



DICE NETWORK+

DIGITAL INNOVATION
& CIRCULAR ECONOMY



Transformation Pathways event

Delegate pack

01 July 2026

The Smith Centre

The Science Museum, London



Welcome to Transformation Pathways

Professor Fiona Charnley

DICE Network+ Lead

Professor of Circular Innovation &
Co-Director of the [Exeter Centre of the Circular Economy](#)

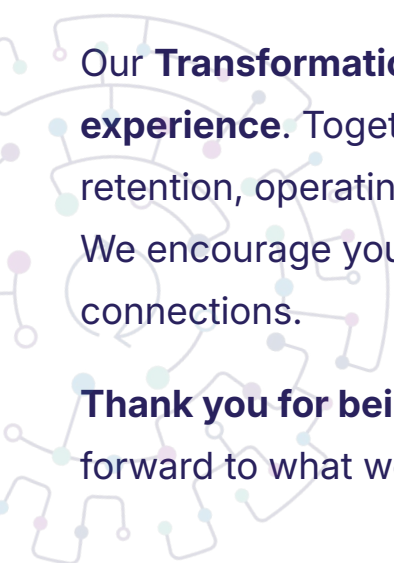
Welcome and thank you for joining us at Transformation Pathways. We greatly appreciate your time, expertise and willingness to contribute.

This **flagship DICE Network+ event** brings together leaders from academia, industry, policy and the third sector to address a critical challenge - how to **embed** and **enable** circular economy principles across **AI and advanced connectivity** building on our recent research into the [Data Centre sector](#).

The DICE Network+ is an EPSRC-funded initiative led by the University of Exeter, working across sectors and value chains. It brings together eleven investigators from nine UK universities alongside a growing community of partners and collaborators to explore how digital innovation can enable a circular economy while embedding circular design in emerging technologies.

Our **Transformation Pathways event** is designed as an **interactive, collaborative experience**. Together, we will explore three key themes - designing for value retention, operating for maximum recovery and collaborating for systemic change. We encourage you to actively contribute, share your insights and build new connections.

Thank you for being part of this conversation. We look forward to what we will achieve together.



Transformation Pathways event

Agenda: 09:30 - 16:00

Led by our facilitators, Dialogue Matters, we have a packed programme of keynote speakers, panel discussions, interactive sessions and lightning talks, bringing our different perspectives together to share knowledge and generate ideas

09:30	Registration and coffee
10:00	Welcome Keynote: Adam Elman, Head of Sustainability EMEA, Google <i>Circularity at Google</i> Panel discussion: Systems Drivers and Strategic Direction
11.35	Break
11:55	Interactive session: Wider Context & Future Outlook
12:30	Networking Lunch
13:20	Keynote: Lisa Rivalin, Senior Staff Engineer, Meta <i>From Measurement to Circularity: Standardizing Carbon Data for Datacenter Hardware Reuse</i> Interactive session: Frontier Technology & Circularity
14:30	Break
14:45	Lightning Rounds Panel discussion: Building Scalable Circular Solutions Key Insights & Actions Closing Comments
16:00	Close: networking until 16:45

How to find us

Please use this address - **noting entry is NOT through the main Science Museum entrance**

The Smith Centre
Imperial College Rd
South Kensington
London
SW7 2BY

By Underground:

South Kensington Station: This is the nearest station, about a 5-minute walk away. It is served by the District, Circle, and Piccadilly lines.

Gloucester Road Station: Also nearby, about a 15-minute walk away, served by the same lines.

Earl's Court Station: The nearest station with step-free access, about a 20-25 minute walk away. You can also take the C1 or 74 bus from Earl's Court to South Kensington Station, which is then a 6-minute walk.

By Bus:

Bus routes 14, 49, 70, 74, 345, 360, 414, 430, and C1 stop outside South Kensington Underground Station.

Bus routes 9, 10, 52, 452, and 70 stop outside the Royal Albert Hall on Kensington Gore.

