MAIQS 2025
International Conference on Measurement, AI, Quality and Sustainability

26–28 August 2025, London, UK

MAIQS 2025

-Innovating for Smart and Sustainable Industries and Societies

Conference Program

Partners and Sponsors

Please visit the conference website for more information www.maiqs2025.org

Table of Contents

Welcome Message 2
Conference Committees 3
Keynote Speakers 6
Special Sessions 10
Conference Partners 11
Conference Sponsors 12
Conference Venue 13
Brunel University of London Campus Map 14
Eastern Gateway Building (ESGW) MAP 15
Program Grid 16
Presentation Guides 17
MAIQS 2025 Program Schedule – Tuesday 26 August 2025 18
MAIQS 2025 Program Schedule – Wednesday 27 August 2025 23
MAIQS 2025 Program Schedule – Thursday 28 August 2025 26

Welcome Message

On behalf of the Organising Committee, I am delighted to welcome you to the inaugural International Conference on Measurement, AI, Quality and Sustainability (MAIQS 2025), to be held at Brunel University of London on 26–28 August 2025.

Today's industries and societies are facing urgent and complex challenges. Their satisfactory solutions demand a rigorous scientific approach. We are entering a new era, Industry 4.0+, which is seeing the convergence of the Fourth Industrial Revolution and an emerging scientific revolution, the two reinforcing one another and advancing together.

The MAIQS themes of Measurement, AI, Quality, and Sustainability are fundamentally linked to this scientific revolution and lie at the heart of Industry 4.0+. They together underpin the trust, intelligence and high-value required to develop the future smart industries and sustainable societies.

We are proud to host this global gathering with contributions from over 15 countries, supported by a network of academic and industrial partners, including Brunel University of London, UK's National Physical Laboratory, Tsinghua University, China Jiliang University, Université d'Angers, EDP Sciences, North University of China, Mitutoyo, SensoPart, Hexagon, TWI, and others.

With a dynamic program of keynote speeches, technical tracks, special sessions and panel discussions, MAIQS 2025 provides a unique platform to explore novel ideas and solutions, and foster international collaborations.

I would like to express my sincere thanks to all the authors for your valuable contributions, as well as to our keynote and invited speakers, committee members, sponsors, and institutional and industrial partners for your invaluable support.

We hope you enjoy your time in London, a city well known for world-leading science and innovation, rich history, and beautiful summer. We wish you all a fruitful and enjoyable conference experience.

With warm regards,

Dr QingPing Yang
MAIQS 2025 Conference Chair

Conference Committees

Conference Board:

QingPing YANG, Brunel University of London, UK (Chair)
Alistair FORBES, National Physical Laboratory, UK (Co-Chair)
Abdérafi CHARKI, Université d'Angers, France (Co-Chair)
Yanfu LI, Tsinghua University, China (Co-Chair)
Binrui WANG, China Jiliang University, China (Co-Chair)
Wenyi LIU, North University of China, China
Valerie LIVINA, National Physical Laboratory, UK
Qiang WANG, China Jiliang University, China
Xiangjun WANG, Tianjin University, China
Huijie ZHAO, Beihang University, China

International Program Committee Co-Chairs:

Valerie LIVINA, National Physical Laboratory, UK
Marc HIMBERT, LNE-INM/CNAM Laboratoire National de métrologie et d'Essais, France
Wenyi LIU, North University of China, China
Qiang WANG, China Jiliang University, China
Huijie ZHAO, Beihang University, China

International Program Committee Members:

Faris ALWZINANI, Brunel University of London, UK
Honggen CHEN, Zhengzhou University of Aeronautics, China
Fuwen HU, North China University of Technology, China
Tianjian LI, University of Shanghai for Science and Technology, China
Feng LIU, Tianjin University, China
Xianping LIU, Warwick University, UK
Yohan NOH, Brunel University of London, UK
Nadeem QAZI, University of East London, UK
Qunfen QI, University of Bristol, UK
Mohd Rizal Bin SALLEH, Universiti Teknikal Malaysia Melaka, Malaysia
Isabel SASSOON, Brunel University of London, UK
Thammarat SOMTHONG, Thailand National Institute of Metrology, Thailand
Valentina STOJCESKA, Brunel University of London, UK
Changjing SUN, China Jiliang University, China
Wenjuan SUN, KU Leuven, Belgium
Mark SUTCLIFFE, TWI, UK
Qijian TANG, Shenzhen University, China
Zdenek VINTR, University of Defense, Czech Republic
Fang WANG, Brunel University of London, UK
Hong WEI, University of Reading, UK
Decheng WEN, Shandong University, China

Bin ZHANG, Brunel University of London, UK
Mengyuan Zhang, Kingston University, UK
Tao ZHANG, Warwick University, UK
Juan ZHOU, China Jiliang University, China
Yanping ZHU, Changzhou University, China

Advisory Committee:

Steve Dyke, Mitutoyo (UK) Ltd, UK
Barry JONES, Brunel University of London; IET (former Vice President), UK
Pete LOFTUS, Evalu8ion Ltd; University of Edinburgh; RCNDE; Sensing Innovation Leadership Council, UK
Ian NICHOLSON, TWI, UK
Scott PHILLPS, Autodesk, UK
Hans RABUS, PTB, Germany
Lee STOKES, MACE, UK

Scientific Committee:

Mokhtar ATTARI, University of Science and Technology Houari Boumediene (USTHB), Algeria
Priyanka BHARTI, National Physical Laboratory, UK
Abdérafi CHARKI, Université d'Angers, France
Honggen CHEN, Zhengzhou University of Aeronautics, China
Alistair FORBES, National Physical Laboratory, UK
Ariana FUGA, EDP Sciences, France
Peipei GAO, Nankai University, China
Thong Ngee GOH, National University of Singapore, Singapore
Hong-Zhong HUANG, University of Electronic Science and Technology of China, China
Marc HIMBERT, LNE-INM/CNAM Laboratoire National de métrologie et d'Essais, France
Argiris LASKARAKIS, Aristotle University of Thessaloniki, Greece
Feng LIU, Tianjin University, China
Jian LIU, The University of Arizona, USA
Wenyi LIU, North University of China, China
Yuanyuan LIU, Science Press; EDP Sciences, China
Valerie LIVINA, National Physical Laboratory, UK
Emanuela NATALE, The Università dell'Aquila, Italy
Seung-Nam PARK, Korea Research Institute of Standards and Science, South Korea
Qunfen QI, University of Bristol, UK
Prem K. RACHAKONDA, National Institute of Standards and Technology (NIST), Gaithersburg, USA
Vishal RAMNATH, University of South Africa, Republic of South Africa
Paul J. SCOTT, University of Huddersfield, UK
Changjing SUN, China Jiliang University, China
Marie-France THEVENON, University of Montpellier – CIRAD, France
Zdenek VINTR, University of Defense, Czech Republic
Qiang WANG, China Jiliang University, China
Decheng WEN, Shandong University, China
Juan ZHOU, China Jiliang University, China

Regional Chairs:

Mokhtar ATTARI, University of Science and Technology Houari Boumediene (USTHB), Algeria
Thong Ngee GOH, National University of Singapore, Singapore
Hong-Zhong HUANG, University of Electronic Science and Technology of China, China
Jian LIU, The University of Arizona, USA
Emanuela NATALE, University of L'Aquila, Italy
Xiangjun WANG, Tianjin University, China

Publishing and Promotion Committee:

Aliénor DECOURS-PEREZ, Publisher of the International Journal of Metrology and Quality Engineering (IJMQE), EDP Sciences, France
Lena KOUNOVSKY, Publisher of the International Journal of Metrology and Quality Engineering (IJMQE), EDP Sciences, France
Ariana FUGA, Publisher of the European Physical Journal Applied Physics (EPJ AP), EDP Sciences, France
Yuanyuan LIU, Publisher of Security and Safety (S&S), Science Press; EDP Sciences, China

Local Organising Committee:

QingPing YANG, Brunel University of London, UK (Chair)
Priyanka BHARTI, National Physical Laboratory, UK
Xinli DU, Brunel University of London, UK
Hongying MENG, Brunel University of London, UK
Nila NILAVALAN, Brunel University of London, UK
Yohan NOH, Brunel University of London, UK
Xizhi SUN, Brunel University of London, UK
Fang WANG, Brunel University of London, UK
Bin ZHANG, Brunel University of London, UK

Keynote Speakers

Professor Alistair Forbes
National Physical Laboratory (NPL)

Since joining the National Physical Laboratory (NPL) in 1985, Alistair Forbes has carried out research in mathematical and statistical modelling, algorithm design, uncertainty evaluation, numerical software development and validation with applications to metrology. Much of his work has been in the area of coordinate metrology, often undertaken in European collaborative projects, including:

- Generation of test data for coordinate metrology software
- Parametrization of geometric elements
- Reference software for fitting geometric elements according to the Chebyshev criterion
- The Virtual CMM
- CMM calibration
- Traceability in computationally-intensive metrology
- Standards for the evaluation of uncertainty of coordinate measurements in industry https://eucom-empir.eu

He is a Fellow in the Data Science Department at NPL and a Visiting Professor at the University of Huddersfield and at the University of Strathclyde, UK, He is chair of the IMEKO Technical Committee 21, Mathematical Tools for Measurements and a member of ISO TC 213, Geometric Product Specification.

