

AILU WORKSHOP

ADDITIVE MANUFACTURING

TUESDAY 22 MARCH 2016

CRANFIELD UNIVERSITY, BEDFORDSHIRE, UK

Presentations, exhibition and tour Networking opportunities



PROGRAMME





08:45 - 09:30 Registration, refreshments & Exhibition

09:30 - 11:10 Session 1

Welcome Adam Clare University of Nottingham

Laser-Powder Interaction in SLM: modelling, experimental, & materials characterisation

Moataz Attallah University of Birmingham

Direct comparison of solid and powder laser melting in various regimes

Wojciech Suder Cranfield University

Open-architecture system for in-situ x-ray imaging during selective laser melting (SLM)

Andrew Moore Heriot-Watt University

The current status and outlook for additive manufacturing in Japan

Hideki Kyogoku Kinki University

11:10 - 11:40 Refreshments & Exhibition
11:40 - 13:00 **Session 2 Vendors Forum**

10-minute presentations by: EOS, ES Technology, InnsTek, BeAM, Renishaw, TRUMPF

Open forum discussion

13:00 - 14:00 Lunch & Exhibition

14:00 - 15:00 **Session 3**

Repair of tooling using laser metal deposition

Carl Hauser TWI

Additive Manufacturing of precious metals in the jewellery industry

Frank Cooper Birmingham City University

Applications for Hybrid Machine Tools

Peter-Jon Solomon Hybrid Manufacturing Technology

15:00 - 15:30 Refreshments & Exhibition

15:30 - 16:15 Session 4

5-axis laser DMD developments at IREPA

Didier Boissellier IREPA

Integrating 3D printed materials in medical device prototyping

Alex Berry Sutrue

Richard Trimlett Royal Brompton Hospital, London

16:15 - 17:00 Tour Welding Engineering and Laser Processing Centre, Cranfield University

ABOUT THIS WORKSHOP

On behalf of AILU I am delighted to bring together a range of speakers from industry and academia with a variety of perspectives on the state-of-the-additive-nation. Talks will have something for everyone, with machine makers detailing their latest offerings alongside materials suppliers showcasing advances in feedstock technology. Naturally the UK academic base will also be well represented and leading researchers will be offering an insight into their latest research. An overview of Japanese AM trends will also be offered by our keynote speaker; Prof Hideki Kyogoku of Kinki University.

The day will conclude with a tour of the first rate facilities at Cranfield and I am sure this will be a valuable workshop for veteran AM practitioners and new entrants alike. I look forward to seeing you in March.

Adam Clare Workshop Chair



Adam Clare is an Associate Professor of Advanced Manufacturing at the University of Nottingham. Adam leads a team investigating material processing techniques for high value components used in the biomedical, tool and aerospace sectors. His interest in lasers relates to their use for surface modification and additive manufacture of new and interesting engineering materials for next generation applications. Adam is Director of the Advanced Component Engineering Laboratory at Nottingham and has investigated materials behaviour in AM for over 10 years.

Venue: Vincent Building Cranfield University College Road

Cranfield Bedfordshire, MK43 0AL www.cranfield.ac.uk Cranfield UNIVERSITY



Delegates

On arrival you will receive a delegate pack containing essential notes for the day. The pack will include information for downloading PDFs of the presentations, which will be made available after the event. A buffet lunch (including vegetarian options) and refreshments will be provided. Please advise us of any special dietary needs.

Exhibitors

There is a dedicated exhibition area in which refreshments and lunch will also be served. The exhibition area can be accessed from 07:30 on the day for set up, and an unloading bay next to the building is available for temporary parking. The exhibition will start at delegate registration (08:45) and end following afternoon refreshments (15:30). An exhibition table with a white table cloth will be provided. Mains power is **not** supplied at the tables but wall sockets are accessible in adjacent areas for recharging laptops, phones etc.

Registration (delegates and exhibitors)

You can register for the event in any of the following ways:

- Go online (http://ailu-am-workshop-220316.eventbrite.co.uk)
- Scan form overleaf and email or post (details overleaf)
- Phone the AILU office (+44 (0)1235 539595)

Travel, Accommodation and Parking

Please see the Events Page on the AILU website for information: www.ailu.org.uk/laser_technology/events.html



Re	egistration								
Name:									
Position:									
Organisation:									
Address:									
Postcode:									
Tel: E-mail:									
Delegate/exhibitor options									
Please tick the box next to your choice. Prices exclude VAT @20%									
		AILU member		Non-member		Unemployed/retired		Full-time student	
	Delegate only	£160		£195		£65		£45	
	Exhibitor only	£155		£195		NA		NA	
	Delegate and Exhibitor*	£265		£340		NA		NA	
* includes £50 discount from combined delegate + exhibitor cost									
Payment options									
Please invoice me									
☐ I wish to pay in advance by Visa/Mastercard (billing in GBP): Name on Card Exp/ Number Exp/ Please debit my account									
Signed:				Date:					
Please scan and return completed form to liz@ailu.org.uk or mail to AILU, 100 Ock Street, Abingdon, Oxon OX14 5DH, UK									
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Image courtesy TWI