

association of Innovations for economic growth: **The UK uptake of Laser Materials Processing**

8 July 2014

Manufacturing Technology Centre Ansty Business Park Coventry CV7 9JU

PROGRAMME

12:30 - 13:15

13:15 - 14:20

14:20 - 14:40

14:40 - 15:40

09:00 - 09:25Registration and refreshments Welcome and Introduction 09:25 - 09:30Lin Li (University of Manchester)

Session 1: Chaired by Lin Li

EPSRC opportunities for laser based manufacturina

Karen Brakspear (EPSRC)

First steps in producing a UK Roadmap Duncan Hand (Heriot-Watt University)

Industrial exploitation of additive manufacturing

- present and possible future

Peter Brown (TWI)

R & D funding from idea to prototype - a round up of all the people who would love to help you

Roger Hardacre (ALT)

10:40 - 11:10Refreshment break and EXHIBITION 11:10 - 12:30 Session 2: Chaired by Lin Li

09:30 - 10:40

Steel development and applications in laser welding Alan Thompson and David Crowther

(TATA Steel) Lasers for aerospace applications in the UK

Clive Grafton-Reed (Rolls-Royce) Industrial fibre laser welding

Stuart Dutton (Graham Engineering)

From road to rail: Novel applications of 3-d laser beam welding in rail car manufacturing

Holger Alder (Photon AG)

Lunch and EXHIBITION

Session 3: Chaired by Clive Grafton-Reed

Support for innovators in laser based manufacturina

Robin Wilson (TSB)

Lasers in manufacturing for the medical sector Martin Sharp (Liverpool John Moores University)

High power high energy diode pumped green, UV and ps lasers for display manufacturing

Young Kwon (Powerlase)

Advanced laser micro processing: software and

hardware solutions

Stefan Dimov (University of Birmingham)

Refreshment break

Session 4: Chaired by Clive Grafton-Reed

Laser welding of metallic foils

Ali Khan (TWI)

Commercial laser cladding technology for UK

industry

Paul Goodwin (Laser Cladding Technology)

The integration of lasers in Art and Design

Sarah O'Hana (University of Lincoln)

15:40 - 16:05 Open forum

Theme: UK LMP current activity and

near-term outlook

16:05 MTC Tour and departure

For full event details, including travel and accommodation please see 'AILU events' on the AILU web site

Background information

The key aims of this Product and Process Innovation Special Interest Group (PPI SIG) event are:

(i) to highlight recent successes in the transfer of technology into UK manufacturing industry, in particular new technologies developed by universities; and

(ii) to assess where the UK is at the present time with regard to the level and the direction of uptake of laser materials processing by industry.

Papers presented during this event include:

- First report and next steps in CIM AILU LMP roadmapping
- Revealing case studies of industrial uptake of university R&D
- State-of-the-art and LMP applications in key sectors
- Update on UK R&D funding and technology transfer activities
- Review and open forum on current status of UK uptake of LMP
- Current status of UK LMP uptake

Joint Chairs for this event:



Lin Li Chair of the PPI SIG, Professor of Laser Engineering at the University of Manchester and Fellow of the Royal Academy of Engineering



Clive Grafton Reed Global Process Owner for Laser Processes at Rolls-

Supporting organisations



REGISTRATION

Contact details

AILU members can register simply by contacting the AILU Office (details below) Otherwise, please complete and return this form.

Fax:

*mandatory field

Charges (exclusive of VAT @20%)

Delegate

I wish to register as a delegate:

■ Non-AILU member £ 110.00 ☐ Existing member of AILU £ 95.00

☐ Full time student £ 35.00

■ Unemployed or retired £ 45.00

■ Non-AILU member ☐ Existing member of AILU £ 100.00*

I require: Space only A table

* Take £ 35 off the total if you are also registering as a delegate

Payment options

Please invoice me

I wish to pay in advance by:

■ Bank/Euro cheque in £ Sterling, payable to AILU

□ Visa/Mastercard (billing in GBP): Name on Card

Number Please debit my account

Please return completed form to the AILU office, details below