Title of his speech:
Coordinate Metrology and the Quality Infrastructure

Professor Pete Loftus
Evalu8ion Ltd; University of Edinburgh

Pete had a 38 year career in Instrumentation and Measurement at Rolls-Royce fostering a passion for measurement and helping others to grow. As the company head of Measurement Engineering, he established standards, skills frameworks, quality system materials, and an R&D portfolio in the discipline. Now, with a private consultancy business and roles as Visiting Professor at the University of Edinburgh; Chair of the Sensing Innovation Leadership Council; Deputy Director of the Research Centre in NDE; Innovate UK contractor, and leader in local Scouting he continues to support and inspire the discipline and community.

Title of his speech:
Preserving Measurement as a Foundation of Trust and Confidence in the Digital Era

Professor Yan-Fu Li
Tsinghua University

Prof. Yan-Fu Li is currently the Director of the Institute for Quality & Reliability of Tsinghua University and a full Professor at the Department of Industrial Engineering in Tsinghua University, China. From 2011 to 2016, he was a faculty member at CentraleSupélec in Université Paris-Saclay, France. His research areas mainly include condition monitoring, fault detection and system reliability with the applications onto various engineering systems.

Dr. Li has published over 100 peer-reviewed international journal papers with an H-index = 41. The representative papers appear on IEEE Transactions, POM, IJOC, etc. He has been continuously elected as the Highly Cited Chinese Researcher 2019-2023 by Elsevier and Top 2% Scientists Worldwide 2021-2022 by Stanford University. He is the Principal Investigator (PI) of several government projects including the key project funded by National Natural Science Foundation of China and National Key R&D Program of China. He is also experienced in industrial research, the long-term partners include the top enterprises such as Huawei, China Southern Power Grid, etc. He holds 12 national patents, 1 international patent and 1 IEEE standard. He has won multiple national society and international society search/paper awards, including the Gold Medal of Geneva International Invention Exhibition. He is currently an Associate Editor of “IEEE Transactions on Industrial Informatics” and “Reliability Engineering & System Safety” and was an AE for “IEEE Transactions on Reliability” (2017-2024). He is the founding Chair of IEEE Technology and Management Society Beijing Chapter.

Title of his speech:
Reliability Engineering for Intelligent Autonomous Systems

Professor Binrui Wang
China Jiliang University

Prof. Binrui Wang (PhD) is a doctoral advisor, a state-sponsored returned overseas scholar, and the Vice President of China Jiliang University. He serves as the Director of the National and Local Joint Engineering Laboratory for Disaster Monitoring Technologies and Instruments, the discipline leader of the Provincial First-Class Discipline in Control Science and Engineering, and a recipient of the Zhejiang Province New Century Excellent Talent Award. His main research areas include bionic robots, quality inspection robots, and intelligent perception. As the first or corresponding author, he has published over 160 high-level academic papers, authored one monograph and two textbooks, and holds over 60 authorized invention patents as the first inventor. He has supervised over 100 graduate students and contributed to the formulation and revision of seven national standards and one ISO international standard. He has received the second prize from the Chinese Society of Automation. He serves as the Vice Chairman of the Robotics Professional Committee of the China Association for Standardization. Additionally, he is a member of the National Standards Committee Technical Committees TC591 and TC307.

Title of his speech:
Research on Calibration and Performance Testing of Industrial Robots

Dr Hans Rabus
PTB

Hans Rabus obtained a PhD in physics in 1992 at the Freie Universität Berlin and has since then with Germany's National Metrology Institute PTB. After eight years the field of synchrotron radiation metrology, he headed the section "detector-based optical radiometry" and organised the first international key comparison of UV spectral responsivity. After changing to ionizing radiation metrology, he chaired the department "Fundamentals of Dosimetry" from 2009 to 2020, pursuing research and development in cross-section measurements, nanodosimetry, track structure simulation and ion microbeam-based radiobiology.

From 2002-2005 he was secretary of the UV working group within the Consultative Committee for Photometry and Radiometry of the Metre Convention. From 2012-2018 Hans was leader of the task group on "Computational Micro- and Nanodosimetry" within WG 6 "Computational Dosimetry" of the European Radiation Dosimetry Group (EURADOS), followed by a six years' term as chair of EURADOS WG6 and consulting member of the EURADOS Council. Presently he is building the new EURADOS WG6 task group on AI in dosimetry.

Since 2020 Hans has been Senior Scientist for "Simulation and Artificial Intelligence in Medicine" and consulting member and temporarily deputy manager of PTB's Innovation Cluster metrology for Health. He is coordinator of pilot project "Metrology for Artificial Intelligence in Medicine (M4AIM)" within the German QI Digital initiative, which comprises 14 Early-Stage Researchers developing quantitative criteria for assessing explainability, robustness and uncertainty of AI algorithms and metrics for data quality (within the EU Testing and experimentation facility TEF Health).

Title of his speech:
Towards Formalized Assessment of Data Quality and Uncertainties of Machine Learning Output Compatible with the GUM

LEE STOKES
Global Head of Carbon – Mace Group

Lee's mission is to leave a legacy by creating thriving cities and places that limit their impact on the natural world.

He is an accomplished sustainability-focused innovator with more than 25 years of experience in implementing ESG programmes. He has led prestige projects globally for both private and public sector organisations, saving more than 2.7m tonnes of CO2e. An agile leader, he has expertise in mentoring and developing cross-functional teams and working in complex stakeholder environments.

Providing rigor to sustainability methodology and driving innovation through applied research, he has authored research on smart buildings, grid-scale carbon modelling and energy optimisation using machine learning and artificial intelligence.

Title of his speech:
Sustainability in the Global Built Environment

Dr QingPing Yang
Brunel University of London

Dr QingPing Yang is currently a Reader at Brunel University of London (BUL), leading Brunel Quality Engineering and Smart Technology (QUEST) Research Group, and Robotics and Automation Research Group. He joined the Brunel Centre for Manufacturing Metrology (BCMM) in 1988 with a visiting scholarship awarded by the AVIC, after his graduation in Instrumentation and Measurement Technology from Chengdu Aeronautical Polytechnic in 1983 and subsequent 4 years' research experiences at an Aircraft Structure Research Institute (AVIC, Xi'an) and admission to an MSc Programme in Robot Control and Intelligent Control at Northwestern Polytechnical University. In 1989, he was awarded an ORS Award and a PhD Studentship from British Technology Group to develop a patented smart 3D high precision probe system for CMMs, and received his PhD degree in October 1992.

His research experiences include sensors, instrumentation, dimensional metrology, smart systems, robotics, AI, quality engineering and sustainability. Over the last three decades, he has developed a unique and coherent research field broadly integrating metrology, quality engineering and smart technologies (including AI and robotics), published more than 120 papers and supervised (as the first supervisor) 27 PhD students to successful completion in these areas. He has led a number of research projects funded by EU, UK government and industry with a total funding of about £2.7 million as Principal Investigator and £1.2 million as Co-Investigator. Dr Yang has received numerous prizes and awards for outstanding academic and work performance in the past.