By Bicycle:

Transport for London Santander Cycle docking stations are available outside the V&A South Kensington and the Natural History Museum on Exhibition Road, and on Thurloe Place near South Kensington tube station.

By Car:

Where possible, we encourage the use of public transport. There is limited parking in the area. The nearest pay and display parking is in Prince Consort Road and Queen's Gate. Disabled parking spaces are available on Exhibition Road for Blue Badge holders.

For alternative options, please see here: <https://www.sciencemuseum.org.uk/visit/getting-here>.

If you have any issues, please call:

- Georgie Hopkins (Network Manager): 07970 852504
- Kate Frewer (Network Coordinator): 07491 679936

Keynote speaker

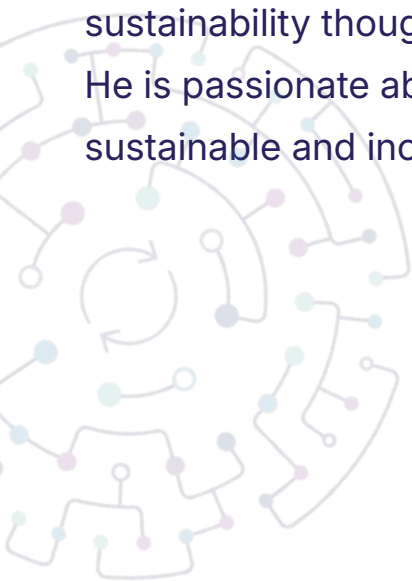
Adam Elman

Head of Sustainability EMEA, Google

Adam is a sustainability leader with over 20 years of experience in driving positive transformational change for some of the world's most influential companies. As Google's Director of Sustainability for Europe, Middle East, and Africa, he works at the intersection of the physical, digital, and natural worlds. He coordinates with Google's real-world and digital infrastructure teams, from real estate and supply chains to data centers and products, to ensure that the company is taking advantage of opportunities to strategically advance sustainability.

Previously, Adam held senior sustainability roles at Amazon, Marks & Spencer, and Klöckner Pentaplast, where he developed and delivered innovative sustainability strategies and programs that enhanced their environmental, social, and governance performance. He is a Chartered Environmentalist and a Fellow of both ISEP and ICRS, and an Executive Fellow at King's Business School. He has been recognised as one of the UK's top 100 environmental professionals and among the top 50 sustainability thought leaders and influencers globally.

He is passionate about creating a more sustainable and inclusive future for everyone.



Panel Members



David Greenfield

David's experience spans both enterprise leadership and thought leadership in sustainability and policy development. He is founder and **MD of Social, ENvironmental & EConomic Solutions (SOENECS)** Ltd, Co-founder and MD Tech-Takeback Ltd, Co-founder and Executive Chair, etsaW Ventures, and Member of the UK Government Circular Economy Taskforce. He is also a Visiting Professor of Circular Economy at the University of Brighton Vice President Circular Economy Institute (CEI), and President – Chartered Institution of Wastes Management (CIWM) Programme Director – Circular South East

Frances Wall, OBE

Frances Wall is **Professor of Applied Mineralogy at the University of Exeter** and a leading expert on critical raw materials and the minerals supply chain. Her research focuses on the geology, processing and sustainable sourcing of rare earth elements and other strategic minerals essential to low-carbon technologies. Working closely with industry, government and international partners, she addresses the growing challenges in securing reliable and responsible material supply through the Critical Minerals Challenge Centre.



Panel Members

Naima Ali

As a **Portfolio Manager in EPSRC's Future Communications team**, Naima supports the development and delivery of strategic investments in cutting-edge communications technologies. She manages research portfolios, engages with stakeholders, and fosters innovation to advance the UK's leadership in next-generation connectivity, ensuring impactful outcomes across academia, industry, and society.



