, to make it truly transparent, sustainable, and effectively manageable is to digitalise it seamlessly. While industrial and social digitalisation gained pace during the covid-19 pandemic and more and more digital solutions for industry 4.0 applications have started to appear on the market, it is not clear at what speed and depth the digitalisation along the global textile and fashion supply chain is taking place. On the other hand, digital textile and fashion is not just limited to computer-aided design (CAD) and manufacturing (CAM), but rather runs throughout the textile and fashion business, from product life cycle management and developing new business models that promote sustainability to connecting virtual and augmenting reality with fashion to enhance consumers' experience through smart solutions. It has emerged as a multidisciplinary field of knowledge that attracts overlapping interests from the academics, researchers and professionals coming from fashion design, business, textile technology; computer science, software engineering, animation and gaming, anthropometrics, supply chain management and industry 4.0, big data and artificial intelligence, and industrial sustainability. Realising the complexity of the issue and building on the global trend of digital innovations, this special issue of the Journal of Textile Institute aims to publishing research, innovation, creative practice and pedagogy about digitalisation of textile and fashion world to provide a comprehensive picture of the ongoing research and development to the interested readers. The relevant topics include, but are not limited to, the following:

- Digital Design and e-Prototyping of Textiles and Fashion
 - Computer-aided Design (CAD) and 3D simulation of fibre, yarn, fabric and garments
 - Digital pattern cutting and marker making.
- Digital Textile Solutions
 - Digital colour communication
 - Digital printing
 - Digital dye dispensing and dye lab automation
 - Robotics for product handling and manufacturing
- Phygital Apparel and Smart e-Technology
 - Designing apparel with embedded electronics
 - Technology of Smart Electro-Clothing Systems (SeCSs)
 - Applications of SeCSs in Health and Fitness, Sports and Social activities
- Digital Human, Metaverse and Fashion Textiles

- Body scanning, digital anthropometry
- Virtual avatar, animation and digital twin for fashion
- Virtual reality (VR), digital fashion mirror and augmented reality (AR) technology
- Digital Fashion Textile Business and Promotion
 - E-Commerce and social media marketing for textile and fashion business
 - Product life cycle management (PLM)
 - E-tools for supply chain transparency and sustainability
 - Block chain technologies, big data, artificial intelligence for business applications

To prepare their manuscript, authors are asked to closely follow the “Instructions to Authors” of the Journal of Textile Institute. Manuscripts will be referred according to the standards of the journal. Manuscripts should be submitted via the journal’s electronic submission system by 30 October 2024. For further enquiries, please contact the guest editor. All submissions will be subject to the usual peer-review process of the journal and should respect the general publication guidelines of the journal. All submissions should be submitted electronically via the submission portal available at <https://www.tandfonline.com/journals/tjti20>

Guest Editor:

Dr. Abu Sadat Muhammad Sayem CText FTI, FRSA, FHEA
Project Lead, UKRI AHRC “[Digital Fashion Network](#)”, Manchester Metropolitan University, &
Chair, [Digital fashion Innovation Conference \(DFIC\)](#), 2024