Title of his speech:
Towards Unification of Measurement, AI, Quality and Sustainability – Principles and Applications

Special Sessions

SS1:Artificial Intelligence in Measurement and Instrumentation

- QingPing YANG, Brunel University of London, UK
- Xiangjun WANG, Tianjin University, China
- Priyanka BHARTI, National Physical Laboratory, UK

SS2:Robotics and Smart Inspection

- Binrui WANG, China Jiliang University, China
- QingPing YANG, Brunel University of London, UK

SS3:Artificial Intelligence for NDT

- Mark SUTCLIFFE, TWI, UK
- Channa NAGESWARAN, TWI, UK
- Qiang WANG, China Jiliang University, China

SS4:Industrial Measurement & Control Networks and Systems

- Wenyi LIU, North University of China
- Nila NILAVALAN, Brunel University of London, UK

SS5:Digital Twins and Applications

- Hongying MENG, Brunel University of London, UK
- Qiang YANG, Zhejiang University, China

SS6:Innovations in Robot Mechanism Design, Sensors, and Control for Robotic Systems

- Yohan NOH, Brunel University of London, UK

SS7:Intelligent Quality Management

- Changjing SUN, China Jiliang University, China
- Decheng WEN, Shandong University, China
- Juan ZHOU, China Jiliang University, China

SS8:Artificial Intelligence in Societies

- Fang WANG, Brunel University of London, UK
- Qiwei CHEN, Brunel University of London, UK
- Chenyang ZHU, Changzhou University, China
- Jun XIAO, Shanghai Open University, China

SS9:Systems Reliability, Prognostics & Health Management

- Abdérafi CHARKI, Université d'Angers, France
- Nizar CHATTI, Université d'Angers, France

SS10:Tipping Points in Complex Systems

- Valerie LIVINA, National Physical Laboratory (NPL), UK
- Ivan SUDAKOW, Open University, UK
- Lee STOKES, MACE Group, UK

SS11:Advancing Sustainable Production: Innovations, Challenges and Future Directions

- Valentina STOJCESKA, Brunel University of London, UK

SS12:Advanced Manufacturing Technologies

- Josh BARRAS, TWI, UK
- Jhonattan GUTJAHR, TWI, UK
- Tianjian LI, University of Shanghai for Science and Technology, China
- QingPing YANG, Brunel University of London, UK

Conference Partners

Brunel University of London

NPL National Physical Laboratory

université angers

清华大学质量与可靠性研究院
Institute for Quality and Reliability, Tsinghua University

中國計量大學
CHINA JILIANG UNIVERSITY

edp sciences

Conference Sponsors

★★★★★

Mitutoyo

★★★

SENSOPART

★★★

NORTH UNIVERSITY OF CHINA 1941

★★

HEXAGON 海克斯康

★★★

Brunel Quality Engineering and Smart Technology (QUEST) Research Group

Sponsor and Exhibitor Categories

★ – Exhibitor
★★ – Bronze Sponsor
★★★ – Silver Sponsor
★★★★ – Gold Sponsor
★★★★★ – Platinum Sponsor

Getting to Brunel University London

BY BUS
From Heathrow Central: A10 "Heathrow Fast", every 15 minutes, (alight Hillingdon Rd at 'The Greenway' and use footpath to campus).

From Stockley Park: A10 "Heathrow Fast" as above.

From West Drayton railway station:
U3 (alight Cleveland Road)
U1 (alight Kingston Lane)
222 (alight Cowley Road and use path to campus).

From Uxbridge (underground) station:
U3 (alight Cleveland Road)
U1, U4 and U7 (alight Kingston Lane)
222 and U5 (alight Cowley Road and use footpath to campus).

BY UNDERGROUND
Uxbridge Station (Transport for London) take the Metropolitan Line from central London (and Piccadilly Line during peak hours). Then take a taxi, or bus U1, U3, U4 or U7. (Alternatively there is a 1 mile walking route.)

BY RAIL
West Drayton (First Great Western Link) is the nearest main-line station (approx 1.5 miles from the campus). Services from London Paddington or the West (Bristol). From West Drayton station take a bus towards Uxbridge: 222 (alight Cowley Road), U5 (alight Station Road), U3 (alight Cleveland Road) or U1 (alight Kingston Lane).

West Ruislip Station (Chiltern Railways) is the main-line service from London Marylebone and the North (Aylesbury, Banbury and Birmingham) and is approximately 4 miles from the campus. From West Ruislip Station take the U1 bus towards West Drayton, alight Kingston Lane.

BY ROAD
Entry by car is via Kingston Lane only. Sat Nav users: Please enter the road address (Kingston Lane) and the postcode (UB8 3PN). You will be directed to Kingston Lane, which is very close to our main entrance. From there, please follow the signs.

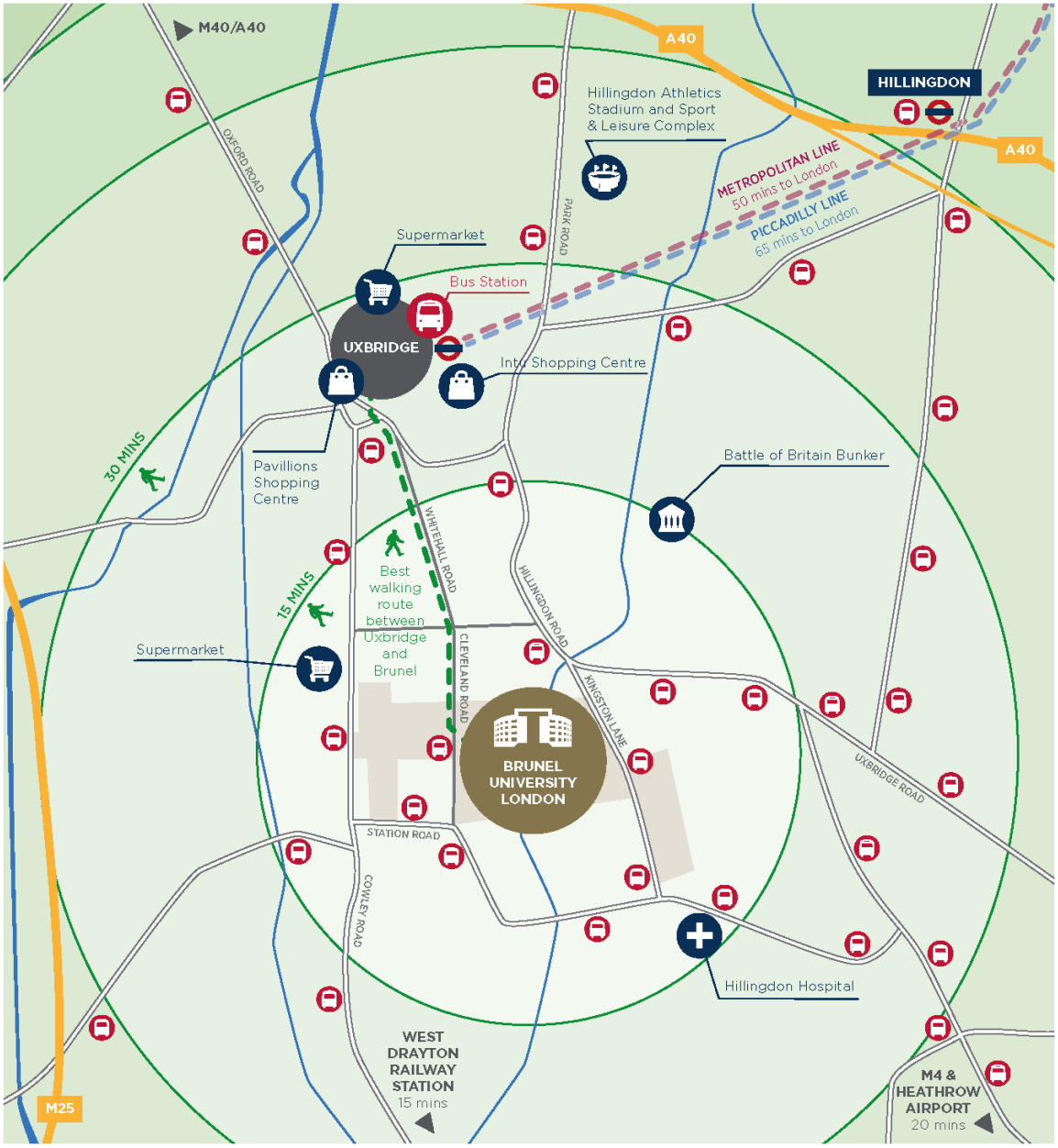
Parking on the Uxbridge Campus and in the local area is very restricted. Barriers control access to the site and all vehicles must display a valid permit. On arrival, pay-and-display parking is available. In addition, parking may also be pre-booked (restrictions apply).

