UKRI Interdisciplinary Textiles Circularity Centre





# *Textiles Circularity Centre* annual showcase during London Design Festival

20<sup>th</sup>- 25<sup>th</sup> September 2021 Royal College of Art, Dyson Building, 1 Hester Road, London, SW11 4AN

The UKRI Interdisciplinary <u>Textiles Circularity Centre</u> is a four year research programme aiming to realise a future *circular textiles economy* for the UK SME apparel-fashion industry based on bio waste - that is shaped by people's participation in materials circularity, consumer experience and supply chain - to create *a coupling between the bio waste resource flow and wellbeing*.

Each year, the UKRI Interdisciplinary Textiles Circularity Centre (TCC) hosts a public dissemination of its research during <u>London Design Festival</u> to showcase its ambitions and insights, to broaden its network of partners and collaborators. This year, the TCC will host an exhibition and symposium, and a series of workshops at the <u>Royal College of Art</u>'s Battersea campus.

The UKRI Interdisciplinary Textiles Circularity Centre proposes materials security for the UK by circularising resource flows of textiles that will reduce reliance on imported and environmentally and ethically impactful materials, and diversifying supply chains. The TCC will provide underpinning research understanding to enable the transition to a more circular economy that supports the brand 'designed and made in the UK'. To enact this vision, we will catalyse growth in the fashion and textiles sector by supporting the SME fashion-apparel community with innovations in materials and product manufacturing, supply chain design, and consumer experiences.



Led by the RCA in collaboration with University of Leeds, Cranfield University, University of Cambridge, University College London, University of Manchester and University of York, the TCC supports better social, economic and environmental outcomes - working also with a wide range of partners from industry, the NGO sector, and the public sector.

The TCC is a four year award of £5.4m (2021-2024) funded by the <u>National Interdisciplinary</u> <u>Circular Economy Research</u> programme.

The TCC research programme has three interconnecting Research Strands: *Materials Circularity* (MC), *Circular Supply Chain* (SC), and *Consumer Experience* (CX).

The TCC is nine months into its first year, so this year's dissemination event will consist of a piece of design communication to articulate the vision and ambition of the programme of research and its partnerships. Each Research Strand will showcase a range of communication elements including illustrations, films, technical demonstrators, materials samples:

The Materials Circularity (MC) research strand will showcase the processes and technologies that underpin an alternative reality for textiles which builds on the transformation of bio-based waste into sustainable and circular textiles, demonstrating the start of the material lifecycle in polymer and textile production stages, including industrial biotechnology in biorefinery, fibre regeneration and spinning, 3D robotic weaving, additive manufacturing, as well as participation of designers to explore the materials developed in the MC research strand to date.

The Consumer Experience (CX) research strand will establish a coupling between the resource flow and human wellbeing, to increase consumer participation across the material flow. We will bring this ambition to life through the following themes: 'circularity unlocked' – we will demonstrate multisensory interactions that will immerse people in textiles circularity, from provenance to end-of-life; 'digitally enabled' – we will showcase technology that enables people to expand how they interact with products, allowing to diversify the types of pleasure they can experience; 'textiles experience' - we will demonstrate technology that enables people to explore their own and others' understanding of textiles.

We invite all sections of society to visit the exhibition, and we welcome the opportunity to discuss new partnerships and collaborations with citizen groups, apparel brands, manufacturers, etc; please register to attend the exhibition at this <u>link</u>.

## Textiles Circularity Centre annual showcase | Exhibition

20<sup>th</sup> – 25<sup>th</sup> September 2021 Royal College of Art, Dyson Gallery, Dyson Building, 1 Hester Road, London, SW11 4AN

# *Textiles Circularity Centre* annual showcase | Private view and reception (invitation only)

Wednesday 22<sup>nd</sup> September, 6pm - 8.30pm

## Textiles Circularity Centre annual showcase | Symposium

23<sup>rd</sup> September 2021, 10am - 1pm

Royal College of Art, Gorvy Lecture Theatre, Dyson Building, 1 Hester Road, London, SW11 4AN

The symposium is part of the annual showcase of the Textiles Circularity Centre. Launched in January 2021, the Centre is nine months into its programme. At this symposium, the Centre consortium will present the ambitions of the programme of research and insights that have emerged from it.

10am - Welcome and introduction, Prof Sharon Baurley

10.20am - Materials Circularity Research Strand

The Materials Circularity (MC) Research Strand will establish *alternative realities* for textiles by developing sustainable interconnections between recyclers, manufacturers, designers and users, their materials, and their tools and processes that enable *distributed recycling and manufacture* with bio-based wastes, transforming the design and use of circular textiles to move towards novel systems for local bio-economies.