Lydia Tabbron

Lydia is a **leading digital sustainability specialist within government, working for Defra**. She chairs the cross-government steering group on digital sustainability and leads the Government Digital Sustainability Alliance (GDSA) on behalf of government. Her sustainability initiatives, which have included the roll out of refurbished devices and esim across Defra group have led to multiple award wins for their innovative approach, sustainability credentials and cost savings to the department. She is currently writing the Digital Sustainability Strategy for government, due to be published later this year





Keynote speaker

Lisa Rivalin, Ph.D.

Senior Staff Engineer, Meta

Lisa Rivalin is the Engineering Lead for Data and AI Systems for Hardware Sustainability on Meta's Hardware Design team. Over six years at Meta, she has applied data science and AI to hardware engineering challenges.

Lisa leads Meta's data foundations for infrastructure decarbonization: estimating and reducing the carbon footprint of IT hardware, and driving the Design for Sustainability strategy. She also leads Meta's AI strategy for hardware reliability and sustainability engineering. Previously, she led a digital twin initiative combining physics-based modeling with ML to optimize data center design. She serves as Meta's Sustainability lead for OCP and is active in SNIA and SEMI. Before Meta, she was an Innovation Lead at Engie and a Research Scientist at Lawrence Berkeley National Lab.



Panel Members



Simon Brown

A Scientist and MBA whose career spans corporate, consulting and startup businesses, Simon **leads the growth of the climate tech ecosystem at Sustainable Ventures** providing early-stage investment, innovation hubs in UK cities and support services including the National Climate tech Accelerator programme. He enables entrepreneurs to scale up commercial climate tech innovation.

Amy Peace

Amy Peace is the **Innovation Lead for Circular Economy at Innovate UK**. With a background in Chemical Engineering, Amy has coordinated sustainability projects and programmes in industry, industrial clusters and pan-EU cross-sector initiatives. Amy's Innovate UK work portfolio includes UKRI investments in interdisciplinary circular economy and Life Cycle Analysis initiatives, and the development of future programmes to aid the transition of manufacturing and materials sectors to get to Net Zero, highlighting the importance of embedded carbon in supply chains.



Panel Members



Dede Tavares

Dede Tavares is a sustainability executive and telecom specialist serving as the **Strategic Programme Lead for Network Sustainability at BT Group**. She leads digital infrastructure initiatives focused on telecom network decarbonisation, e-waste reduction, and energy efficiency. Dede drives BT's Exchange Clearance Operation (ECO), a major circular economy project decommissioning legacy UK telephone exchanges to recover and recycle valuable copper. Her expertise covers sustainable supply chains, ITC circularity, and she is a member of the Joint Alliance for CSR (JAC).

Steve Haskew is the **Director of Sustainability and Client Engagement at Circular Computing**, a global remanufacturer of laptop technology, specialising in reducing ICT's environmental impact through circular economy innovation. He has worked at strategic board-level, exceling in managing complex partnerships, risk, and organisational change to deliver meaningful commercial, environmental, and social outcomes. He is a speaker, advisor to government bodies, and serves on the BSI Committee, where he helps define British and international standards (BS8887) for the remanufacturing and refurbishing of laptop technology.

Steve Haskew



Lightning Rounds

Introducing a rapid fire of six presenters, affiliated with our DICE Network+, sharing emerging ideas and signals from the next generation of research

Dr. Emma Fromberg, King's College London 

- Recipient of a DICE N+ Knowledge Exchange Placement
- Theme: *Digital Product Passports and material traceability*, focusing on batteries as an early test case for CE
- See Emma's work in our **marketplace** today

Dr. Farzaneh Goli, University of Birmingham 

- DICE N+ ECR Member
- Theme: *AI-supported triage for end-of-life products and components*
- See Farzaneh's work in our **marketplace** today

Dr. Jiafeng Zhou, University of Liverpool

- Recipient of a DICE N+ Knowledge Exchange Placement 
- Theme: *AI-enabled microwave technologies for sustainable infrastructure: combining wireless power transfer, electromagnetic sensing & AI to create more resilient and resource-efficient systems*

