



PROGRAMME

TECHNICAL CONFERENCE 2025

University of Birmingham

Thursday 18th September

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academia
the technology group

About the IST Conference

The IST has been supporting the technical workforce in the creative, digital, engineering and science technologies for over 75 Years.

Our aim is to make the Institute all embracing and, in order to achieve this, help/advice networks, skills training, specialist forums, recognised qualifications, continuing career development opportunities and guidance will be available to the membership.

Recognition of professional standing is high on our agenda and, most importantly, expansion of the vibrant community of specialist, technical and managerial colleagues who will work together to help make a difference and shape the future.

Our Annual Conference plays a vital role in giving technicians the opportunity to network with other technical staff and managers from across the UK, as well as providing the chance to take part in a National event or deliver a presentations or talk.

Previous Conferences:

2024 - Lancaster
2023 - London
2022 - York
2021 - Hybrid
2020 - Online
2019 - Birmingham
2018 - Newcastle
2017 - Leicester
2016 - Manchester
2015 - Leeds
2014 - Sheffield



We always aim to move around the country to give as many technicians the opportunity to attend our Conferences in future.

If you are interested in taking part in next years Conference, either being part of the organising committee, giving a talk or showcasing your specialist area, please contact us at office@istonline.org.uk.

We hope you enjoy the day at The University of Birmingham.

PROGRAMME 2025

09:00-09:30	Registration
09:30-09:50	Welcome and Opening Remarks
09:50-10:50	<u>Keynote 1</u> Navigating the Inflection Point: Creativity, AI and the Future of Innovation Main Lecture Theatre
10:50-11:10	Refreshment Break, Exhibition and Networking
11:15-11:55	<u>SESSION ONE</u> (Details on Pages 6 - 8) Workshop 1 - 5: Various Locations
12:00-12:40	<u>SESSION TWO</u> (Details on Pages 9 - 12) Workshop 6 - 10: Various Locations
12:40-14:00	Lunch Break, Exhibition and Networking IST Drop-in Registration Desk
14:00-15:00	<u>Keynote 2</u> Artificial Intelligence: the Good, the Bad, and the Grey Area
15:00-15:10	Awards, Announcements and Acknowledgements Main Lecture Theatre
15:10-15:40	Refreshment Break, Exhibition and Networking
15:45-16:45	<u>Keynote 3</u> Workplace survival skills or managing your manager because adulting is hard Main Lecture Theatre
16:45	Depart for home - Safe Journey!

Programme Outline

CONFERENCE KEYNOTE SPEAKERS



Professor Tracy Harwood
Professor of Digital Culture



Professor Kit Windows-Yule
Founder of AI Startup EvoPhase



Dr Raj Persaud
Consultant Psychiatrist, Life Coach and Executive Coach



Cadbury World



Library of Birmingham



St. Philip's Cathedral



Bullring Centre



09:50 - 10:50

Keynote Speaker 1

Professor Tracy Harwood

*Navigating the Inflection Point:
Creativity, AI and the Future of
Innovation*

We are standing at a pivotal moment in the evolution of technology — a convergence of artificial intelligence, creative computing, and accelerated innovation. In this keynote, we'll explore how technical professionals can lead through disruption by embracing adaptability, ethical foresight, and interdisciplinary collaboration. From generative AI to immersive design tools, emerging technologies are not just reshaping the tools we use — they are redefining how we think, create, and solve problems.

This session will dive into real-world applications of AI in creative and technical domains, highlight the skills and mindsets needed to stay ahead of rapid change, and offer a strategic lens for navigating ambiguity with curiosity and confidence. Whether you're an engineer, developer, designer, or technology leader, you'll leave with practical insights and forward-thinking strategies for thriving in a future that's already here.

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Birmingham Town Hall



14:00 - 15:00

Keynote Speaker 2

Professor Kit Windows-Yule

Artificial Intelligence: the Good, the Bad, and the Grey Area

Artificial Intelligence is rapidly becoming ubiquitous in both Academia and Industry – and indeed our daily lives. While it is undoubtedly a powerful tool for efficiency and productivity across many contexts, its relationship with sustainability can be a little less clear-cut. Through his experience as an academic researcher, a BridgeAI Independent Scientific Advisor, a Research Ethics Reviewer for the Alan Turing Institute, and founder of an AI start-up, who has worked on AI adoption with more than 20 companies spanning 8 industrial sectors, Prof Windows-Yule has witnessed the application of AI in a broad range of contexts, and with varying degrees of success.

