

**Venue:** Cranfield University Cranfield Bedfordshire MK43 0AL.  
The meeting will take place in Building 38 – Management Centre – Galleries room.

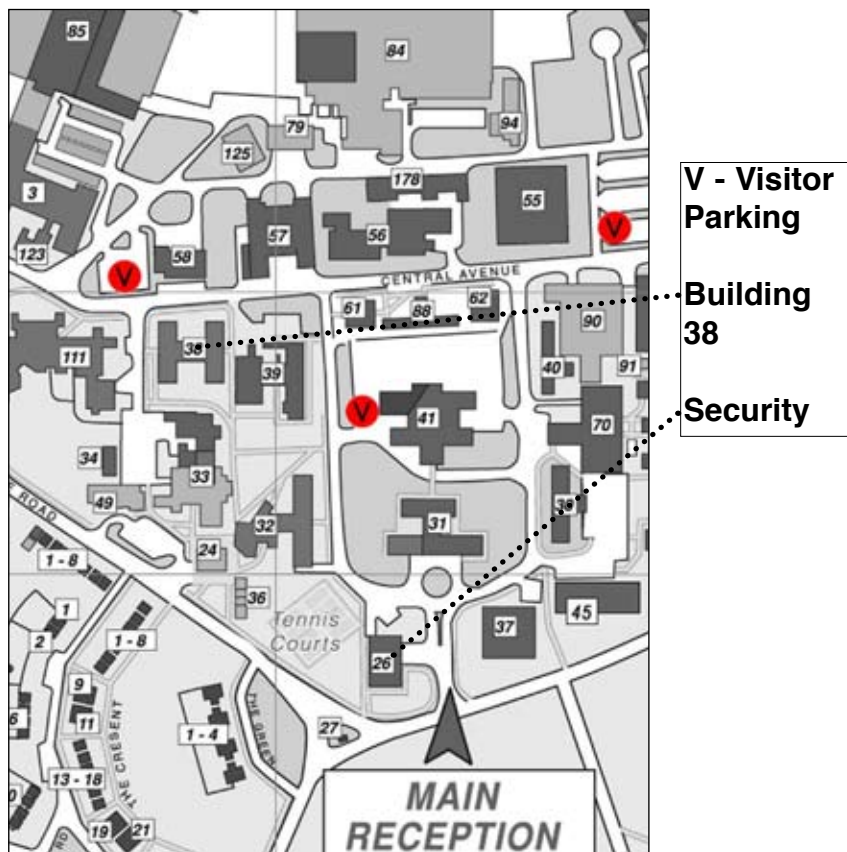
**Directions by road:** The campus lies about 10 minutes drive from Junction 13 of the M1 motorway. Please go to Security in the main reception area to collect a car pass. You will be directed to where to park.

**By Rail:** Milton Keynes is the nearest train station (9 miles).

**By Air:** The nearest airport is Luton (26 miles).

Maps and further information can be found at:

<http://www.cranfield.ac.uk/locations/cranfield/index.jsp>



**AILU**

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## *Your invitation to the annual* **AILU Members' Meeting and AGM**

**Tuesday 8 April 2008**

**Building 38 – Management  
Centre – Galleries room**

**Cranfield University**

**Spend an enjoyable day with  
members of the industrial laser  
community at Cranfield University**  
**Pre-registration is required for lunch and tour**

## Presentations

### New opportunities for AILU

The three-year Photonics Knowledge Transfer Network (KTN) project is over halfway and from an AILU perspective is reaching an important point in terms of the formation of Special Interest Groups and improved networking/collaboration opportunities for its members. AILU Secretary Mike Green and Technology Officer, Anna O'Neil, will review progress, highlight ongoing activities and point to near and midterm opportunities for association members.

### Developments in welding

David Yapp, senior lecturer at Cranfield, will cover recent developments in welding. This will be a presentation reviewing developments mainly outside of lasers.

## Forum on new developments

### How well do lasers currently compete with non-laser sources for welding?

Following on from the success of the last two years' open discussions, this year's event will provide an opportunity for members to examine issues relating to recent developments in welding and in particular the impact of new high brightness lasers in welding. Following on from David Yapp's presentation on alternative welding technologies the forum format provides a unique opportunity to contribute informally to the discussion.

## Presentation of the AILU Award and Prize 2008

The AILU Award and Young Engineer's Prize will be presented, with interesting insights into the winners' backgrounds and laser activities.

The 2008 Award will be presented to **Tim Weedon** in recognition of his introduction of YAG-based machining systems in the early 1980s and being a tireless champion of laser based manufacturing in the UK.

The Young UK Engineer's Prize will be presented to **Fraser Dear** in recognition of successful development of fine laser machining techniques for the use of zirconia, primarily for application in dental restorations.

## Cranfield facilitates tour

### Welding Centre

In the laboratory of the Welding Engineering Research Centre you will see the UK's highest power fibre laser facility (8kW), the technology developed that is forecast to provide over \$500m worth of savings in the production of the Trans Alaska gas pipeline.

Also on display will be the latest developments in high deposition rate additive manufacture.



### Precision Engineering Centre



The Cranfield facility is pivotal to the recently established EPSRC £8m Integrated Knowledge Centre (IKC) in ultra precision and structured surfaces, embracing technologies and manufacturing techniques that are key for effective design and manufacture of many advanced systems, medical devices and 'high end' consumer products.

The new Hexagon Loxham Precision Engineering laboratory, opened in December 2007, support work in a range of processes including abrasive machining, diamond turning, micro-machining and metrology.

All photographs courtesy of Cranfield University

## Programme

09:15 - 10:00 Registration and refreshments

10:00 - 10:10 Welcome to Cranfield University  
*Stewart Williams (Chair)*

10:10 - 11:15 **New developments**  
New developments at AILU  
*Mike Green and Anna O'Neil, AILU*

New developments in welding technology  
*David Yapp, Cranfield University*

11:15 - 11:45 Refreshment break

11:45 - 12:15 **Open forum discussion**  
How well do lasers currently compete with non-laser sources for welding?

12:15 - 13:15 **AGM and award presentations**  
President and Secretary report  
Election of Officers and Members<sup>1</sup> of the committee

<sup>1</sup> For administrative reasons, it would be a big help if you would please contact the AILU office ahead of the AGM if you have an interest in joining the committee for the coming year.

Presentation of the Young UK Engineer's Prize 2008 to Fraser Dear

Presentation of the AILU Award 2008 to Tim Weedon

13:15 - 14:00 **Lunch**

14:00 **Tour of the Welding Centre and the Precision Engineering Centre**

## Registration

There is a charge of £20 + VAT(= £23.50) for members wishing to stay for the buffet lunch and tour. The buffet will include vegetarian dishes.

No charge for members wishing to attend the morning session and AGM only. We would nevertheless like you to register.

Limited table top space will be made available in the refreshment area for free display of any material you may wish to bring for distribution.

Please register, either by completing and mailing or faxing the form below to the AILU office (contact details can be found on the back page) or by e-mail to [courses@ailu.org.uk](mailto:courses@ailu.org.uk).

REGISTRATION DEADLINE: Friday 28 March 2008

## Please register me for the AILU Members' Meeting at Cranfield University on 8 April 2008

Name:

Organisation:

I would like to stay for lunch and tour YES/NO\*

If YES, payment £20 + VAT (= £23.50):

Please invoice me\*/ AN Other\* (please provide details below)

Visa\*/Mastercard\* (please give card name, number and expiry date below)

Details:

\*delete as appropriate