Dr. Sonnich Sonnichsen, Nottingham Trent University 

- Recipient of DICE N+ Feasibility Study funding
- DICE N+ ECR Representative on the DICE N+ Advisory Group
- Theme: *SurplusMap project, exploring the feasibility of using Agentic AI for a city-wide digital platform designed to better coordinate food surplus recovery, utilization and valorisation*

Dr. Lirong Liu, University of Surrey

- DICE N+ ECR Co-Lead 
- Theme: *The Circular Space Economy, outlining findings on material & resources efficiency, & how CE principles could be used in space sector*

Dr. Alireza Moghayed, UWE Bristol

- DICE N+ ECR Member 
- Theme: *A conceptual framework for Digital Product Passports and Digital Material Banks in the circular built environment*

We are pleased to welcome the following organisations joining us:

ATOS / British Standards Institution / BT Group
Capgemini / Care Quality Commission
Circular Computing / Circular Way / Circularity First
Cronk Advisory Ltd / DCA / Defra
Ellen MacArthur Foundation
Engineering and Physical Sciences Research Council
Freegle / GoCodeGreen / Google / HSBC / IBM
Imperial College London / Innovate UK / Kings College London
Kintara / Lancaster University / Lifescape
London South Bank University
Loughborough University / Manchester Metropolitan
Meta / Myriad / ODI Global / Open University
PPA Consulting / Praja Controls & Systems
Queen's University Belfast / RoboTriage
Royal College of Art / Skills England
SOENECS / Spin Ventures / Subleeve
SUMER Research Project (UCL)
Sustainable Ventures / Techbuyer
The Data Centre Trade Association
The Manufacturing Technology Centre
Univ of Birmingham / Univ of Exeter / Univ of Liverpool
Univ of Manchester / Univ of Nottingham
Univ of Oxford / Univ of Salford / Univ of Sheffield
Univ of Southampton / Univ of Surrey
Univ of Warwick / WRAP / Vodafone Three / Zero Tech Waste

Marketplace

Come and join some of our Network Members and fellow delegates in the breaks showcasing their innovative work through a series of posters and live demonstrations.



The Circular Electrical and Electronics Project

(CEEP) is a £2.3m UK Research and Innovation (UKRI) and industry-funded project, led by Professor

Lucia Corsini. CEEP seeks to enable a low-carbon Circular Economy for Electrical and Electronic Equipment (EEE) that reduces the mining of raw, expensive and critical raw materials. It adopts a whole systems design approach that integrates expertise in engineering design, business model innovation and sustainability assessment.

→ Find out more:

Lucia Corsini, Associate Professor & Head of the Circular Economy & Sustainability Lab (CESL);

Aya Abdelmeguid, Postdoctoral Research Assistant in Design in the Circular Economy;

Ana Outeirinho Morgado, Postdoctoral Research Assistant in Systems and Engineering Design for the Circular Economy.

Circular Computing exists to help our clients and partners decarbonise the digital workplace, reduce the reliance of natural resources and protect the usage of water, and by so doing protect the planet. Our innovation in laptop technology creates a user experience uncompromised to that of new technology - referenceable and expected by the world's leading provider of remanufactured devices.

Find out more:

Steve Haskew, Group Director
- Sustainability & Growth

Amanda Hedley, Marketing
& Strategic Relationship Manager



**circular
computing®**

Marketplace

Come and join some of our Network Members and fellow delegates in the breaks showcasing their innovative work through a series of posters and live demonstrations.



Circular Economy Services

We deliver insights and expert advice to help sustain the useful life of IT assets, maximise capacity, minimise energy



Techbuyer

consumption, and ensure circularity through ethical and sustainable disposal or reuse. This includes providing redundant technology buy back, a fleet efficiency assessment across IT estates, and helping companies to establish a sustainable and resilient parallel supply chain.