Parking Charge Notices will be issued for illegally parked vehicles and vehicles not registered for a Brunel Virtual permit. If not registered for a Brunel Virtual permit all vehicles must use the Pay & Display.

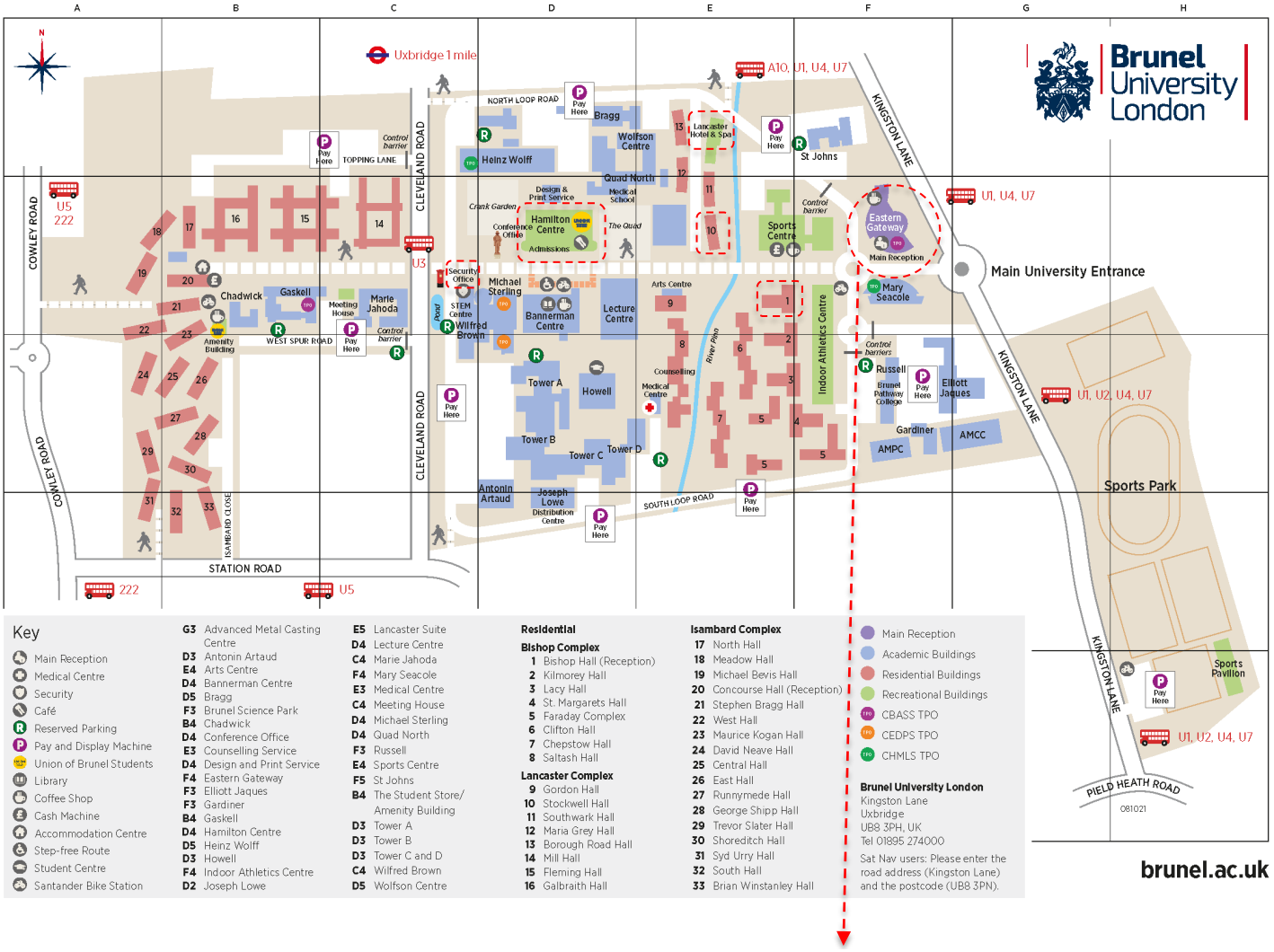
VISITOR PARKING FOR DISABLED BLUE BADGE HOLDERS
Accessible parking bays are available at various locations around campus. Please register for a virtual permit with the Main Reception in the Eastern Gateway Building and display your Blue Badge..

Brunel University London

brunel.ac.uk



Brunel University of London Campus Map



Key

- Main Reception
- Medical Centre
- Security
- Café
- Reserved Parking
- Pay and Display Machine
- Union of Brunel Students
- Library
- Coffee Shop
- Cash Machine
- Accommodation Centre
- Step-free Route
- Student Centre
- Santander Bike Station

- G3 Advanced Metal Casting Centre
- D3 Antonin Artaud
- E4 Arts Centre
- D4 Bannerman Centre
- D5 Bragg
- F3 Brunel Science Park
- B4 Chadwick
- D4 Conference Office
- E3 Counselling Service
- D4 Design and Print Service
- F4 Eastern Gateway
- F3 Elliott Jaques
- F3 Gardiner
- B4 Gaskell
- D4 Hamilton Centre
- D5 Heinz Wolff
- D3 Howell
- F4 Indoor Athletics Centre
- D2 Joseph Lowe
- E5 Lancaster Suite
- D4 Lecture Centre
- C4 Marie Jahoda
- F4 Mary Seacole
- E3 Medical Centre
- C4 Meeting House
- D4 Michael Sterling
- D4 Quad North
- F3 Russell
- E4 Sports Centre
- F5 St Johns
- B4 The Student Store/ Amenity Building
- D3 Tower A
- D3 Tower B
- D3 Tower C and D
- C4 Wilfred Brown
- D5 Wolfson Centre

Residential

Bishop Complex
1 Bishop Hall (Reception)
2 Kilmorey Hall
3 Lacy Hall
4 St. Margarets Hall
5 Faraday Complex
6 Clifton Hall
7 Chepstow Hall
8 Saltash Hall

Lancaster Complex
9 Gordon Hall
10 Stockwell Hall
11 Southwark Hall
12 Maria Grey Hall
13 Borough Road Hall
14 Mill Hall
15 Fleming Hall
16 Galbraith Hall

Isambard Complex
17 North Hall
18 Meadow Hall
19 Michael Bevis Hall
20 Concourse Hall (Reception)
21 Stephen Bragg Hall
22 West Hall
23 Maurice Kogan Hall
24 David Neave Hall
25 Central Hall
26 East Hall
27 Runnymede Hall
28 George Shipp Hall
29 Trevor Slater Hall
30 Shoreditch Hall
31 Syd Urry Hall
32 South Hall
33 Brian Winstanley Hall

- Main Reception
- Academic Buildings
- Residential Buildings
- Recreational Buildings
- CBASS TPO
- CEDPS TPO
- CHMLS TPO