This talk showcases AI at its best and worst, and provides a number of key, widely-generalisable learning points gained from his experience.

2025 Key Sponsors:



Birmingham Skyline



15:45 - 16:45

Keynote Speaker 3

Dr Raj Persaud

*Workplace survival skills or
managing your manager because
adulting is hard*

As technicians, scientists and researchers we are driven by curiosity, innovation and the pursuit of knowledge. Our work is often exhilarating, pushing the boundaries of what's known. However, this high-stakes, competitive and often solitary journey can also be incredibly demanding. The pressures of grants, deadlines and the myriad challenges of scientific inquiry can take a significant toll.

Today, as a consultant psychiatrist who has observed and supported countless professionals navigating complex work environments, I want to share some vital workplace survival skills with you. These aren't just about coping; they're about thriving, maintaining your well-being, and sustaining a fulfilling career in science. Think of these as psychological toolkits for resilience and effectiveness.

<https://drrajpersaud.com/>

2025 Key Sponsors:



Workshop 1

Room: tbc

Workshop Title

ACCES: An accessible evolutionary framework for optimising just about anything



About the workshop

In this workshop, we will demonstrate the use of a unique, free, open source software (ACCES: Automatic Characterisation and Calibration using Evolutionary Simulation) which allows the coupling of evolutionary algorithms with numerical simulation software to a) optimise the simulations

Dan Rhymer and Aaron Wiggin

The University of Birmingham

themselves, and b) use the simulations to optimise anything you can model! The workshop will provide an overview of the software, some example applications, and an introduction to the underlying code, so that you can try it for yourself.

Workshop 2

Room: tbc

Workshop Title

How to use AI to leverage the benefits of immersive learning on any device - from tablets, to XR headsets, to immersive rooms



About the workshop

In partnership with Academia, Madison Stoneburner from ThingLink will explore ways to modernise learning materials (such as PDFs or slide decks) to make them more interactive, engaging and accessible to all learners, on all devices. Designed for both education and business, ThingLink allows users to build rich, visual experiences such as interactive images, virtual tours, branched scenarios, and even VR/AR simulations – all without any coding knowledge.

Madison Stoneburner

ThingLink on behalf of
Academia - the technology group

By the end of the session, you'll understand how ThingLink can modernise and enhance learning design, support hybrid and self-paced learning, and make content more accessible and engaging for today's learners. Please feel free to sign up ahead of time for a personalised demo at our stand by emailing Yan at Academia: yan.gilbert-miguet@academia.co.uk.

Workshop Delivered by:

academia
the technology group

Workshop 3

Room: tbc

Workshop Title

NTDC HETT Technician Career & Promotion Pathways; introducing the new National Education Technical Professional Pathway



Dr Sara Bacon and Dr Ian Tidmarsh

National Technician Development Centre & Institute of Science and Technology

About the workshop

NTDC will update on Career and Promotional pathway collaborative activity including highlighting the benefits and recommendations from the ETP national working group report. We will also highlight early success.

Workshop 4

Room: tbc

Workshop Title

Upskilling Through Apprenticeships: Taking Control of Your Technical Career



Tyler Harvey-Cowlishaw

Science Apprenticeship Forum

About the workshop

This workshop is designed for current technicians who are curious about how apprenticeships can support their career development. Whether you're just starting out or looking to upskill, we'll explore how apprenticeships can provide structured learning, professional recognition, and new opportunities for progression. Drawing on lived experience, we'll cover practical steps for finding the right apprenticeship, making the most of your training, and aligning it with long-term goals. Come along to discover how an apprenticeship could be the next step in your technical journey.

Workshop 5

Room: tbc



Dr Gabor Radics

LabCup

Workshop Delivered by:



Workshop Title

Inventory Management: An Easier And Safer Way To Store And Use

About the workshop

In this presentation, Gabor will show you how to use technology, to do inventory management much quicker with less administration. While you gain more free time, your laboratory will become a much safer and compliant place to work.