#### 11.10am-11.30am - Break

#### 11.30am - Consumer Experience Research Strand

The Consumer Experience (CX) Research Strand will offer consumer experience design that gives citizens agency to participate in the circular economy. We will establish a coupling between the resource flow and human wellbeing by building a Product Cultures Lab and a Circular CX Framework with which to design CXs that engage people in interactive, meaningful, co-creative and sustainable cultures around products, transforming their role from 'consumers' to 'active co-creators' in a sustainable product cycle.

#### 12.20pm - Supply Chain Research Strand

The *Circular Supply Chain Design* Research Strand will establish narrow, slow and closed resource flows through better tools for Circular Supply Chains, and study which novel supply chain configurations and technologies are needed for bio-based textiles circular supply chains.

#### 1pm - End

#### *Textiles Circularity Centre* annual showcase | Workshops As part of its annual showcase, the Textiles Circularity Centre will be hosting stakeholder workshops, which are by invitation only.

**Textiles Circularity Centre annual showcase | Future consumer experiences in a circular economy: a scenario-building workshop** Wednesday 22<sup>nd</sup> September, 10am - 2pm Helen Hamlyn Centre for Design, Royal College of Art

# Textiles Circularity Centre annual showcase | Transformation pathway mapping with multi- stakeholder groups, in collaboration with Policy Connect

Wednesday 22<sup>nd</sup> September, 3pm - 5pm Helen Hamlyn Centre for Design, Royal College of Art

#### Registration

**Textiles Circularity Centre annual showcase | Exhibition Register via this link** to register to attend the exhibition at the Royal College of Art **Register via this link** to register to attend the exhibition virtually

# Textiles Circularity Centre annual showcase | Symposium

**Register via this link** to register to attend the symposium at the Royal College of Art **Register via this link** to register to attend the symposium virtually

*Textiles Circularity Centre* annual dissemination | Events listing <u>View all public events listings</u> for the Textiles Circularity Centre annual showcase

## About the RCA

The Royal College of Art is the world's leading university of art and design. A small, specialist and research-intensive postgraduate university based in London, the RCA provides over 2,000 students with unrivalled opportunities to deliver art and design projects that transform the world.

Offering MA, MPhil, MRes and PhD programmes across the disciplines of architecture, arts & humanities, design and communications, the RCA's approach is founded on the premise that art, design, creative thinking, science, engineering and technology must all collaborate to solve today's global challenges.

The College employs around 1,000 professionals from all over the world to teach and develop students in 30 academic programmes; exposing them to new knowledge in a way that encourages experimentation.

InnovationRCA, the university's centre for enterprise, entrepreneurship, incubation and business support, has helped over 70 RCA business ideas become a reality that has led to the creation of over 750 UK jobs.

The RCA was named the world's leading university of art and design in the QS World Rankings 2021 for the seventh consecutive year.

#### www.rca.ac.uk

# About the UKRI Interdisciplinary Textiles Circularity Centre

Funded by the <u>UK Research & Innovation</u>'s NICER programme (National Interdisciplinary Circular Economy Research) the UKRI Interdisciplinary Textiles Circularity Centre proposes materials security for the UK by circularising resource flows of textiles. The aims of the research programme are to stimulate innovation and growth in the UK textile manufacturing, SME apparel and creative technology sectors, whilst reducing reliance on imported and environmentally and ethically impactful materials, and diversifying supply chains.

The TCC is one of five national circular economy research centres funded by the UKRI and coordinated by the <u>Circular Economy Hub</u>. It is funded by the NICER programme, a £30 million UKRI investment comprising 34 universities and 200 industry partners and is the most comprehensive attempt yet to create a future UK circular economy – one that uses fewer resources, creates more jobs and reuses more waste materials.

The TCC sits within the Materials Science Research Centre at the Royal College of Art in collaboration with University of Leeds, Cranfield University, University of Cambridge, University College London, University of Manchester and University of York.

Partnerships include:

Arcade Centre for Process Innovation Circular Systems Agraloop DressX

EPSRC Future Manufacturing HUB Fashion District Fashion for Good Fashion Revolution Brazil H&M Foundation Henry Royce Institute Hong Kong Research Institute of Textiles and Apparel (HKRITA) I-CO IBM Ideo Innsbruck University Jesmond Engineering Kiosk Laudes Foundation London Cloth Company MaDE Made in NY Campus Manor Farm/National Farmers Union Novozymes OnRoad Oxfam Pentland Brands Policy Connect Presca Teamwear Regemat ReLondon RSA SharpEnd Suez Swift Technical Fibre Products Ltd THP UKFT Ultraleap Vireol Bio-Energy Wandsworth Council Wilson Bio-Chemical Yoox Net a Porter