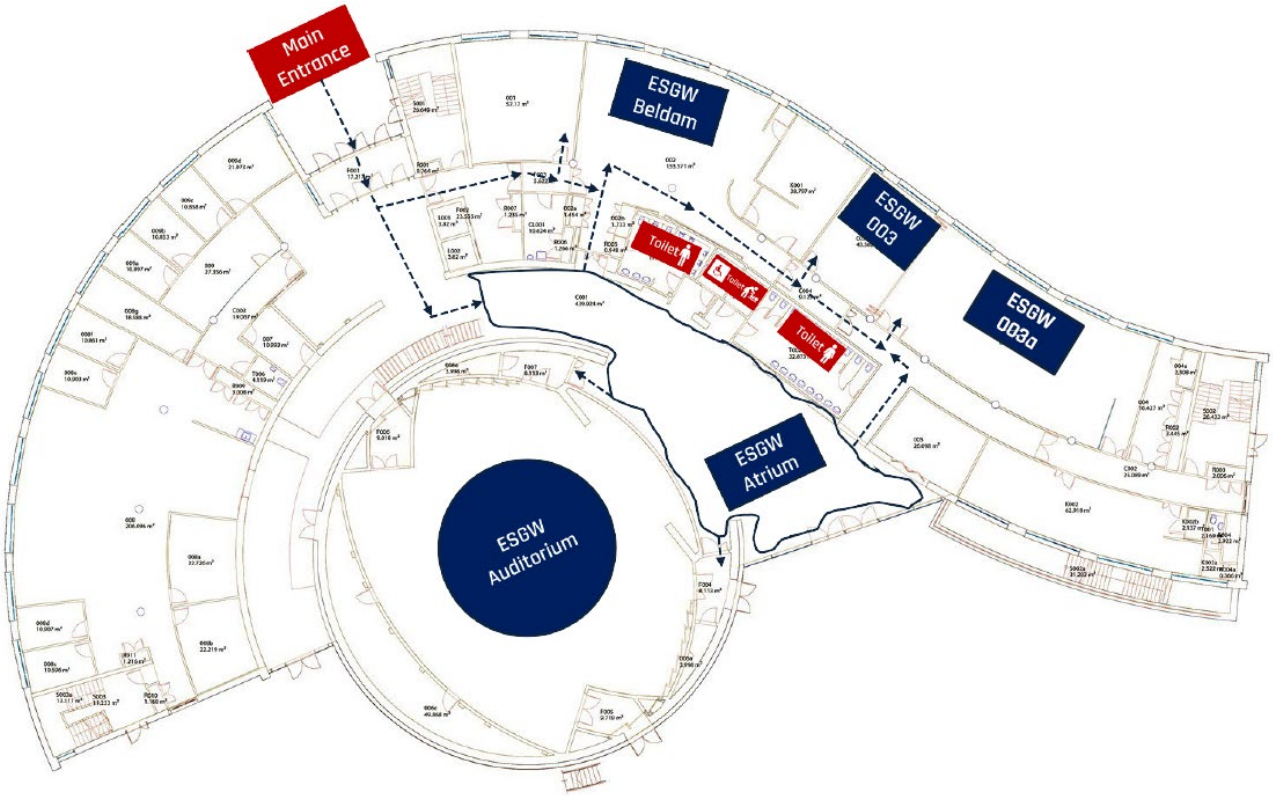
Brunel University London
Kingston Lane
Uxbridge
UB8 3PH, UK
Tel 01895 274000

Sat Nav users: Please enter the road address (Kingston Lane) and the postcode (UB8 3PN).

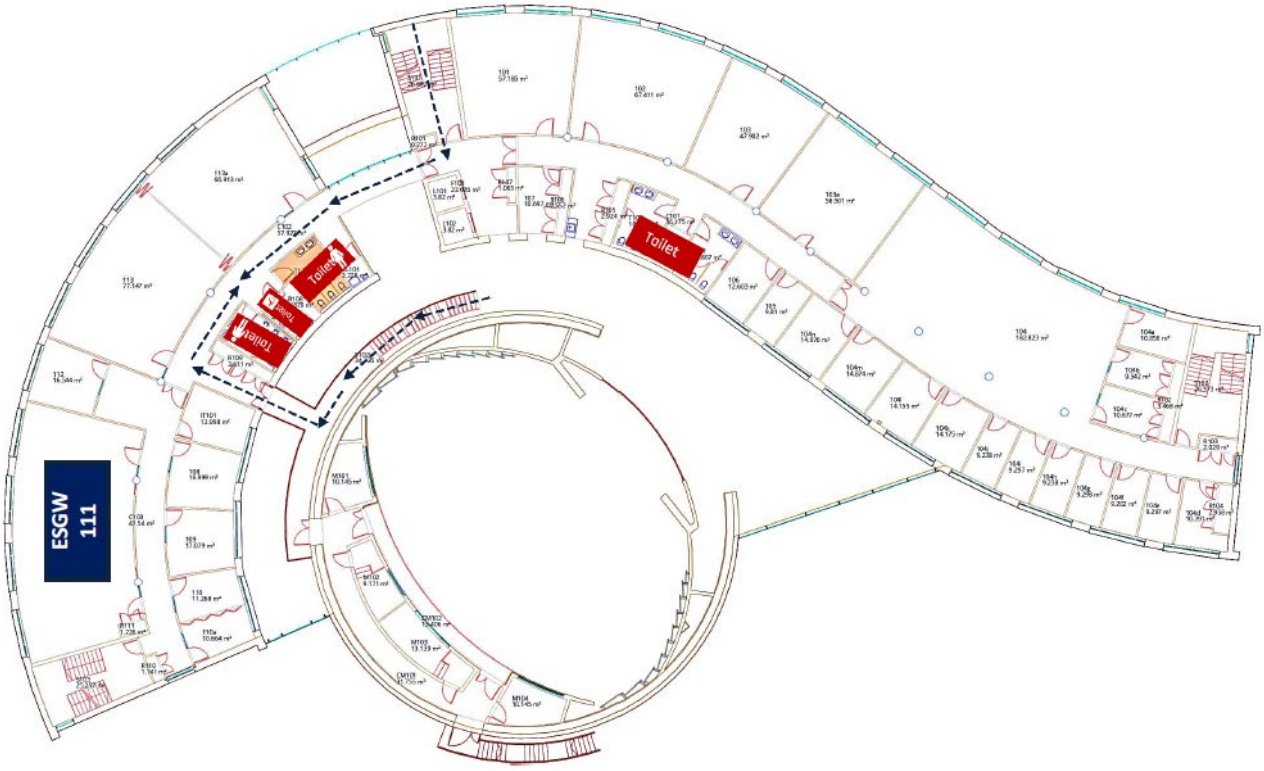
Conference Building: Eastern Gateway (ESGW)

Eastern Gateway Building (ESGW) MAP

Ground Floor



1st Floor



Program Grid

Tuesday 26th August 2025		
	ESGW 003a	ESGW 111
08:00-09:00	Registration	
09:00-09:20	Opening ceremony (Auditorim)	
09:20-10:00	Plenary Speaker: Prof Alistair Forbes, NPL (Auditorim) Coordinate Metrology and the Quality Infrastructure	
10:00-10:40	Plenary Speaker: Prof Pete Loftus, Evalu8ion Ltd; University of Edinburgh (Auditorim) Preserving Measurement as a Foundation of Trust and Confidence in the Digital Era	
10:40-11:10	Coffee break	
11:10-12:50	S1: Advanced Measurement I	S2: Artificial Intelligence
12:50-14:00	Lunch and Poster Session	
14:00-14:40	Plenary Speaker: Dr Hans Rabus, PTB (Auditorim) Towards Formalized Assessment of Data Quality and Uncertainties of Machine Learning Output Compatible with the GUM	
14:40-15:20	Plenary Speaker: Prof Binrui Wang, China Jiliang University (Auditorim) Research on Calibration and Performance Testing of Industrial Robots	
15:20-15:50	Coffee break	
15:50-17:50	S1: Advanced Measurement II	S2/SS1:Artificial Intelligence and Measurement
18:20-21:00	Welcome Reception (Newton Room, Hamilton Centre)	
Wednesday 27th August 2025		
08:30-09:00	Registration	
09:00-09:40	Plenary Speaker: Prof Yan-Fu Li, Tsinghua University (Auditorim) Reliability Engineering for Intelligent Autonomous Systems	
09:40-10:20	Plenary Speaker: Mr LEE STOKES, Global Head of Carbon – Mace Group (Auditorim) Sustainability in the Global Built Environment	
10:20-10:50	Coffee break	
10:50-12:50	SS2/SS6: Robotic Systems and Smart Inspection	SS12:Advanced Manufacturing Technologies
12:50-14:00	Lunch and Poster Session	
14:00-14:40	Plenary Speaker: Dr QingPing Yang, Brunel University of London (Auditorim) Towards Unification of Measurement, AI, Quality and Sustainability – Principles and Applications	
14:40-15:40	Plenary Panel Discussions: Emerging Challenges and Opportunities for the Future of Measurement, AI, Quality and Sustainability	
15:40-16:10	Coffee break	
16:10-17:50	SS3:Artificial Intelligence for NDT	SS8:Artificial Intelligence in Societies
18:30-21:30	Conference Gala Dinner (The Sir Christopher Wren Hotel, Windsor)	
Thursday 28th August 2025		
08:30-09:00	Registration	
09:00-10:20	SS10:Tipping Points in Complex Systems	SS11:Advancing Sustainable Production: Innovations, Challenges and Future Directions
10:20-10:50	Coffee break	
10:50-12:50	SS4:Industrial Measurement & Control Networks and Systems	S3/SS7: Advances in Quality Management
12:50-14:30	Lunch (Conference Board Meeting: 13:30-14:30)	
14:30-15:30	Plenary Discussions and Future Collaborations	
15:30-15:45	Conference Awards	
15:45-16:00	Closing Ceremony and Announcement of MAIQS 2026	
16:00-17:30	Farewell Reception (Lancaster Hotel)	

Presentation Guides

Oral Presentation Instructions:

- Each oral presentation is allocated 20 minutes, including 15 minutes for the presentation and 3 minutes for questions and discussion, and 2 minutes for the changing time and introduction of speaker.
- Presenters must bring their presentation on a USB flash drive, and are advised to include files in .ppt, .pptx, and .pdf formats to avoid compatibility issues.
- Files must be uploaded to the computer in the session room before the session starts. Uploading during the talk is not allowed.
- Presenters must arrive in their session room at least 10 minutes before the session begins to check in with the Session Chair and ensure their presentation is ready.
- Each session room will be equipped with a projector and a computer running Microsoft PowerPoint and Adobe Acrobat Reader.
- If the presentation includes videos or animations, these should be embedded in the file. Please also bring the original media files (e.g. .mp4, .avi, .mov) and prepare a simplified backup version without media in case of technical difficulties.

