



University of  
**Strathclyde**  
**Glasgow**



7<sup>th</sup> INTERNATIONAL ACADEMY OF  
ENGINEERING AND TECHNOLOGY  
FORUM ON  
FUTURE MANUFACTURING  
TECHNOLOGIES & SYSTEMS

PROGRAMME

20 – 22 AUGUST 2026

UNIVERSITY OF STRATHCLYDE  
GLASGOW, UK

**DAY 1 | 20<sup>TH</sup> AUGUST 2026 (THURSDAY) – REGISTRATION AND WELCOME RECEPTION**

**VENUE: LEVEL 7 ROOM JW7.06B, DEPARTMENT OF DMEM, JAMES WEIR BUILDING, UNIVERSITY OF STRATHCLYDE, 75 MONTROSE STREET, GLASGOW, G1 1XJ**

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| 15:30-19:00 | Registration      |
| 17:00-19:00 | Welcome Reception |
| Close Day 1 | Free Evening      |

**DAY 2 | 21<sup>ST</sup> AUGUST 2026 (FRIDAY) – AET FORUM AND GENERAL MEETING**

**VENUE: THE CARNEGIE ROOM, ROSS PRIORY, ROSS LOAN, ALEXANDRIA, G83 8NL**

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| 07:45-08:50                                                                          | Bus transport from James Weir Building, University of Strathclyde, 75 Montrose Street, Glasgow, G1 1XJ to Ross Priory         |
| 08:50-09:10                                                                          | Registration, Tea, Coffee & Biscuits                                                                                          |
| <b>OPENING CEREMONY</b><br>Chair: Prof. Xichun Luo, <i>University of Strathclyde</i> |                                                                                                                               |
| 09:10-09:20                                                                          | <b>Host Welcome Address</b><br>Prof. Campbell Booth, Associate Principal and Executive Dean, <i>University of Strathclyde</i> |
| 09:20-09:30                                                                          | <b>AET President Welcome Address</b><br>Prof. Lihui Wang, <i>KTH Royal Institute of Technology</i>                            |
| <b>KEYNOTE SESSION 1</b><br>Chair: Prof. Fred Roozeboom, <i>University of Twente</i> |                                                                                                                               |
| 09:30-09:50                                                                          | <b>KEYNOTE 1: Quo Vadis, Manufacturing?</b><br>Prof. Kornel Ehmann, <i>Northwestern University</i>                            |
| 09:50-10:10                                                                          | <b>KEYNOTE 2: On Atomic-scale Manufacturing</b>                                                                               |

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|                                                                                                              | Prof. Fengzhou Fang, <i>University College Dublin</i>                                                                                                                                                           |
| 10:10-10:30                                                                                                  | <b>KEYNOTE 3: Heterogeneous Integration for Classical and Quantum Photonics Applications</b><br>Prof. Michael Strain, <i>University of Strathclyde</i>                                                          |
| 10:30-10:50                                                                                                  | <b>KEYNOTE 4: AI in Manufacturing Research – A Swedish Perspective</b><br>Prof. Lihui Wang, <i>KTH Royal Institute of Technology</i>                                                                            |
| <b>INVITED TALK SESSION 1</b><br>Chair: Prof. Thomas Arnold, <i>Leibniz Institute of Surface Engineering</i> |                                                                                                                                                                                                                 |
| 10:50-11:00                                                                                                  | <b>INVITED TALK 1: Atomic layer processing: advancing 3D electronic architectures and new applications in nanofiltration membranes</b><br>Prof. Fred Roozeboom, <i>University of Twente</i>                     |
| 11:00-11:10                                                                                                  | <b>INVITED TALK 2: Rapid Fabrication of Re-Entrant Super-Repellent Metals via Confined Shear-Induced Structure Discretization</b><br>Prof. Jining Sun, <i>Dalian University of Technology</i>                   |
| 11:10-11:20                                                                                                  | <b>INVITED TALK 3: Advancing Atomic and Close-to-Atomic Scale Manufacturing: From Structural Modulation to Functional Device Fabrication</b><br>Prof. Chengyong Wang, <i>Guangdong University of Technology</i> |
| 11:20-11:30                                                                                                  | <b>INVITED TALK 4: Spatiotemporal Learning for Uncertainty-Aware Contour Error Prediction in Blade Milling</b><br>Prof. Xu Han, <i>Hebei University of Technology</i>                                           |
| 11:30-12:00                                                                                                  | <b>Q &amp; A and Panel Discussion</b> (Chair: Prof. Paul Shore, Loxham Precision Ltd)                                                                                                                           |
| 12:00-13:20                                                                                                  | <b>Lunch Break</b>                                                                                                                                                                                              |
| <b>KEYNOTE SESSION 2</b><br>Chair: Prof. Kornel Ehmann, <i>Northwestern University</i>                       |                                                                                                                                                                                                                 |
| 13:20-13:40                                                                                                  | <b>KEYNOTE 5: Ultra-precision enabling our quantum future</b><br>Prof. Paul Shore, <i>Loxham Precision Ltd</i>                                                                                                  |

