



**TWI Aerospace Panel and Innovation Conference**  
**19 and 20 April 2023**  
**Venue: TWI Ltd, Granta Park, Great Abington, Cambridge CB21 6AL, UK**  
**Day One**

|       |  |                   |  |                 |
|-------|--|-------------------|--|-----------------|
| 08:30 | Arrival and Refreshments   |                   |  |                 |
| 09:00 | Welcome and Introduction – John Hill, Paul Woollin and TWI’s Aerospace Team, TWI Ltd                   |                   |  |                 |
| 09:45 | Key note – Iain Minton: The Challenges for the Future of Aerospace in Defence, BAE Systems             |                   |  |                 |
| 10:30 | Move to Theme Sessions and Refreshments  |                   |  |                 |
|       | Room 1 – Sustainable Aviation  |                   | Room 2 – Advanced Manufacturing  |                 |
| 10:30 | Boeing, Joe Fixter - Boeing's path through a new era of innovation                                     |                   | UKSA, Helen Roberts - GSTP Programme   |                 |
| 10:50 | GKN, Dan Graham - TBC  |                   | TWI Ltd, Alan Taylor – Emerging challenges and opportunities for surface engineering and advanced coatings in the space sector |                 |
| 11:10 | TWI Ltd, Melissa Riley – Hydrogen compatibility  |                   | Think Orbital, Sebastian Asprella – Scalable space infrastructures for In-space manufacturing                                  |                 |
| 11:30 | TWI Ltd, Yingwei Wu – Coating Technologies for Hydrogen  |                   | TWI Ltd, Colin Ribton – Electron Beam Welding in Space   |                 |
| 11:50 | Rolls-Royce, Clive Grafton-Reed - setting out the challenges and the opportunity for supply chain      |                   | TWI Ltd, Stuart Lewis - Composites   |                 |
| 11:10 | TWI Ltd, Chris Allen – Laser welding for electrification   |                   | TWI Ltd, Graham Edwards – Digital Twin & Structural Health Monitoring  |                 |
| 12:30 | Lunch break + Exhibition + Meet the experts  |                   |  |                 |
| 14:00 | Membership value and TWI’s Core Research Programme – Ian Froment, TWI Ltd                              |                   |  |                 |
| 14:20 | Key note - Matthew Bailey: Funding models for supply chain development, Aerospace Technology Institute |                   |  |                 |
| 14:40 | JIP Panel Discussion   |                   |  |                 |
| 15:00 | Move to Panel Meetings – Technology Roadmaps for Space and Aerospace and Refreshments                  |                   |  |                 |
|       | Room 1 – Aerospace Panel Meeting   |                   | Room 2 – Space Panel Meeting   |                 |
|       | Iain Minton  | BAE Systems - Air | Sebastian Asprella   | Think Orbital   |
|       | Dan Graham   | GKN               | Andrew Norman  | ESA             |
|       | Richard March  | Rolls-Royce Aero  | Helen Roberts  | UK Space Agency |
| 16:00 | Tour of TWI Facilities   |                   |  |                 |
| 17:00 | Reception  |                   |  |                 |



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|       |  |   |
|-------|--|---|
| 09:00 | <b>Arrival and Refreshments</b>  |   |
| 09:30 | Keynote – Andy Norman, European Space Agency   |   |
| 10:00 | TWI Keynote – Non Destructive Testing – Ian Cooper, TWI Ltd                                |   |
| 10:30 | Move to Theme Sessions and Refreshments  |   |
|       | <b>Room 1 – Advanced Manufacturing</b>   | <b>Room 2 – Power and Propulsion in Space</b>                                   |
|       | TWI Ltd, Anna Wojdyla – Addressing the problem of icing in the aerospace sector            | Frazer-Nash, Peter Entwistle – The Techno- Economics of Space Based Solar Power |
|       | TWI Ltd, Carl Hauser - Laser Additive Manufacturing  | Rolls-Royce, Matthew Marriott - Nuclear micro-reactor for space                 |
|       | TWI Ltd, Tyler London – Modelling of Advanced Manufacturing Processes                      | TWI Ltd, Raja Khan – Near Net Shape Manufacturing and Thermal Processing        |
|       | Rolls-Royce, Richard March – The Journey to Zero Defects                                   | Guest speaker - TBC   |
|       | Parker LORD, Alexandre Kursner/Marc Papie – Clean Sky 2 – Engine Attachment System Summary | Mars Space Ltd, Franco Bosi – Electric Propulsion                               |
|       | TWI Ltd, Kate Franklin - LFW for Near Net Shape  | TWI Ltd, Phil McNutt – Cold spray AM  |
| 12:30 | Lunch break + Exhibition + Meet the experts  |   |
| 14:00 | Networking   |   |