Poster Presentation Instructions:

- Posters must be prepared in A1 portrait format (594 mm wide × 841 mm high), and should include the title, names and affiliations of all authors. Please use the **MAIQS 2025 poster template**.
- Presenters are responsible for bringing their printed posters.
- Posters must be mounted before 8:30 AM on the 26 August and removed at the end of 28 August.
- Each poster board will be clearly numbered. Presenters must mount their posters on the correct numbered board as listed in the PDF program.
- Pins will be provided in the poster area. Presenters are responsible for both mounting and removing their own posters.

Online Presentation Instructions:

- Online presentations will be delivered via Microsoft Teams. A dedicated Teams link for each session will be sent to presenters one week before the conference.
- Presenters must ensure they have Microsoft Teams installed or access to the web version, and that their device is equipped with a working microphone, camera, and stable Internet connection.
- Each online presentation follows the same format as in-person presentations, with 20 minutes, including 15 minutes for the presentation and 3 minutes for questions and discussion, and 2 minutes for the changing time and introduction of speaker.
- Presenters are expected to join their session at least 10 minutes early to check connectivity and test screen sharing.
- Presentations should be prepared in .ppt, .pptx, or .pdf formats, and shared via screen share during the session.
- A session chair or technical host will be present to assist with coordination and facilitate the Q&A.

MAIQS 2025 Program Schedule – Tuesday 26 August 2025

Tuesday, 26 August 09:00 - 09:20
Opening Ceremony
Room: ESGW Auditorium
Session Chairs: QingPing Yang, Abdérafi Charki

- **Institutional Welcome**, Prof Geoff Rodgers, Pro Vice-Chancellor (Enterprise and Employment), Brunel University of London
- **Welcome Address,** Dr QingPing Yang, Conference Chair

Tuesday, 26 August 09:20 - 10:00
Coordinate Metrology and the Quality Infrastructure
Plenary Speaker: Prof Alistair Forbes, NPL, UK
Room: ESGW Auditorium
Session Chair: QingPing Yang

Tuesday, 26 August 10:00 - 10:40
Preserving Measurement as a Foundation of Trust and Confidence in the Digital Era
Plenary Speaker: Prof Pete Loftus, Evalu8ion Ltd; University of Edinburgh, UK
Room: ESGW Auditorium
Session Chair: Yan-fu Li

Tuesday, 26 August 10:40 - 11:10
Coffee Break and Poster Session 1 (Beldam Room and Atrium)

Tuesday, 26 August 11:10 - 12:50
S1: Advanced Measurement I
Room: ESGW 003a
Session Chairs: Alistair Forbes, Qingli Luo

Invited Talk: Mitutoyo advancements in optics and lens technology
Ralf Kruse (Mitutoyo (UK) Ltd)

Modeling and optimization of a photovoltaic module's parameters
Oumayma Mabrouk, Abderafi Charki, Nizar Chatti, and Xavier Sidambarompoule University of Angers, France); Sid-ali Blaifi (University of Medea, Algeria)

Joint optimisation model for light source position based on a combined target
Xiangjin Kong, Zijing Wang, Yupei Miao and Xiaoli Liu (Shenzhen University, China); Qingping Yang (Brunel University of London); Qijian Tang (Shenzhen University, China)

Self-calibration measurement and uncertainty evaluation of lens focal length based on Fabry-Perot Interferometer
Zelin Li, Xiaoyan Shen, Lei Li and Wenxia Kong (China Jiliang University)

Angular contact ball bearing cage kinematic deformation testing method
Xiqiang Ma, Nan Guo, Xiao Wang, Chunyang Liu and Jinyuan You (Henan University of Science and Technology, China

Tuesday, 26 August 11:10 - 12:50
S2: Artificial Intelligence
Room: ESGW 111
Session Chairs: QingPing Yang, Binrui Wang

Research progress on CPG-based movement technology for bionic robots control
Mingrui Wang, Binrui Wang, Junwei Fang, Qian Li and Pengfei Zhang (China Jiliang University)

Design of a bio-inspired adaptive central pattern generator control for pneumatic muscle antagonistic joint
Chenchao Ma, Feifei Qin and Binrui Wang (China Jiliang University)

Explainability of deep learning models for Covid-19 detection using PCA
Richard Yang, Qingping Yang, Fang Wang (Brunel University of London, UK); Ding Chen and Yang Qiu (Wuhan Union Hospital affiliated with Tongji Medical College, Huazhong University of Science and Technology, China)

Few-shot defect detection in industrial scenarios: a comprehensive review of challenges, advances, and frontier trends
Ruibo Wang and Tao Hong (China Jiliang University, China)

A deep reinforcement learning approach for flexible multi-path routing using graph neural networks
Kun Geng, Yingzi Zhang and Wenyi Liu (North University of China)

Tuesday, 26 August 12:50 - 14:00
Lunch and Poster Session (Beldam Room and Atrium)
Session Chair: Yohan Noh

P1. Research on local visual global localization method based on out-of-view reference of spatial point association
Gao Peipei (Nankai University, China); Liu Feng (Tianjin University, China); Yang Qingping (Brunel University London, UK); Wang Jiale (Tianjin University, China)

P2. A time synchronization optimization algorithm based on SharkNet
Qiang Li, Yanzhang Xie, Gaigai Liu, Wenyi Liu (North University of China)

P3. Gamma-corrected phase measuring deflectometry with DCT- Poisson solver for high-reflectivity surface reconstruction
Ji Hu, Chunyang Ma, Guofeng Zhang and Shuming Yang (Xi'an Jiaotong University, China)

P4. Adaptive multi-wavelength temperature retrieval method
Yuqian Dong, Xiaojian Hao, Shenxiang Feng, Tong Wei and Hongkai Wei (North University of China)

P5. CO2 concentration detection based on TDLAS technology
Songtao Gao, Xiaojian Hao, Biming Mo, Junjie Chen, Shuaijun Li, Junjie Ma, Hongkai Wei and Yanlin Wu (North University of China)

P6. Design and application of a robust multivariate control chart for gas PE pipe production
Fan Ye, Juan Zhou, Qiang Wang, Weijiao Zhang, Zuoyuan Zhang, Haiting Zhou, Xiangliang Chen (China Jiliang University)

P7. Aerodynamic design and analysis of horizontal-axis wind turbine blades
Zhongyuan Qiao (North China University of Technology); Suriani Binti Che Kar (Brunel University of London, UK)

P8. MCAF-Net: a non-invasive early screening method for coronary artery disease based on a multi-scale cross-modal model
Fangyuan Chen, Jiangong Cui, Renxin Wang, Pengcheng Shi, Guofu Wang (North University of China); Xinyi Wang (Second Hospital of Shanxi Medical, China); Guojun Zhang (North University of China)

P9. Characteristic investigation of stress-hydrogen coupling hydrogen diffusion of X80 steel based on finite element simulation
Jiaping Shen and Haiting Zhou (China Jiliang University, China); Xinwei Zhu and Jianhua Yang (Jiaxing Special Equipment Inspection and Testing Institute, China); Haibo Miu and Zhihui Cai (Wenzhou Special Equipment Testing Research Institute, China); Qiang Wang and Yun Song (China Jiliang University, China)

P10. Ground penetrating radar signal recognition and localization method based on improved Yolov8
Peng He, Haiting Zhou, Jiajun Feng, Linming Xia, Qiang Wang, Yun Song, Juan Zhou (China Jiliang University)

P11. Application of artificial intelligence in 3D printing
Tiangi Liu (North China University of Technology); Xizhi Sun (Brunel University London, UK)

P12. Research on analytical methods for defect measurement systems in gas polyethylene pipe welded
Chenjia Zong, Juan Zhou, Qiang Wang, Zhilong Yu, Haiting Zhou, Yun Song and Jiayan Chen (China Jiliang University).