Gabor will also touch the following subjects and many more:

- Expiry date management,
- Quick stock taking,
- Automatic data sourcing and validation,
- Compliance reporting (CWC, CMR, peroxide forming chemicals, etc.),
- Master database management,
- Compatibility storage,
- Internal web shop for stock room managers.

Workshop 6

Room:



Allison Hunter

Imperial College London

Workshop Title

Innovative Sustainability: Bridging Science and the Arts for a Greener Future

About the workshop

In the last 10 years sustainability has come out from the shadows and is now a mainstream and dynamic consideration across many disciplines. This talk will review the current cross sector landscape and frameworks and the many roles that technicians have had in innovating and shaping sustainable practices across these industries. It can be by making those considerations in what we buy, how we use it and remove it to reduce carbon footprints, influencing behaviour changes in staff and students, various resource efficiencies or designing novel process or procedures. Here, we will look at what does it take to get these implemented and what are the barriers?

Workshop 7

Room:



Rachel Baynton

University of Lincoln on behalf of Creative UK

Workshop Title

StageLinc: Connecting Technical Skills to the Technical Challenges of a Region

About the workshop

StageLinc are an events and immersive experiences production company working from concept to production to create memorable experiences across the East Midlands and the wider UK. A commercial spin-out from the courses at the University of Lincoln School of Creative Arts, StageLinc draws on the considerable professional, industry and academic experience of the staff across the school to deliver high-quality events, while also directly supporting both undergraduate and postgraduate students in gaining industry skills. In this workshop, discover more about how StageLinc is working across the UK. Join Rachel Baynton (Associate Professor - Creative Engagement Producer, University of Lincoln) to explore your own regional challenges, technological solutions, and avenues for industry skills development.

Workshop 8

Room:



**Daniella Webb, Ana Rutter,
David Massey, Jodie Wingham,
Riz Iftakhar**

Birmingham City University

Workshop Title

The Accreditation Edge: Real Stories from Creative Tech Trailblazers

About the workshop

What does it really take to earn professional accreditation in the creative technologies - and why does it matter?

This dynamic workshop/panel discussion brings together experienced professionals who've navigated the process firsthand. Expect honest reflections, practical tips, and a closer look at how accreditation not only validates expertise but opens doors to collaboration, recognition, and career growth. Whether you're just curious or ready to apply, this session will spark ideas and confidence to take the next step.

Workshop 9

Room:



Gemma Carter-Morris

Next Steps Consulting

Workshop Title

Career Alignment in a Changing World: Aligning Personal Aspirations with Organisational Needs

About the workshop

In an ever changing world of work, clarity and alignment are more important than ever. This interactive session will guide individuals through the 'Alignment model', a framework that helps to explore the relationships between what you want from your career and what organisations need from their people.

We will cover:

- Your wants and needs - what you need to thrive in your career
- Your offer - what strengths, skills and experience you bring to the table
- Organisational needs - how the workplace is changing and what skills are most in demand now and in the future
- Personal development planning - how can you future proof your career and move towards where you want to be

The session will also explore practical ways to build resilience and adapt positively to change so you can feel more confident navigating transition and thriving in changing landscapes.

Workshop 10

Room:



Chris Williams and Kathryn Draper

Siso Software Ltd

Workshop Title

Chemical and Safety Sheet Management

About the workshop

This talk will demonstrate new features currently in development that are aimed to make the management of Chemicals and Safety Sheets a lot easier to organise and track in one system.

This is a chance to see what we have in development but also our plans for the future.

Workshop Delivered by:



Workshop 11**Room:****Workshop Title**

Selling Unwanted Lab Equipment with UniGreenScheme – Launched by a UoB Student in 2015



Michael McLeod and Benjamin Glazier

UniGreenScheme

each week and has saved the sector more than £4 million to date. This workshop will take a practical, behind-the-scenes look at how UniGreenScheme works – covering equipment testing, logistics, and resale. With real university case studies, it highlights how lab teams can unlock space, savings and sustainability through reuse.

About the workshop

In 2015, while studying at the University of Birmingham, Michael McLeod helped clear out a lab – and watched valuable equipment thrown away. Frustrated, he launched UniGreenScheme: a service that helps universities resell unwanted lab equipment safely and effectively. Now used by over 70 institutions, the service prevents over 5 tonnes of waste

Workshop Delivered by: **UniGreenScheme**

Workshop 12**Room:** tbc**Workshop Title**

What is Deep Learning?