→ Find out more:

Astrid Wynne, Head of Sustainability, AI & Automation

Charlotte Nixon, Content & Campaigns Manager, Techbuyer



Cloud Powered the AI for Everyone - "Brains Now Delivered Like Netflix"

This poster explains how cloud computing became the invisible backbone of the AI revolution. By turning global supercomputing into an on-demand utility, the cloud delivers the massive power, storage, and specialised chips that modern AI needs - making advanced tools affordable and accessible to startups, businesses, and everyday users, not just tech giants.

→ Find out more:

Dr. Esha Barlaskar, Lecturer (Education) in Cloud Computing and AI, School of Electronics, Electrical Engineering and Computer Science (EECS), Queen's University Belfast



Marketplace

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AI Triage Platform for End-of-Life Product Decision Support

AI Triage is a decision-support platform for end-of-life products. It uses images, product information, and market data to assess condition, risks, recovery value, and recommends reuse, repair, or recycle routes, enabling faster and consistent triage.

→ Find out more:

Dr Farzaneh Goli, Research Fellow



UNIVERSITY OF
BIRMINGHAM

A Quantitative Triage-Based Method for Circular Economy Decision-Making: The Case study of Electric Vehicles

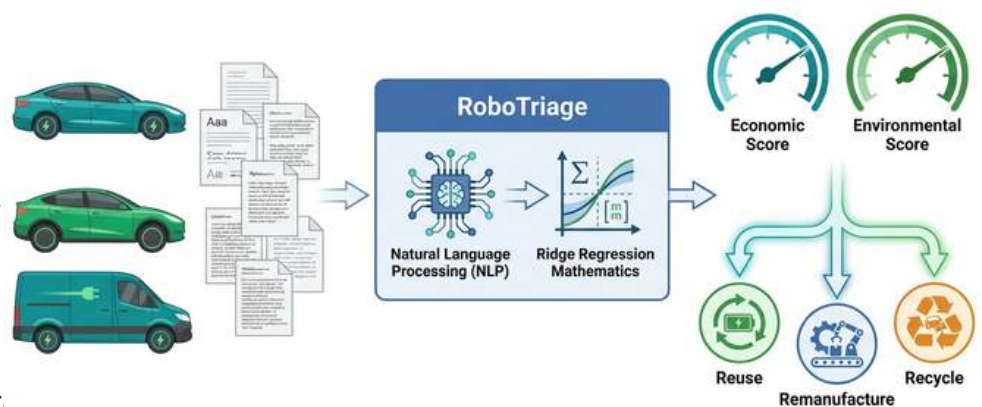
The paper introduces Predictive Circular Triage Framework, a computational framework for Circular Economy that automates end-of-use product routing. Using Natural Language Processing to analyse vehicle defect records and Ridge Regression to estimate

economic and environmental viability, the system reliably categorises assets for reuse, remanufacture, or recycling, significantly reducing logistical barriers.

→ Find out more:

Gustav Jonsson, Mechanical Engineering PhD researcher specialising in the intersection of Data Science, Robotics, and the Circular Economy

Graphical Abstract of RoboTriage Process for Circular Economy in Electric Vehicle Inspection



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BIRMINGHAM

Marketplace

Come and join some of our Network Members and fellow delegates in the breaks showcasing their innovative work through a series of posters and live demonstrations.



Nature's Playbook Ecological Design Thinking for a Circular Economy

How might nature change the way we think about a circular economy? Nature's Playbook is a research-based toolkit that helps participants explore circular economy business challenges through ecological design thinking. Used in workshops, teaching, and organisations, it encourages fresh perspectives on systems change. Discover more at naturesplaybook.org.

→ Find out more:

Dr Emma Fromberg, Research Fellow at King's College London Centre for Sustainable Business



THE HOUSE OF CIRCULARITY®

Spin Ventures, The House of Circularity

The House of Circularity by Spin Ventures is built to tackle the \$1.5 trillion lost to inefficiencies every year within the consumer and retail sectors. It aggregates technologies across the supply and value chain (clothing and apparel, footwear, and accessories) to provide end-to-end pilots, derisking investment and scaling adoption.