P13. Ultrasonic guided wave-based defect detection in extra-long, small-diameter, thin-walled solar heat-absorbing tubes with heterogeneous salt films
Xinyi Ni, Xiaomeng Xu and Qiang Wang (China Jiliang University); Luowei Cao, Lei Zhang (China Special Equipment Inspection & Research Institute); Le Li (China Jiliang University)and Guodong Jia (Henan Boiler and Pressure Vessel Inspection Technology Research Institute, China)

P14. Correction of misalignment errors in the magnetic gradient tensor measurement system and its application in localization
Yali Shen and Yingzi Zhang (North University of China); Qingping Yang (Brunel University of London, UK)

P15. Theoretical overview of Quality 4.0
Wenyu Chen and Lei Sun (Shanghai Dianji University, China)

P16. Theoretical overview of Quality 4.0 An investigation of the use of the solid-state microwave technology as an energy-efficient method to improve heating uniformity and moisture retention during the baking process
Leyli Vahid Dastjerdi and Valentina Stojceska (Brunel University of London, UK); Maria Oruna-Concha (University of Reading, UK); Savvas Tassou (Brunel University of London, UK)

P17. Tipping points in MOOC engagement: AI-driven sentiment and topic modeling of cybersecurity learner feedback on the SWAYAM platform
Jeetendra Pande (Uttarakhand Open University, India), Harsh Vardhan Pant (Pal College of Technology and Management, India) and Ivan Sudakow (The Open University, UK)

P18. The Reconceptualization of Industrial Measurement and Control Networks
Wenyi Liu (North University of China)

P19. The VR-controlled robotics – technical analysis
Prajjwalit Singh, Qingping Yang (Brunel University of London)

Tuesday, 26 August 14:00 - 14:40
Towards Formalized Assessment of Data Quality and Uncertainties of Machine Learning Output Compatible with the GUM
Plenary Speaker: Dr Hans Rabus, PTB, Germany
Room: ESGW Auditorium
Session Chair: Abdérafi Charki

Tuesday, 26 August 14:40 - 15:20
Research on Calibration and Performance Testing of Industrial Robots
Plenary Speaker: Prof Binrui Wang, China Jiliang University, China
Room: ESGW Auditorium
Session Chair: QingPing Yang

Tuesday, 26 August 15:20 - 15:50
Coffee Break and Poster Session (Beldam Room and Atrium)

Tuesday, 26 August 15:50-17:50
S1: Advanced Measurement II
Room: ESGW 003a
Session Chairs: Pete Loftus, Qiang Wang

Invited Talk: Mitutoyo's digital threads for manufacturing and quality control
Andrew Fifield (Mitutoyo (UK) Ltd)

3D drift correction of AFM using Lissajous and localised scanning
Xizhi Sun, Edward Heaps, Andrew Yacoot (National Physical Laboratory, UK); Qingping Yang (Brunel University of London, UK); Petr Grolich and Petr Klapetek (Czech Metrology Institute, Czech Republic)

Strengthening data privacy and interconnectivity of a digital twin prototype: application to a heat pump test bench
Harimanga-Yannick Rakotonirina, Abderafi Charki (Universite d'Angers, France); David Espes (Universite de Bretagne, France), Bassel Chokr (Universite d'Angers, France); Antonio Costanzo (ESAIP, France)

A low-cost Stewart platform-based multi-axis force/torque sensor using strain gauges
Yohan Noh, Tamanna Billah, Ruiheng Wu and Dalia Osman (Brunel University of London, UK)

Design of remote wireless video monitoring system for forest fires based on Internet of Things
Xiqiang Ma, Fang Yang, Nan Guo (Henan University of Science and Technology, China)

Microstructural and leaching behavior of aluminum pressure cookware: A case for standardized testing in Saudi Arabia
Hussain Alsalamah, Mohammed A. Hassan, Saed A. Alzahrani, Ibrahim A. AlMoghed (Saudi Standards Organization, Saudi Arabia); Carl Magnus (Intertek Testing Service, UK)

Tuesday, 26 August 15:50-17:50
S2/SS1: Artificial Intelligence and Measurement
Room: ESGW 111
Session Chairs: Jean-Laurent Hippolyte, Abdérafi CHARKI

Invited Talk: Semi-automatic mapping with SBERT for ontology-based interoperability in construction data systems
Priyanka Bharti, Jean-Laurent Hippolyte and Michael Chrubasik (National Physical Laboratory, UK)

Invited Talk: Visual geolocalization and real-time fire detection for UAVs in GNSS-denied environments
Qingli Luo, Jiaxu Wang, Shubin Zhang, Tiantian Qin and Xiangjun Wang (Tianjin University, China)

TMRL-NBV: Triangular mesh-based reinforcement learning for next-best-view in active 3D reconstruction
Huijie Zhao, Yong Tang, Sivu Qi, Hongzhi Jiang and Xudong Li (Beihang University, China)

From transcript to insights: summarizing safety culture interviews with LLMs
Wouter Steijn, Janneke van de Loo and Dolf van der Beek (TNO, Netherlands); Jop Groeneweg (TNO; TU Delft; Leiden University, Netherlands)

Rapid aerodynamic approximation of rotating blades using AI
Mars Burke and Alvin Gatto (Brunel University of London, UK)

Reliability testing and machine learning approach for modelling high-power light-emitting diode reliability
Quoc Tiep La, Zdenek Vintr, David Valis, Libor Zak and Zdenek Kohl (University of Defence, Czech Republic)

Tuesday, 26 August 18:20-20:30
Welcome Reception
Room: Newton Room, Hamilton Centre

MAIQS 2025 Program Schedule – Wednesday 27 August 2025

Wednesday, 27 August 09:00 - 09:40
Reliability Engineering for Intelligent Autonomous Systems
Plenary Speaker: Prof Yan-Fu Li, Tsinghua University, China
Room: ESGW Auditorium
Session Chair: Alistair Forbes

Wednesday, 27 August 09:40 - 10:20
Sustainability in the Global Built Environment
Plenary Speaker: Lee Stokes, Global Head of Carbon – Mace Group, UK
Room: ESGW Auditorium
Session Chair: Valentina Stojceska

Wednesday, 27 August 10:20 - 10:50
Coffee Break and Poster Session (Beldam Room and Atrium)

Wednesday, 27 August 10.50-12:50
SS2/SS6: Robotic Systems and Smart Inspection
Room: ESGW 003a
Session Chairs: QingPing Yang, Yohan Noh

Invited Talk: IntACom™: Advancing Robotic NDT
Ian Nicholson (TWI Ltd, UK)

Invited Talk: Smart vision for robot based inspections
Nadja Nagel (SensoPart, Germany)

Invited Talk: A review of non-destructive testing using robot
Yongqian Lin and Hanming Zhang (North China University of Technology); Xizhi Sun (Brunel University of London) and Yongliang Chen (North China University of Technology)

Surgical robot for implantation
Xinli Du (Brunel University of London, UK)

Development of force, torque, and shape sensors using optoelectronic technologies for robotic systems
Yohan Noh (Brunel University of London, UK)

Design of a two axis optoelectronic joint measurement sensor using orientation constraining mechanism for flexible robotic application
Dalia Osman, Madeshwaran Murali and Yohan Noh (Brunel University of London, UK)

Wednesday, 27 August 10:50 - 12:50
SS12: Advanced Manufacturing Technologies
Room: ESGW 111
Session Chairs: Bin Zhang, Xizhi Sun

Invited Talk: Coating applications of EHLA in geothermal pipeline for corrosion resistance
Tomaso Maccio (TWI Ltd, UK)

Invited Talk: Generative design method of machine tool conceptual configuration and its application
Yulong Yang and Tianjian Li (University of Shanghai for Science and Technology, China)

Influence of 3D printing process parameters and design on mechanical properties of tissue scaffolds
Karim Poonawala and Bin Zhang (Brunel University of London, UK)

