

### VIRTUAL TECHNICAL CONFERENCE 2021

## Wednesday 15th September 2021 09.15 - 14.30

FIND OUT MORE VIA THE FOLLOWING THIS LINK:

https://istonline.org.uk/ist-virtual-technicalconference-2021/





























## CONFERENCE PROGRAMME



09.15 - 09.25	Welcome Remarks Dr Helen Sharman CMG OBE FIScT, IST
09.25 - 09.55 10.00 - 10.40	Keynote Speech Why Equity, Diversity, Inclusion and Belonging are important factors for sustainability within the technical community  Denise McLean, University of Nottingham  Carbon Literacy
10.00 - 10.40	Lucy Lloyd-Ruck & Jane Mork, Manchester Metropolitan University
10.40 - 10.50	Comfort Break
10.50 - 11.20	Green Impact and Plastic Recycling Rachel Soper, Students Organising for Sustainability & David Kuntin, University of York
11.25 - 11.55	NFT, Artificial Intelligence – and indigenous peoples  Kanupriya Bhargava, Swiss Re Corporate Solutions  & Alicia Colson, Freelance Consultant
12.00 - 12.30	Fabric of the City  Adam Butler, Robin Broadley, Owen Ramsay, Jim Suthernden,  Manchester Metropolitan University
12.30 - 13.00	<b>Lunch Break</b> – including a 15 min presentation from the Science Museum about an exciting project involving technical staff <i>Anna Ravenscroft, Rachel Flaxman, Science Museum</i>
13.00 - 13.30	LEAF - what it is and the NTDC involvement  Martin Farley, University College London, Jan Brett, University of Liverpool, Kate Dixon, Manchester Metropolitan University,  Olga Khutoryanskaya, University of Reading
13.35 - 14.05	Headline Data from the NTDC Skills Survey,  Jared Carnie, Jedidah Mould, National Technician Development Centre
14.10 - 14.30	Close of the Day Terry Croft MBE FIScT CSci, IST

## Half-day Virtual Technical Conference Wednesday 15th September 2021































# CONFERENCE PROGRAMME 3



#### **Detailed Links**

<u>Zoom Link 1: Welcome and Keynote - Equity, Diversity, Inclusion & Belonging</u>

https://us02web.zoom.us/j/82769276326?pwd=RENmQy9rekQxSVp1R0xha1I5aVpLZz09

**Zoom Link 2: Carbon Literacy** 

https://us02web.zoom.us/j/84525255214?pwd=RUdvRVVVTEhqL2k2Q3dTNzdKYm5XQT09

**Zoom Link 3:** Green Impact & Plastic Recycling

https://us02web.zoom.us/j/87533490094?pwd=UlpIWjk1TjdpOW1UQURuME91UU1iUT09

**Zoom Link 4: NFT, Artificial Intelligence and Indigenous Peoples** 

https://us02web.zoom.us/j/86770506701?pwd=bnptOStLU044T0FENGJ4WTlyelY2dz09

**Zoom Link 5:** Fabric of the City & Lunchtime with the Science Museum

https://us02web.zoom.us/j/83449839719?pwd=QU56N1Q1TjhEMmZzOVJRNm03SU1FZz09

**Zoom Link 6: LEAF - What is it and the NTDC Involvement** 

https://us02web.zoom.us/j/89631466337?pwd=UHVnS1Y1SFQvWmdnRVl1bkR6c0R4dz09

**Zoom Link 7:** Headline Data from the NTDC Skills Survey & Close of Day

https://us02web.zoom.us/j/84461725300?pwd=UUFPYkZ4bGFCMnk2enIrdEpDVU80QT09

































## **CONFERENCE PRESENTERS**





#### **Denise McLean**

Imaging and in the University's Nanoscale and Microscale Research Centre. She has been a technician at the University for over 20 years and is a nationally recognised expert in Electron Microscopy and Histology.

With a passion for introducing young people to the world of science, Denise is a STEM Ambassador, working within outreach projects in Primary and Secondary Schools, and

community initiatives.