→ Find out more:

Tvisha Teli, Co-Founder and CTO @ The House of Circularity, Venture Associate, Spin Ventures

Nic Gorini, Founder & Managing Partner, Spin Ventures

Marketplace

Come and join some of our Network Members and fellow delegates in the breaks showcasing their innovative work through a series of posters and live demonstrations.

TTB CircularIT is an award-winning circular IT service providing secure collections, certified data erasure and reuse-first processing.

We provide certified erasure to NCSC standards of all data-bearing devices - either for redeployment within a business or to be responsibly reused & recycled by our team.

A proportion of our reusable laptops are donated to Tech-Takeback Foundation, an independent charity providing laptops and digital skills training for people living in digital poverty in the UK. By promoting digital inclusion, the Foundation generated £12.5m in social value in 2025 alone.

→ Find out more:
visit ttbcircularit.co.uk



Our 2025 in Review

12,800 items collected - weighing 17 tonnes
4,800 items reused - weighing 6 tonnes
4,700 items data-sanitised (HMG Infosec 5)
366 tonnes of CO₂e (Scope 3) emissions saved

TTB CircularIT
Secure IT reuse.
Measurable impact.

CIRCUIT4EU - European E-Waste Project

Electronic waste is the fastest growing waste-stream worldwide. Whilst end-of-use products contain recoverable critical raw materials (CRMs), the EU faces a critical dependency on importing CRMs essential to industrial value chains.

CIRCUIT4EU is a Horizon Europe-funded project to advance 10 technologies to enable selective recovery, reuse, refurbishment and recycling to unlock their value. TTB CircularIT are project partners piloting a robotic disassembly facility to recover CRMs from end-of-use laptops. Our aim is to disassemble 1000 laptops & desolder 1000 printed circuit boards using cutting-edge human-robotic interactive technology.

→ Find out more:

Dr. David Greenfield, Co-founder and MD Tech-Takeback Ltd (TTB CircularIT)

Poppy Robertson, Circular Research Intern (TTB CircularIT)



Funded by
the European Union

Future Events

Join DICE Network+ at these upcoming events through 2026

Look out for updates and registration links on our [website](#) and [LinkedIn](#)

Date	Time	Event	Location
24 July 2026	All day	ECR Summer Event <u>*Register now!*</u>	Loughborough *More info on page 18 of this pack*
23 September 2026	Morning	EDI research workshop	Online
13 October 2026	Morning	DICE N+ - eFutures Roadshow	QUB, Belfast
14 October 2026	Morning	Circular Tech Expo	Farnborough
17-18 November 2026	All day	Circular Tech Expo	TIC, Glasgow

DICE Network+ Team



Prof Fiona Charnley

Professor of Circular Innovation & Co-Director of the Exeter Centre of the Circular Economy
University of Exeter



Dr Diego Bermudez

Research & Impact Fellow
University of Exeter



Georgie Hopkins

Network Manager
University of Exeter



Dr Oliver Fisher

Assistant Professor in Chemical and Environmental Engineering
University of Nottingham



Kate Frewer

Network Coordinator
University of Exeter



Prof Jeremy Frey

Professor of Physical Chemistry
University of Southampton



Dr Lirong Lui

Senior Lecturer within the Centre for Environment and Sustainability
University of Surrey



Prof Roger Maull

Academic Director of the Initiative in the Digital Economy Research Centre
University of Exeter