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| 13:40-14:00                                                                                      | <b>KEYNOTE 6: Physics-Informed and AI-Enhanced Manufacturing: From Process Control to Quality Assurance</b><br><br>Prof. Robert Gao, <i>Case Western Reserve University</i>                                                                                                                        |
| <b>INVITED TALK SESSION 2</b><br><br>Chair: Prof. Xichun Luo, <i>University of Strathclyde</i>   |                                                                                                                                                                                                                                                                                                    |
| 14:00-14:10                                                                                      | <b>INVITED TALK 5: Ion beam-based ultra-precision polishing of metal optics</b><br><br>Prof. Thomas Arnold, <i>Leibniz Institute of Surface Engineering (IOM)</i>                                                                                                                                  |
| 14:10-14:20                                                                                      | <b>INVITED TALK 6: Neural Operators on Riemannian Manifolds</b><br><br>Prof. Yingguang Li, <i>Nanjing University of Aeronautics and Astronautics</i>                                                                                                                                               |
| 14:20-14:40                                                                                      | <b>Q &amp; A and Panel Discussion (Chair: Prof. Xichun Luo)</b>                                                                                                                                                                                                                                    |
| <b>FLASH TALK SESSION</b><br><br>Chair: Prof. Jining Sun, <i>Dalian University of Technology</i> |                                                                                                                                                                                                                                                                                                    |
| 14:40-14:42                                                                                      | <b>ORAL 1: Laser-assisted slow tool servo diamond turning of glass-ceramic optics</b><br><br><u>Kaiyuan You</u> , Hang Zhang, Wei Wang, <i>University of Electronic Science and Technology of China</i>                                                                                            |
| 14:42-14:44                                                                                      | <b>ORAL 2: Planning in Bespoke Manufacturing Toward Human-Aware Production Scheduling: Skill Graphs and Absence Data as a Substrate for Adaptive Shop-Floor Planning in Bespoke Manufacturing</b><br><br><u>Wasiu Yusuf</u> , Essam Eliwa, Matt Whaley, Basu Somyae, <i>Preformed Windings Ltd</i> |
| 14:44-14:46                                                                                      | <b>ORAL 3: Employing deep reinforcement learning for machining process planning: An improved framework</b><br><br><u>Hang Zhang</u> , Kaiyuan You, Wei Wang, <i>University of Electronic Science and Technology of China</i>                                                                       |
| 14:46-14:48                                                                                      | <b>ORAL 4: Process monitoring and surface quality assessment in wire laser additive manufacturing using melt pool imaging and point cloud analysis</b><br><br><u>Hao Xue</u> , Long Ye, Yichang Zhou, S. Tamas-Williams, Hangning Liu, Nan Yu, <i>University of Edinburgh</i>                      |

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| 14:48-14:50                                                                                                            | <b>ORAL 5: Automated Detection and Repair of Minor Defects on Irregular Surface by Robot</b><br><u>Hanyu Li</u> , Jixiang Yang, Han Ding, Huazhong University of Science and Technology                          |
| 14:50-14:52                                                                                                            | <b>ORAL 6: Precision force control with vibration compensation for conformal vibration polishing</b><br><u>Xu Tang</u> , Wenhao Li, Jixiang Yang, Han Ding, <i>Huazhong University of Science and Technology</i> |
| 14:52-15:00                                                                                                            | <b>Q &amp; A and Panel Discussion</b> (Chair: Prof. Jining Sun)                                                                                                                                                  |
| 15:00-15:20                                                                                                            | <b>Tea Break</b>                                                                                                                                                                                                 |
| <b>ROUNDTABLE MEETING SESSION</b><br>Chair: Prof Fengzhou Fang, <i>University College Dublin</i>                       |                                                                                                                                                                                                                  |
| 15:20-16:20                                                                                                            | <b>Roundtable Discussion</b>                                                                                                                                                                                     |
| <b>AET MEMBERSHIP MEETING AND CLOSING CEREMONY</b><br>Chair: Prof Lihui Wang, <i>KTH Royal Institute of Technology</i> |                                                                                                                                                                                                                  |
| 16:20-16:50                                                                                                            | <b>AET Membership Meeting</b>                                                                                                                                                                                    |
| 16:50 -17:00                                                                                                           | <b>Closing Ceremony</b>                                                                                                                                                                                          |
| 17:00-18:00                                                                                                            | <b>Bus Return to Glasgow City Centre</b>                                                                                                                                                                         |
| <b>BANQUET</b>                                                                                                         |                                                                                                                                                                                                                  |
| 19:00-21:00                                                                                                            | <b>Restaurant in Glasgow City Centre</b><br>The Anchor Line Bar and Grill, 12-16 St Vincent Place, Glasgow, G1 2EU                                                                                               |