From both within and outside of University, Denise sits on various groups and committees adding her voice and listening ear to:

- The Women's Staff Network University of Nottingham
- Racial Harassment and Bullying Working Group School of Life Sciences at University of Nottingham
- The National Technician Development Centre as Specialist Advisor for Equality Diversity and Inclusion
- Staff Equity and Inclusion Task and Finish Group
- The University of Nottingham Executive Board subcommittee for Equality, Diversity &Inclusion.
- The TALENT programme at Midlands Innovation as Chair for Equality, Diversity & Inclusion seconded one day per week
- Race Equity and Inclusion Task and Finish Group

National recognition of her strong advocacy for technical careers resulted in an invitation to speak at New Scientist Live 2018 alongside Sir John Holman and at the at the Tower of London, Technician Commitment event alongside Lord Sainsbury and Dr Tim Bradshaw, Chief Executive of the Russell Group.

Denise has proved to be a wonderful ambassador for the University of Nottingham and her contributions have also been recognised with her being awarded the Vice Chancellors Medal in 2019.



#### **Lucy Lloyd-Ruck**

Supporting the Senior Management team and 225 technical services staff Lucy has played a key role creating opportunities for technical services staff to engage in sustainability practice.

With 15 years' experience in partnership development in the cultural sector and graduating from Aurora Women in Leadership in 2021 Lucy plays and integral role supporting the technical services staff across at Manchester Metropolitan University.



#### Jane Mork

Jane is a certified Carbon Literacy Consultant with over 13 years' experience of studying and working within the field of social and environmental sustainability and over nine years' experience of Carbon Literacy. Together with Dr Rachel Dunk she forms the core of Manchester Metropolitan University's award-winning Carbon Literacy team.

Jane has played a key role in the development of a UK wide public sector Carbon Literacy toolkit as well as developed and delivered Carbon Literacy training and train-the-trainer

programmes to over 600 people from over 20 different local and international organisations including, Universities, Local Authorities, Third sector and Arts organisations.



#### **Rachel Soper**

Rachel is Senior Project Manager at Students Organising for Sustainability (SOS-UK) where she delivers sustainability programmes, training workshops and consultancy, as well as leading on the national Green Impact programme which engages staff across organisations with workplace sustainability action.



#### **David Kuntin**

David is a postdoctoral researcher at the University of York, focussing on the translation of regenerative therapies. He completed his Masters and PhD at the University of York, during which time he was involved with departmental and external groups, working toward more sustainable science.



#### **Kanupriya Bhargava**

Kanupriya is a data science and analytics professional with experience in building data and machine learning based solutions across various industries such as finance, retail, and FMCG. In her current role as an associate in the Portfolio Steering team at Swiss Re, she is responsible for developing and designing analytical solutions and initiatives to generate portfolio insights to support the property and special lines insurance unit of the company. Recently, she has also collaborated with Great Learning, an e-learning company, to design

and teach an online course in business statistics for MBA and business students. She holds an MSc. in Financial Statistics from the London School of Economics and a BSc. (Hons) in Mathematics with Economics from Loughborough University. She is also currently pursuing an actuarial qualification from the Institute and Faculty of Actuaries.



#### **Alicia Colson**

I'm a freelance archaeologist and ethnohistorian with a portfolio career. I'm interested in the interplay between digital humanities, pattern matching and machine learning (AI) particularly using images, often created by indigenous peoples, and texts. I've always had one foot in the humanities area and another in computer science. I studied at the Institute of Archaeology, UCL for my undergraduate degree (BA (Hons.), and for a MA/PhD (McGill) as the last doctoral student of the late Bruce G. Trigger. During the same period. I was a Research Visitor