Prof Paul Meredith OBE

Professor of Materials Physics
Swansea University



Beth McEvoy

Multidisciplinary Research Manager
Queen's University Belfast



Prof Mandy Parkinson

Professor of Business Innovation
University of Salford



Prof Ashutosh Tiwari

Deputy Vice-President for Innovation
University of Sheffield



Dr Silvia Tedesco

Associate Professor
University of Salford



Dr Divya Tiwari

Post Doctoral Research Fellow
University of Sheffield



Madeline Smith

Impact Consultant
Independent



Prof Gosia Swadzba-Kwasny

Director of the QUILL Research Centre
Queen's University Belfast



Prof Andrea Zisman

Professor of Computer Science
Open University



University of Exeter



The University of Nottingham



The Open University



QUEEN'S UNIVERSITY BELFAST



University of Salford
MANCHESTER



University of Sheffield



UNIVERSITY OF SURREY



Swansea University
Prifysgol Abertawe

DICE Network+ Code of Practice

Principles of participation

All members and collaborators of the DICE Network+ are asked to follow this code of practice during network engagements, meetings, events and interactions on social media, upholding the network's core values:

- **Curiosity** to drive exploration and learning.
- **Collaboration** to foster teamwork and shared growth.
- **Courage** to embrace transformation and change.

Foster an inclusive and respectful community

We understand that excellence will be achieved through recognising the value of every individual. We want to create a welcoming environment to encourage, support and respect ideas from everyone and ensure our inclusive activities are representative of the diverse circular economy community. Our ambition is to instil these values across all our activities, and we wish to support a diverse network membership. As such, we will:

- Treat all individuals with dignity and respect, regardless of background, identity or role.
- Actively include and make space for underrepresented voices.
- Support our peers in their development and learning.
- Welcome differing viewpoints and constructive feedback, reflecting on our own biases.
- Avoid language or behaviour that is discriminatory, harassing or exclusionary.

Engage professionally and constructively

We are committed to high standards for the network and take great pride in being recognised as a trusted and reputable source of insight and collaborative opportunity. The integrity of the network is a product of our members and collaborators. As such, we will:

- Represent the interests of our whole network without seeking individual advantage and acknowledge any conflict of interest which may arise.
- Advocate for and promote the most positive outcomes for the network.
- Act in a transparent and ethical manner, taking responsibility for our actions and their consequences.
- Respect the confidentiality of information shared across the network where appropriate.
- Respect copyrights, avoid plagiarism and credit others' research / work where appropriate.

Champion ethical innovation

The network is focused on digital innovation to both embed circular principles in technology design and use digital enablement to accelerate the adoption of the circular economy. Recognising the UKRI focus on Responsible Innovation, the network supports the co-creation of meaningful solutions that consider the wider impacts of research and innovation. As such, we will:

- Use technology and data responsibly, with consideration for social & environmental impact.
- Actively consider potential unintended negative impacts and act to mitigate them.
- Promote the dissemination, adoption and diffusion of research and innovation across our networks and peers.

Concerns?

Your continued compliance with this code of practice is a prerequisite for ongoing engagement.

Should you have any concerns regarding this code of practice or the behaviour of any network members, please contact DICE Network+ Manager, Georgie Hopkins, DICE-network@exeter.ac.uk



DICE N+ ECR Community Event

Join the DICE Network+ ECR Community Event

24 July, Loughborough University

Are you an Early Career Researcher looking to expand your network, gain practical insights, and explore how your research can drive real-world impact? We're excited to invite you to our upcoming DICE Network+ ECR Community Event; a unique opportunity to connect, learn, and be inspired.

What to expect:

- 🤝 Engage with a diverse community of fellow ECRs from across the UK
- 🎤 Join our challenge-based workshop on digital innovation for a circular economy
- 💡 Gain IP and commercialisation training from Loughborough's Research & Innovation Office - learn how to protect your ideas and turn them into ventures
- 🏢 Visit leading industry innovators, including Intelligent Energy, a UK leader in hydrogen fuel cells and a fast-growing circular economy company focused on green chemicals.

This immersive experience will give you valuable insight into how engineers and researchers are designing solutions to tackle urgent challenges in clean energy and the circular economy.

👉 Sign up now via the [registration form](#).



Connect with us

LinkedIn



Get involved in the conversation using our hashtag:

#dicenetworkplus

DICE Network+ website

Visit our website to keep up to date with further network activities.



DICE-Network@exeter.ac.uk