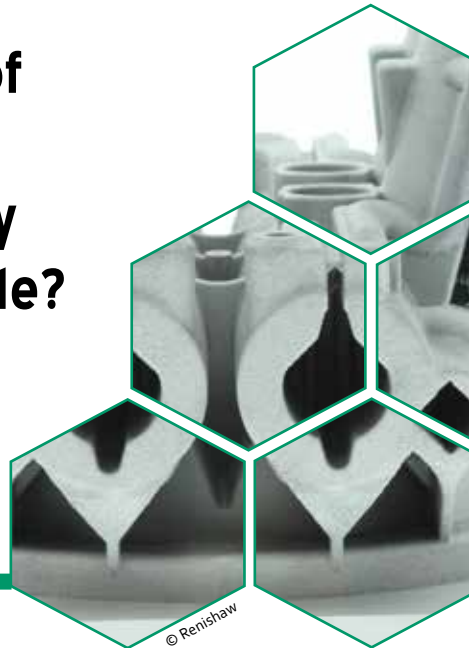




**The Engineering
Integrity Society**

Durability & Integrity of Additive Manufactured Products: Do you really know what you've made?

**MTC Coventry
18 June 2019**



Additive Manufacture has advanced considerably since it was called Rapid Prototyping and the change of name reflects a different purpose. AM is no longer simply making a prototype, it is making a product fit for purpose.

The benefits of AM are widely debated but the challenges of a new manufacturing process need to be addressed. Powder materials need to be stored, transported and reused, potentially degrading their performance. Products made by traditional manufacturing methods have known defects and AM can introduce its own flaws. These can be characterised by appropriate Non-Destructive Testing. The fatigue performance of any component is dependent upon the manufacturing route. AM opens up new opportunities in near net shape and low cost manufacturing provided the resulting structural integrity and durability are properly understood.

PROVISIONAL PROGRAMME

- 09.00 Registration, Tea and Coffee
- 09.20 Introduction to EIS and MTC
- 09.30 KEYNOTE: Structural Integrity in Additive Manufacturing - Iain Todd, University of Sheffield
- 10.00 AM part integrity: the NDT in-process and post-build perspectives - Ben Dutton, MTC
- 10.30 Characterising the Fatigue Performance of Additive Materials using the Small Punch Test
Dai Lewis, Swansea University
- 11.00 Tea/Coffee
- 11.15 Fatigue Testing and Characterisation of an Additive Manufactured Titanium Alloy
Rob Plaskitt - HBM Prencia
- 11.45 Challenges with Additive Manufacture and the Aerospace Industry
Mark Craig - Safran
- 12.15 Powdered-polymer Additive Manufacturing - why materials matter - Candice Majewski,
University of Sheffield
- 12.45 Lunch
- 1.30 Lab Tour of MTC labs
(security clearance required)
- 3.00 New Nickel based Superalloys for Additive Manufacturing - Roger Reed, Oxford University
- 3.30 The Metalysis Process – A Flexible Distributed Manufacturing Route for the Production of
Novel AM Powders - Ian Mellor - Metalysis
- 4.00 Additive Manufacturing for Space Applications: On Earth, On Orbit and On Planet
Andrew Norman - ESA
- 4.30 Closing Comments

BOOKING FORM

	EIS Member	Non EIS Member
Delegate	£100+VAT	£125+VAT
Student/Apprentice	£25+VAT	
	UK	Rest of the World
Personal Membership of the EIS	£25 per year	£30 per year
I enclose a cheque for £_____ made payable to the Engineering Integrity Society. Payment can also be made by BACS.		
Name:		
Company:		
Address:		
Telephone:		
Email:		
Any Special Dietary Requirements		
Please tick this box if you are happy to have future contact with the EIS. We limit the emails we send and will never pass your details to any other organisation. You are able to unsubscribe at any time. Our privacy statement can be viewed on our website. <input type="checkbox"/>		
Please tick this box if do not want to receive any information from the EIS. <input type="checkbox"/>		

Please return completed forms to the following address:
Engineering Integrity Society, 6 Brickyard Lane, Farnsfield, Nottinghamshire, NG22 8JS, UK
Telephone: +44(0)1623 884225 Email: info@e-i-s.org.uk

The **Engineering Integrity Society** is an independent not-for-profit organisation which aims to inspire all engineers, both experienced and newly qualified, across a broad spectrum of technologies. The Society is committed to promoting events and publications, providing a forum for engineers to discuss present industrial needs, new technologies and to stimulate both company and personal development.

The annual subscription rates are £25 for UK residents and £30 for non-UK residents. Upon joining the Society you will also have the additional advantages of preferential attendance rates at EIS events, together with selected events held by some of the associated organisations. In addition you will have access to CDs containing archived copies of EIS presentations.

The **Engineering Integrity Society** is pleased to acknowledge the support of the following organisations:

AcSoft	Instron	Servotest
Airbus Defence & Space	Interface Force Measurements	Severn Thermal Solutions
ANV Measurement Systems	Ipetronik	Siemens
ASDEC	Kistler	Star Hydraulics
Bruel & Kjaer	M&P International	Strainsense
CaTs3	Mecmesin	Systems Services
CentraTEQ	Meggitt	Techni Measure
Correlated Solutions	Micro-Epsilon	Telonic Instruments Ltd
Dassault Systemes	Micro Measurements	THP Systems
Data Acquisition & Testing Services Ltd	Millbrook	Tiab Ltd
Data Physics UK	Moog	Tranmission Dynamics
Datron Technology	MTS Systems	Variohm
Dewesoft	Mueller-BBM	Vibration Research
Flintec	PCB Piezotronics	Zwick / Roell
Gantner Instruments	PDS Hitech	
GOM	Phoenix Materials Testing	
HBM Prencsia	Polytec Ltd	
Head Acoustics	Prosig	
HORIBA MIRA	RAL Space	
	Sensors UK	