(01/2000 – 09/2006), at the IAM Laboratory, Department of Electronics and Computer Science, Southampton, UK supervised by Dame Professor Wendy Hall. I trained in academic, government, and governmental organizations in the non-profit sector in the UK, Canada and the US. I'm fluent in four languages and I have undertaken extensive fieldwork in Canada, the UK, US, and Antigua as well as expeditions in Namibia and Iceland. My research interests include: hunter-gatherers of the Boreal Forest, digital humanities, archaeological theory, history of archaeology, and sub-Saharan Africa. I've been a volunteer member of the London Working Group for the HOT Missing Maps Community (https://www.missingmaps.org/) for the last three years, given my interest in computer vision and imagery. I was a Visiting Research Fellow at Department of Computing, Goldsmiths (03/2017 - 03/2019) and I'm currently one of the Wiley Digital Archive Research Fellows at the Royal Geographical Society and IBG. I've just launched a new hybrid publication, called Exploration Revealed, for Scientific Exploration Society. I'm currently working on two research projects one in northern Ontario and the other in southern Brazil.



#### **Adam Butler**

Working previously at Manchester Art Gallery, I joined MMU in 2018 bringing expertise as an Art Conservation technician, with a thorough understanding of the technical gallery and workshop environment and experience delivering large scale exhibitions worldwide. As a team leader, I am very proud to manage a team of highly skilled Technicians to deliver ambitious professional/student exhibitions and support Fine Art studios and workshop facilities, providing expert technical support for students and academics across the School of Art.



#### **Raymond Broadley**

As a BA (hons) Fine Art sculpture graduate and current practicing artist within the City I'm well placed to speak to students about their creative endeavours, both inside and outside the art school.

I enjoy working practically and creatively with the future artists of Manchester.



#### **Owen Ramsay**

I have a multidisciplinary background in contemporary art, creating video, sculpture and installation work as well as 6 years industry experience constructing and making for design, exhibition, museum and arts. I enjoy using this blend of creative and technical skills to help people with ambitious ideas and unusual technical challenges.



#### Anna Ravenscroft

Anna Ravenscroft is an Interpretation and Learning specialist. For many years she worked on the development of new First and Second World War Galleries at the Imperial War Museum; delivering award winning galleries and community engagement programmes. She is committed to exploring inclusive and imaginative forms of storytelling in museums.

As Interpretation Manager for the Technicians Gallery, Anna's focus is on delivering content in a way that is relatable, inspiring, useful and engaging for the target audience. This includes

developing a representation strategy to ensure every visiting young person sees themselves reflected in the space.



#### **Rachel Flaxman**

Rachel Flaxman is a specialist learning curator at the Science Museum, London, developing engaging and memorable museum experiences. Committed to showcasing the UK's technical community through bespoke interactive exhibits, Rachel has a passion for ensuring all young people have a positive relationship with science and technology. Her role as a Youth Trustee and Creative Mentor for young people supports her work to create exciting and engaging spaces.



#### **Martin Farley**

Raised between France and the US, Martin started down the path of becoming a researcher in his university years, taking him to Canada, the US, and the Netherlands. This path was interrupted though when his passion for sustainability led him to become the UK's (and Europe's) first full-time sustainable laboratory specialist at the University of Edinburgh. After he moved south to London where he founded Green Lab Associates, while establishing the

sustainable labs program at King's College London (where he was recognized with the Green Gown – Sustainability Professional award). Martin is currently UCL's first Sustainability Labs Advisor, and is helping to make UCL's labs more efficient to reduce their impact on the environment.



#### **Jan Brett**

I have worked in technical services for over 25 years. I have a M.Sc. in Molecular Genetics, a B.Sc. (Hons) in Biomedical Technology and I am a registered Chartered Scientist. I currently work in the Faculty of Health and Life Sciences at The University of Liverpool, as the Technical Development and Planning officer and have been in post since July 2020. Before this, I was a technical team leader for over thirteen years. My job in the faculty is to enable all our technicians to develop their skills, have equal access to development opportunities and assist in all aspects

of technical workforce planning. I also sit on our Technician Commitment steering group and I am chair of Liverpool University Technical Network.



