

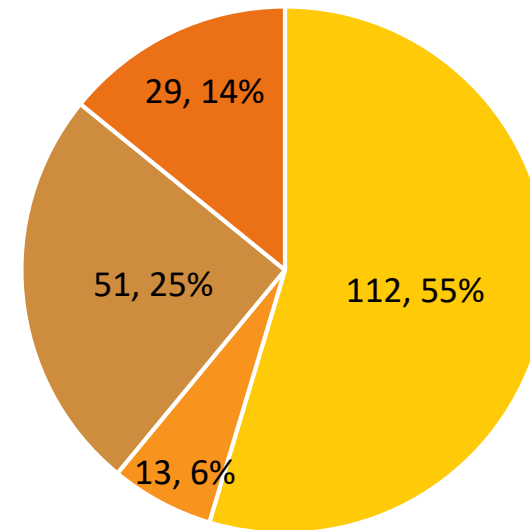
The background of the slide is a microscopic image of a textile. It shows a complex network of fine, light-colored lines (likely conductive traces) woven into a fabric structure. The fabric has a greenish-brown hue, and the traces are arranged in a grid-like pattern with some diagonal lines. The overall appearance is that of a highly detailed, integrated electronic textile.

# **E-Textiles 2019**

**International Conference on the Challenges,  
Opportunities, Innovations and Applications in  
Electronic Textiles**

# E-Textiles 2019

- 1<sup>st</sup> International Conference organised by the E-textiles Network
- E-Textiles Network: EPSRC funded activity to bring together researchers and developers from academia and industry interested in adding electronic functionality to textiles
- 3 years from 1 August 2018
- 205 members:



■ Academic ■ Academic/Industry ■ Industry ■ Other

# E-Textiles Network

NOTTINGHAM  
TRENT UNIVERSITY

UNIVERSITY OF  
Southampton

stretchline

SMARTLIFE

Swansea University  
Prifysgol Abertawe

HERIOT  
WATT  
UNIVERSITY

Community

Collaboration

E-textiles  
Network

QinetiQ

infinitex

UNIVERSITY OF  
CAMBRIDGE

Footfalls &  
Heartbeats

MANCHESTER  
1824  
The University of Manchester

Problems  
&  
Solutions

Dissemination

TechniTex

Brunel  
University  
London

[dstl]

Manchester  
Metropolitan  
University

Royal College of Art

Chartered Institute for Textiles, Clothing and Footwear  
The Textile Institute

Home Office  
Centre for Applied Science  
and Technology

E-Textiles Network

E-Textiles 2019

# Activities

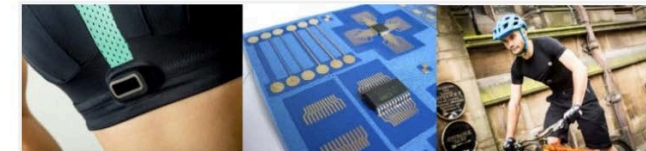
- Activities include e-textiles conferences, workshops: identifying research challenges, facilitating collaborations, supporting early career researchers.
- Web page and email based monthly newsletters - welcome contributions
- Workshops:
  - Healthy Ageing – report available <https://e-textiles-network.com/e-textiles-for-healthy-ageing-workshop/>
  - Manufacturing and Sustainability – 16<sup>th</sup> January 2020, Southampton
  - Sport and Fitness Applications – July 2020

E-TEXTILES NETWORK

## Welcome to E-Textiles Network

The E-Textiles Network is an EPSRC funded activity to bring together researchers and developers from academia and industry interested in adding electronic functionality to textiles and their related products. E-textiles can include a range of functionality such as sensing, signal processing, lighting, wireless data transmission and actuation. It has the potential to revolutionise the textiles industry, offering a new class of products across a range of application including medical, performance sports, automotive and fashion.

The primary objective of the network is to act as a focal point for the community and organise a series of workshops and events that will identify research challenges, showcase the latest innovations and research findings, catalyse collaborations and support young researchers through travel grants. Membership of the network is free and will be required to participate in workshops, access our services as well as providing preferential rates for open events organised by the network.



<https://e-textiles-network.com/>

# Network Collaboration Fund

The E-Textiles Network has launched an open call for funding to support the establishment of new projects and collaborations in E-Textiles.