Dr Richard Saldanha

Institute of Science & Technology

About the workshop

Deep learning has become one of those all-encompassing buzzwords but primarily it's about the use of neural networks (large ones). This Workshop will examine the basics of neural networks model fitting, model components and architectures followed by a look at one or two examples.

The aim of the Workshop is for attendees to gain a better understanding of what underpins these widely implemented class of model. All are welcome, novices and experts alike.



Academia

www.academia.co.uk

Email: sales@academia.co.uk

Academia combine next generation technology with cost effective, sustainable solutions and managed services that change the way we work. We enhance teaching and learning experiences with great products and services, we also ensure businesses get technology that's scaleable and improves the user experience. We enable the public sector to get the very best from their IT and we innovate responsibly to ensure a sustainable future for everyone.

Our range of exceptional services and solutions will help run your IT operations better and in a more cost-effective way. Whatever your service requirement, our team of experts will work with you to resolve your challenges.

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Siso Software

www.siso.co.uk

Email: info@siso.co.uk

Siso Software are a highly experienced UK based software house established over 20 years ago.

Their focus is on developing and refining niche products that address the unique and intricate requirements of a booking system for industries such as higher education, media, science & technology, and healthcare.

Siso work hard to understand your objectives and current issues, creating a bespoke configuration and implementation plan with you. This ensures you get the maximum benefits rapidly and effectively.

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Uni Green Scheme

www.unigreenscheme.co.uk

Email: info@unigreenscheme.co.uk

UniGreenScheme help UK universities and the wider scientific industry reduce waste and consume resources sustainably to enable research organisations to thrive in an increasingly resource-constrained world.

They have experienced first-hand the difficulties involved in disposing of unused or surplus laboratory equipment. Currently, the most common route for equipment disposal is...well, disposal.

They offer a hassle-free, more sustainable alternative. By offering a service where they collect, store and resell equipment for reuse, preventing the needless disposal of equipment - whilst helping you to achieve your environmental targets by reducing your carbon footprint and even generate revenue by offering a share of the profit.

Social Media:  [company/unigreenscheme](https://www.linkedin.com/company/unigreenscheme)



LabCup

www.labcup.com

Email: sales@labcup.net

Labcup is for life science industry and research university. Our platform simplifies the tracking and reporting of inventory data, providing real-time information on inventory levels, storage conditions, compliance and much more! We are honoured to serve our customers, follow up on researchers' ideas and support safety officers in creating a safer environment for everyone.

LabCup is always there to solve researchers' problems and find unique solutions to their daily challenges. We develop together with our customers, working with the very best innovators in developing unique solutions to unique problems. Now with over a decade of experience, we are leading the way in simplifying inventory management for clients of all sizes around the globe.

Social Media:  [company/labcup](https://www.linkedin.com/company/labcup)



Dr Helen Sharman, CMG OBE FIScT HonFRSC

Technical Conference Chair & IST President

Helen Sharman, CMG, OBE, HonFRSC is a British chemist and space technician, who became the first British person, first Western European woman and first woman in space, as well as the first woman to visit the Mir space station, in May 1991.

Helen started her career with a degree in chemistry from the University of Sheffield before working in industry for GEC and Mars Confectionery. Helen then trained at the Yuri Gagarin Cosmonaut Training Centre, becoming the first British astronaut when she launched into space on board a Soyuz spacecraft on 18 May 1991. Helen became a science communicator after her space flight.

Helen started a new career in management, working at the National Physical Laboratory and at Kingston University London, before moving to Imperial College in the summer of 2015.

Helen is the IST President and is an advocate for technical staff all over the world.

THANK YOU TO ALL OUR SPEAKERS

The Institute of Science & Technology is very grateful for the support from our professional speakers, who truly do make the day a brilliant success.

The thoughts, opinions and expertise are their own and they have put a great deal of time of detail into the workshops to give delegates new and interesting insights, into their own work or into something they are particularly interested in.

Fancy being involved with our Conference in 2026? We would love to hear from you if you are interested in delivering a workshop next year. Please contact us on office@istonline.org.uk.