#### **Kate Dixon**

Kate graduated from Plymouth University in 1992 with a BSc (Hons) in Biological Sciences and a keen interest in plant biology. After a period of further study in her hometown at Newcastle University Kate was awarded a MSc in Agricultural Biotechnology having worked with Professor Monica Hughes within her research team investigating the molecular and genetic basis of cold tolerance response in barley. Kate moved to Norfolk's John Innes Research Centre joining Professor George Coupland's research team as a technician supporting a large

team investigating flowering time response *Arabidposis Thaliana*. From here, Kate returned to her beloved West Country to study for her PhD at Exeter University investigating plant pathogen interactions in the rice blast fungus *Magnaporthe Grisea*.

After completing her PhD Kate worked in industry for the multinational biosciences company 'Applied Bioscience's (ABI) travelling the world providing specialist molecular biology technical support to customers sequencing the human genome, using molecular techniques in forensic science and within genetic testing labs using molecular biology tools to predict and diagnose genetic disorders. It was while working for ABI that Kate was invited to join a multidisciplinary team at Manchester University to Project Manage an MRC funded project, The UK DNA Banking Network. Here Kate project managed some high profile projects, managing the logistics and politics involved in suppling human biological samples to several of the Wellcome Trust Case Control Consortium projects that successfully identified genetic risk factors involved in conditions important to public health such as Types 2 Diabetes, Multiple Sclerosis, Arthritis and Heart Disease. Kate was promoted to manage the operations at Manchester University's Centre for Integrated Genomic Medicine, responsible for delivery of the operational requirements of a large multidisciplinary research group. From here, Kate was promoted to lead the administration of a large engineering school at Manchester University, being responsible for the admissions, programme administration and technical Professional Services staff and associated service delivery. In 2017, Kate made her next move to Manchester Metropolitan University to lead the 200 technical staff working at the University via her role as Head of Technical Services and more recently Director. Kate has a passion education and life -long learning and acknowledges the positive impact education can have both on the individual and on society as a whole.



#### Olga Khutoryanskaya

Olga graduated from Kazakh State National University (Almaty, Kazakhstan) with the first-class degree in Chemistry, she then completed MSc and PhD in Polymer Chemistry. Her PhD research was focussed on the development of novel functional grafted and cross-linked copolymers of maleic anhydride and styrene for different applications. She then worked as a research assistant in the Institute of Chemical Sciences (Almaty, Kazakhstan) and University of

Strathclyde, Department of Pure and Applied Chemistry (Glasgow, UK).

In September 2006, Olga joined the University of Reading as a postdoctoral researcher. She was working on the design, development and characterisation of polymer films, hydrogels and tablet formulations. She then decided to change her career path, and in 2009 Olga became a teaching and research technician. In June 2016, Olga was promoted to Technical Manager. In her current role, she leads a team of technicians and together they provide support to teaching and research across the School of Chemistry, Food and Pharmacy.



#### **Jared Carnie**

Coming from an administrative background, Jared joined the Technical Development and Modernisation project in October 2014. He worked as a data analyst, developing and piloting the Technician Skills, Roles and Responsibilities Audit that made up an integral part of the TDM toolkit. This continued to evolve into the Technician Survey in the NTDC Toolkit available now.

As part of the National Technician Development Centre, Jared has a dual role. He continues to oversee the development and implementation of the Technician Survey, whilst also working as Operations Manager for the office-based NTDC team.

#### Jedidah Mould

Before joining the NTDC, Jedidah Mould was a Lecturer in Public Health Nutrition (PHN) at Liverpool Hope University. Prior to that, she was a Ph.D. Researcher in PHN at Loughborough University.

Her research focussed on maternal and child nutrition. Prior to her Ph.D., she worked as a Nutrition and Agriculture Value Chain Consultant for Sight and Life NGO, Switzerland, and helped in conducting research to develop an affordable nutritious product for women of reproductive age in Ghana. She has also worked as a Visiting Lecturer at the University of Chester where she gained her MSC degree in PHN.

Jedidah joined the NTDC in January 2021 as a Research and Survey Officer. Jedidah's role involves capturing data from the technical workforce in institutions using audits and surveys which help to support continuous professional development.

## IST Half-day Virtual Technical Conference Wednesday 15th September 2021

























