

TWIIN 2019 Annual Convention

Day One – Tuesday 2 July - NSIRC 2019 Annual Conference
Lecture Rooms 1 & 2



- 9:00 Registration and Refreshments
- 9:30 Introduction and Welcome – **Tat-Hean Gan**, Director of Innovation and Skills, TWI Ltd
- 10:00 Keynote Speaker – **David Holmes**, Manufacturing Director, BAE Systems' Air Sector

Lecture Room 1

Theme: Additive Manufacturing / Advancing Crack Arrest

10:30 **Madie Allen**

Predicting the microstructure of metal additively manufactured parts

10:50 **Emre Akgun**

Effect of porosity on fatigue strength of SLM Ti6Al4V

Lecture Room 2

Theme: Composites and Polymers

Dimitrios Fakis

Electromagnetic surface waves on fibre-reinforced composite substrates

Changi Yu

Effect of insufficient homogenisation during the extrusion of polyethylene pipes on butt fusion joint integrity

11:10 *Break*

11:25 **Xu Liu**

Effect of mean stress in variable amplitude fatigue loading on welds

Athanasios Pouchias

Flow monitoring system for the resin transfer moulding process

11:50 **Jessica Taylor**

What is the correlation between crack initiation and arrest behaviour?

Faranak Bahrami

Thermally assisted piercing; manufacture and properties of multiply-pierced composite

12:15 *Lunch*

13:00 Keynote Speaker – **Elizabeth Donnelly**, Chief Executive Officer, Women's Engineering Society

Lecture Room 1

Theme: Inspection Technologies and Monitoring

13:30 **Houman Nakhli Mahal**

Detection of defects in guided-wave inspection of pipelines

13:55 **Harendra Kumar**

On the Development of an Ultrasonic Technique Enabling Detection of Type IV Creep at Early Stage

Lecture Room 2

Theme: Standards and Maintenance Methodologies

Habiba Lais

Optimisation of the non-invasive ultrasonic fouling removal technique for submerged structures

Fernando Galvan

Wave decomposition in a mooring chain to monitor cracks

14:20 *Break*

14:35 **Zhiyao Li**

Advanced shearography for wind turbine blade inspection

Konstantinos Kouzoumis

Effects of biaxiality on engineering critical assessments

14:55 **Hadi Khalili**

Updating the distribution of uncertain parameters involved in the fatigue analysis

Domenic di Francesco

Quantification of the value of inspecting for fatigue cracks

15:15 Poster Session

18:30 TWIIN Annual Convention Dinner

TWIIN 2019 Annual Convention

Day Two – Wednesday 3 July
Abington Room



9:30 Registration and Refreshments

10:00 Welcome and Introduction – **Simone Gubbins**, Head of Public Funding, TWI Ltd

10:10 TWIIN Updates – **Tat-Hean Gan**, Director of Innovation and Skills, TWI Ltd

10:35 Innovation Accelerators / Technology Acceleration Programme (TAP) – **Cem Selcuk**, Manager - Innovation Accelerators, TWI

10:50 Tapping into the innovation for technology - bridging countries - **John Stephenson**, Integrity NDT

11:15 *Break*

11:35 Future technology landscape and applications – **Ruth Bumphrey**, Director of Research, Lloyd's Register Foundation (LRF)

12:00 Flanders investment and trade activities – **Ben De Smit**, Economic & Commercial Counsellor, Embassy of Belgium

12:20 *Lunch*

13:30 The export landscape and inward investment into the U.K. – **John Brook**, Department for International Trade

13:50 An investor's perspective on spinning out and scaling a revolutionary industrial technology – **Marc Jacobs**, MPG, Luxembourg

14:15 Research and Development (R&D) Tax Relief for UK Companies – **Rich Grimster**, Price Bailey Chartered Accountants, Cambridge, UK

14:40 *Coffee, networking and exhibition stands*

15:00 Non-metallic Innovation Centre (NIC) – **Mihalis Kazilas**, Director of NIC, TWI

15:15 Closing Words – **Simone Gubbins**, Head of Public Funding, TWI

15:30 – 16:30	Clinic with TWI's Technology Innovation Management Team – For companies interested in obtaining public funding to support technology developments By appointment only – Maximum of 10 slots available	Impacting Business by Design Programme drop-in stand – Ian Ferris , Brunel University London
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