

# Lasers in emerging energy markets

Wednesday 30 April 2008  
Warwick Manufacturing Group  
University of Warwick

Laser applications provide novel solutions for harnessing sustainable energy.

Industrial use of such technologies can provide long-term solutions to an expanding society and contemporary market needs.

This event is a unique opportunity to experience different laser processes and gain critical knowledge to enhance business performance.

- Technical presentations from experienced laser-processing experts
- Exhibition featuring laser users, manufacturers and support organisations
- A tour of the Warwick Manufacturing Group's Engineering Hall
- Excellent networking opportunities



Register now to become a MIWL member or to exhibit at an event @[www.miwl.org.uk](http://www.miwl.org.uk)

## Make it With Lasers (MIWL)

is a non-profit making long-term programme designed to help industry increase productivity, reduce costs and improve quality by the application of lasers within the manufacturing process. It is committed to the transfer of existing, well-proven technology to generate a competitive edge in world markets.

MIWL is managed by TWI and sponsored by companies with an interest in widening the use of industrial lasers. MIWL provides a golden opportunity for manufacturers to make an objective assessment of the viability of lasers in their companies without facing difficulties of taking unnecessary risks.

The MIWL event involves a series of workshops that focus on the practical aspects of applying lasers to manufacturing tasks and are run by technologists with knowledge and practical experience of putting lasers to work on the shopfloor. The underlying principles of materials processing with lasers and how the technology can be used to best advantage will be explained in relation to Lasers in Emerging Energy Markets.

### Current members of the MIWL programme

*Air Products plc • Barkston Ltd • BOC Gases • Bystronic • Camtek • Electrox • Energas • GSI Lumonics • Laser Lines • Linde Gas UK • Micrometric Ltd • Olympus Technologies • Pyramid Engineering Services Co Ltd • Rofin-Baasel • SPI Lasers • Trumpf Ltd • TWI Ltd*

Please enrol me on 'Lasers in emerging energy markets' on 30 April 2008

Title .....First Name.....Surname.....

Job Title.....Company.....

Postcode.....Country.....

Tel.....Fax.....E-mail.....

How did you find out about this event?.....

Return by post or fax to: Make it With Lasers, TWI Ltd., Granta Park, Great Abington, Cambridge CB21 6AL UK

Tel: +44 (0) 1223 899000, Fax: +44 (0) 1223 890661, E-mail: [miwl@twi.co.uk](mailto:miwl@twi.co.uk)

Alternatively, enrol on the Make it with Lasers website: [www.miwl.org.uk](http://www.miwl.org.uk)

The Lasers group at TWI would like to attract to the forthcoming MIWL event both technology providers and those seeking to exploit the technology.

The topic will be 'Lasers in emerging energy markets'. This industrially relevant event will include a broad range of presentations about the applications of lasers, mainly in relation to sustainable energy.

Making use of sustainable energy is imperative to a modern society and is both a long term and global issue.

With research and development in areas of renewable energy sources and new technologies we should be able to harness renewable energy more efficiently now than ever. This event will inform you of how laser applications can be used to capture energy, such as solar, in order to supply mankind's expanding needs without environmental detriment.

## Why attend?

This event will provide:

- A unique opportunity to find out how lasers can improve your business.
- Understanding of how the applications of lasers can help with the harnessing of renewable energy for a better future.
- An opportunity to learn how to improve productivity through the introduction of laser technology.
- An assessment of the benefits arising from enhanced product quality and performance.
- An opportunity to identify new manufacturing opportunities and solutions.
- A networking opportunity with engineers experienced in manufacturing with lasers.

## Who should attend this workshop?

Senior managers, product designers, development and production engineers, marketing and quality managers.

## Programme

Chair: Louise Partridge, SPI Lasers

- 09.00 Registration and exhibition  
(Refreshments available)
- 09.30 Welcome and introduction to the Make It With Lasers programme  
*Louise Partridge, SPI Lasers*
- 09.45 Surf-sculpt © with laser beams  
*Lien Nguyen, TWI Ltd*
- 10.15 Coffee and exhibition
- 10.30 Laser-based rapid prototyping and manufacturing technologies and applications  
*Greg Gibbons, Warwick Manufacturing Group*
- 11.00 Lasers in solar applications  
*Jack T Gabzdyl, SPI Lasers*
- 11.30 Lasers in the fabrication of solar thermal systems  
*Stephan Brandle, Sunlaser*
- 12.00 Coffee and exhibition
- 12.30 Lasers for low stress, hermetic welding that maintains the integrity of fluid path channels for fuel cells and batteries  
*Gareth McGrath, Gentex Corporation*
- 13.00 Lunch and exhibition
- 14.00 Laser marking  
*Simon Lau, Lasers Are Us*
- 14.30 Tour and demonstration of Warwick Manufacturing Group's engineering hall
- 15.00 Open Forum and Discussion
- 15.30 Close

## Venue

The event will take place at the Warwick Manufacturing Group (WMG), located on campus at the University of Warwick in Coventry. A location map, parking instructions and hotel information will be provided with the joining instructions. WMG employ over 200 full time staff with a further 150 associates who fill three buildings at the University of Warwick dedicated to developing innovative research projects and sharing their knowledge with a wide range of businesses and individuals through collaboration, knowledge transfer schemes, PhD supervision, postgraduate study and bespoke executive training.

## Fees and how to enrol

The enrolment fee is £120+VAT per delegate, and includes refreshments, handbook, exhibition, technical presentations and tour. Please enrol on-line at [www.miwl.org.uk](http://www.miwl.org.uk) or complete the enrolment form overleaf (one form per delegate). Fees must be paid in advance. An invoice will be issued with the joining instructions following enrolment.

## Exhibit at this event

A limited number of spaces are available for your company to exhibit at this event. To find out more, contact Chantal Lipscombe.

**E-mail:** [chantal.lipscombe@twi.co.uk](mailto:chantal.lipscombe@twi.co.uk) or [miwl@twi.co.uk](mailto:miwl@twi.co.uk) **Tel:** +44 (0)1223 899464



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