Influence of process parameters on powder jet properties in L-DEDp using different nozzle designs
Joao Pedro Madeira Araujo (Brunel University of London, UK); Jhonattan Gutjahr (TWI Ltd, UK); Qingping Yang and Diane Mynors (Brunel University of London, UK)

Wednesday, August 27 12:50 - 14:00
Lunch and Poster Session (Beldam Room and Atrium)

Wednesday, 27 August 14:00 - 14:40
Towards Unification of Measurement, AI, Quality and Sustainability – Principles and Applications
Plenary Speaker: Dr QingPing Yang, Brunel University of London, UK
Room: ESGW Auditorium
Session Chair: Pete Loftus

Wednesday, 27 August 14:40 - 15:40
Plenary Panel Discussions: Emerging Challenges and Opportunities for the Future of Measurement, AI, Quality and Sustainability
Panelists: Alistair Forbes, Pete Loftus, Yan-fu Li, Binrui Wang, Lee Stokes, Ian Nicholson
Room: ESGW Auditorium
Session Chairs: QingPing Yang, Nila Nilavalan

Wednesday, 27 August 15:40 - 16:10
Coffee Break and Poster Session (Beldam Room and Atrium)

Wednesday, 27 August 16:10 - 17:50
SS3: Artificial Intelligence for NDT
Room: ESGW 003a
Session Chairs: Ian Nicholson, Qiang Wang

Invited Talk: AI-driven quality assurance in laser welding of battery connections
Kai Yang (TWI Ltd, UK)

High-density polyethylene buried natural gas pipe butt fusion joint defects automatic detection via total focusing method and deep learning
Qiang Wang, Haowen Zhang, Tianliang Chen and Weirong Xu (China Jiliang University)

Invited Talk: Trust in AI for NDT: Mitigating risks by building in knowledge
Alastair Poole (University of Strathclyde, UK)

NEAT-based 3D path planning for mobile robotic arms in NDT with offline inverse kinematics validation
Mengyuan Zhang and Qingping Yang (Brunel University of London, UK); Mark Sutcliffe and Ian Nicholson (TWI Ltd, UK)

LSTM based SCC detection using ultrasonic testing based data
Sumit Kumar (Brunel University of London, UK); Channa Nageshwaran (TWI Ltd, UK); Qingping Yang (Brunel University of London, UK)

Wednesday, 27 August 16:10-17:50
SS8: Artificial Intelligence in Societies
Room: ESGW 111
Session Chairs: Fang Wang, Chenyang Zhu

Invited Talk: Temporal-logic guided learning for reliable embodied multi-robot systems
Chenyang Zhu (Changzhou University, China)

Personalized email marketing with agentic Al
Venkatasubramaniam Gopalakrishnudu, George Ghinea, Kate Hone and Yongmin Li (Brunel University London, UK)

A framework for truth and honesty in language processing for safety engineering
John Robert Taylor (University of Southern Denmark)

Visual transformer with depthwise separable convolution projections for video-based human action recognition
Yu Cao and Fang Wang (Brunel University of London, UK); Qiusheng Zheng (Zhongyuan University of Technology, UK)

Streamlining copyright protection: leveraging algorithmic justice, administrative, civil systems
Faye Fangfei Wang (Brunel University of London, UK)

Wednesday, 27 August 18:30-21:30
Conference Gala Dinner
Room: The Sir Christopher Wren Hotel, Windsor

MAIQS 2025 Program Schedule – Thursday 28 August 2025

Thursday, 28 August 09:00 - 10:20
SS10: Tipping Points in Complex Systems
Room: ESGW003a
Session Chairs: Ivan Sudakow, Lee Stokes

Climate modelling without irrelevant weather details: the Half-Order Energy Balance Equation
Shaun Lovejoy, Dustin Lebiadowski, Yifan Wang and Dave Clark (McGill University, Canada)

Tipping in the Earth System from Rapid Carbon Forcing
Ivan Sudakow (The Open University, UK)

Detecting and classifying dynamical transitions in mass extinction events and environmental turnovers using recurrence quantification analysis
Andrej Spiridonov, Robertas Stankevič, Simona Rinkevičiūtė, Sigitas Radzevičius, Liudas Daumantas and Simona Bekeraitė (Vilnius University, Lithuania)

Advancing predictive understanding of summer Arctic sea ice
Dmitri Kondrashov (University of California - Los Angeles, USA)

Thursday, 28 August 09:00 - 10:20
SS11: Advancing Sustainable Production: Innovations, Challenges and Future Directions
Room: ESGW111
Session Chairs: Valentina Stojceska, Xiaomeng Xu

Sustainability assessment of a novel solar thermal system (A case study)
Valentina Stojceska (Brunel University of London, UK)

Plate waste measurement in hospitality: examining tailored interventions and impact through nudges, mobile ethnography and AI-ML solutions
Gabriela Appel, Ofira Ayalon and Noga Collins-Kreinner (University of Haifa, Israel)

Environmental and economic sustainability assessment of food waste management options in a tortilla industry (a case study)
Mosunmola Adeoye and Lu Gan (Brunel University of London, UK); Zainab Oyetunde, Usman and Simon Willcock (Rothamsted Research, UK); Valentina Stojceska (Brunel University of London, UK)

The relation between Artificial Intelligence (AI), Eco Innovation (EI) and Green Innovation (GI) and effects on sustainability
Lana Freihat (Brunel University London, UK)

Thursday, 28 August 10:20 - 10:50
Coffee Break and Poster Session (Beldam Room and Atrium)

Thursday, 28 August 10:50 - 12:50
SS4: Industrial Measurement & Control Networks and Systems
Room: ESGW 003a
Session Chairs: Nila Nilavalan, Kun Zhou

Invited Talk: The Reconceptualization of Industrial Measurement and Control Networks
Wenyi Liu (North University of China)

Invited Talk: Broadband Industrial Fieldbus Process Automation Solution
Yi Huang (Kyland Technology Co., Ltd, China)

Invited Talk: Future communication technologies for industrial control & networks and systems
Nila NILAVALAN (Brunel University of London, UK)

Measurement system of elevator shaft based on 2D LiDAR and corner point detection technologies
Zonghua Qi, Yinglian Jin, Junwei Fang, Bin Zhang, Kun Zhou and Chunxiang Zhu (China Jiliang University)

SharkNet-5G wireless link integration technology research
Yanzhang Xie, Wenyi Liu (North University of China); Qingping Yang (Brunel University of London, UK); Qiang Li and Gaigai Liu (North University of China)

Thursday, 28 August 10:50 - 12:50
S3/SS7: Advances in Quality Management
Room: ESGW 111
Session Chairs: Changjing Sun, Juan Zhou

Invited Talk: Thoughts on quality management in the AI era
Decheng Wen (Shandong University, China)

A study on the application and maturity evaluation of digital quality management based on literature analysis
Guihua Dai and Changjing Sun (China Jiliang University)

Opportunities of explainable Al for enhancing management systems
Thanyalak Sangdean, Aydin Nassehi and Qunfen Qi (University of Bristol, UK)

Hybrid and Deep Learning Architectures for Predictive Maintenance: Evaluating LSTM, and Attention-Based LSTM-XGBoost on Turbofan Engine RUL
Adam Ahmed (Brunel University of London, UK)

How short-video e-commerce shapes urban economic integration and its spatial spillovers
Weidong Wang and Jinchi Ma (China Jiliang University)

Navigating careers in the digital age: the influence of Al-powered social media platforms on Chinese graduate students' career decision-making
Yinghao Wen (King's College London, UK)

Thursday, 28 August 12:50 - 14:30
Lunch and Poster Session (Beldam Room and Atrium)

Thursday, 28 August 13:30 - 14:30
Conference Board Meeting
Room: ESGW 111

Thursday, 28 August 14:30 - 15:30
Plenary Discussions and Future Collaborations
Room: ESGW Auditorium
Session Chair: QingPing Yang

Thursday, 28 August 15:30 - 15:45
Conference Awards
Room: ESGW Auditorium
Session Chair: Abdérafi Charki

Thursday, 28 August 15:45 - 16:00
Closing ceremony and Announcement of MAIQS 2026
Room: ESGW Auditorium
Session Chairs: QingPing Yang, Binrui Wang

Thursday, 28 August 16:00 - 17:30
Farewell Reception
Room: Lancaster Hotel

Notes

Notes