Individuals can apply for funds to help cover travel costs and expenses of up to £500.

Applications should be no longer than 200 words and include costings and justification for the project. Please send applications to [info@e-textiles-network.com](mailto:info@e-textiles-network.com)

# Steering Board

Member	Affiliation	Member	Affiliation
Russel Torah	University of Southampton	Brian McCarthy	KTN/TechniTex Faraday Ltd
John Tudor	University of Southampton	Stephanie Dick	The Textile Institute
Tilak Dias	Nottingham Trent University	Thushara Sabreen	Stretchline International
Dorothy Hardy	Nottingham Trent University	Robert Glenn	Stretchline International
Theodore Hughes-Riley	Nottingham Trent University	Mark Pedley	Brighter Futures
Tim Claypole	Swansea University	Roya Ashayer-Soltani	QinetiQ
Davide Deganello	Swansea University	Annie Lywood	Bonnie Binary
Luigi Occhipinti	University of Cambridge	Simon McMaster	Footfalls and Heartbeats
Barbara Shepherd	Barbara Shepherd Associates	Graham Smith	Dstl
Henry Li	University of Manchester	Myra Waiman	Infi-Text
David Harrison	Brunel University	Philip Kunovski	Kymira
Felice Torrisi	Imperial College London		

# Conference Details

- Mixture of keynote, invited and accepted talks (30/15 minutes)
- 36 papers submitted, 24 accepted. TPC committee reviewed all papers: acceptance rate 66%: 32% for oral contributions
- Formal poster session during lunch break – Best Student Poster Prize awarded in afternoon coffee break (12 candidates)
- Coffee break sponsored by MDPI Sensors
- Extended abstracts will be published in MDPI Proceedings – open access, available ~6 weeks after conference
- Feedback form – please complete

# Agenda Pt 1

09.00	Registration
09.15	Welcome
09.30	Christian Dalsgaard – <i>Keynote Speaker</i> Textile integrated wearables in space and on earth
10.00	Dr Anura Fernando – <i>Invited Speaker</i> Graphene coated sensor yarn for composite preforms
10.30	Coffee Break – <i>Sponsored by MDPI Sensors</i>
10.45	Caitlin McCall (Swansea University) Eye of the Storm
11.00	Dr Kristel Fobelets (Imperial College) Knitted Coil for Inductive Plethysmography
11.15	Jane Wood and Rebecca Bennett (Manchester Metropolitan University) A Wearable FES Compression Garment
11.30	Mark Catchpole – <i>Invited Speaker</i> Crossing the Seam
12.00	Innovate UK - Dr Lien Ngo

## Agenda Pt 2

12:15	Lunch + Posters
13.45	Malte von Krshiwoblozki – <i>Keynote Speaker</i> E-Textiles Technologies – Merging Electronics and Textiles
14.15	Prof Henry Yi Li – <i>Invited Speaker</i> Smart E-Textile Wearable Technology Developments
14.45	Dr Abiodun Komolafe (University of Southampton) Modelling Reliable Electrical Conductors for E-Textiles Circuits on Polyimide Filament
15.00	Coffee Break– <i>Sponsored by MDPI Sensors</i> Student Poster Award Presentation
15.15	Prof. John Wilson – <i>Invited Speaker</i> Photovoltaic Solar Textiles
15.45	Tommaso Busolo (University of Cambridge) Fiber-based Triboelectric Generators for Smart Textiles using Surface-modified Electrospun Polymer Fibers
16.00	Dr Felice Torrisi (Imperial College) Wearable and textile electronics and energy storage devices based on two-dimensional materials
16.15	Close of Conference

- [Christian Dalsgaard, Ohmatex](#)
- [Anura Fernando, University of Manchester](#)
- [Caitlin McCall, Swansea University](#)
- [Kristel Fobelets, Imperial College London](#)
- [Jane Wood and Rebecca Bennett, Manchester Metropolitan University](#)
- [Mark Catchpole](#)
- [Lien Ngo, Innovate UK](#)
- [Malte von Krshiwoblozki, Fraunhofer IZM](#)
- Henry Yi Li, University of Manchester
- [Abiodun Komolafe, University of Southampton](#)
- [John Wilson, Power Textiles Limited](#)
- [Tommaso Busolo, University of Cambridge](#)
- Felice Torrisi, Imperial College London