



PROGRAMME & Call For Posters

High Power Diode Lasers & Systems

A ONE AND A HALF DAY PROGRAMME

Date: **Wednesday 16th & Thursday 17th October 2013**

Venue: **Ricoh Arena . Coventry . UK**

IT IS FREE TO ATTEND
THIS CONFERENCE

Please watch out for updates on the website

Wednesday 16th October 2013

Exhibition Open: 10:00 to 17:00

12.30 - registration & coffee -

13.10 **Introduction to meeting.**

Prof Eric Larkins, *Programme Chair, School of Electrical and Electronic Engineering, University of Nottingham, UK*

SESSION 1:

Novel high-brightness laser diodes

13.20 **KEYNOTE ADDRESS**

Coherent Beam Combining of Diode Arrays.

Dr. Tso-Yee Fan, *Associate Leader, Laser Technology and Applications Group, MIT Lincoln Labs, USA*

14.00 **High-brilliance diode lasers with monolithically-integrated surface Gratings as sources for spectral beam combination.**

Dr. Jörg Fricke, *Senior Scientist, Ferdinand Braun Institute, Germany*

14.20 **Current challenges for high-power semiconductor disk lasers.**

John-Mark Hopkins, *Fraunhofer Research UK, Scotland*

14.40 - refreshment break in the exhibition hall -

SESSION 2:

High-power laser diodes and Poster Session

15.20 **Design considerations for high-power external cavity laser diodes.**

Dr. Stephen Bull, *Senior Research Fellow, University of Nottingham, UK*

SUPPORTED BY:



15.40 Poster Introductions (2 minutes per poster)

16.00 Poster Session in the Exhibition Hall

17.00 - end of first day -

17.05 *There will be an exhibition drinks and networking opportunity in the exhibition hall followed by a conference dinner.*

Thursday 16th October 2013

Exhibition Open: 10:00 to 17:00

10.00 - coffee on arrival -

SESSION 3:

Power scaling of high-power laser diode systems

10.30 **Introduction to meeting.**

10.40 **Diode laser platform for multi-kw applications and competing technologies.**
Dr Thomas Brand, *DILAS Diodenlaser, Germany*

11.00 **Power scaling diode lasers to high-brightness kW systems.**
David Schleuning, *Coherent Inc, USA*

11.20 **Fiber Coupled High-Power Diode-Lasers with Highest Brilliance.**
Dr. Markus Roehner, *Head of Product Development, Jenoptik Laser GmbH, Germany*

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ORGANISER

Scottish Chapter of IEEE Photonics Society

MEETING ADMINISTRATION & MANAGEMENT

Laurence Devereux, Enlighten Meetings/Xmark Media Ltd

Please register early to attend this event and to receive more details about this meeting at:

www.photonex.org

High Power Diode Lasers & Systems

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11.40 **Beam combining technologies for direct diode laser systems at the kW level.**

Dr. Hagen Zimer, *Senior Scientist, TRUMPF Laser GmbH + Co. KG, Germany*

12.00 -13.30 - lunch & exhibition -

SESSION 4:

High-power laser diode applications and degradation performance

13.30 **KEYNOTE ADDRESS**

Opportunities for High Power Diode Pumped Lasers – from X-ray Imaging to Inertial Fusion Energy

Dr Ric Allott, *Science and Technologies Facilities Council, Rutherford Appleton Lab, UK*

14.10 **Industrial laser sources for sheet metal cutting.**

Oliver Bühler, *Head of Laser Development, Bystronic Laser AG, Switzerland*

14.30 **Degradation processes in high-power laser diodes under external feedback**

Dr. Jens Tomm, *Max Born Institute, Germany*

14.50 **Concluding comments**

14.55 - end of meeting, opportunity to visit the exhibition (closes at 16:00pm).

Programme Organisation and TPT

Scottish Chapter of IEEE Photonics Society

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Dr Robin Huang

TeraDiode, USA

Dr Andreas Kohl

Quantel Laser Diodes, France

Dr Marc Sorel (for the IEEE Photonics Society)

University of Glasgow, UK

Dr Stefano Taccheo

Swansea University, LIFT project, UK

Martin Traub

Fraunhofer Institute for Laser Technology, Germany

Call for Poster Papers

We invite contributions for posters which will be accepted on the basis of their technical content. Poster presentations will include a short (2 minute) oral introduction.

Subjects may include, but are not limited to:

- Power scaling diode lasers to high-brightness kW systems
- Coherent phase-locking of high-power laser diodes
- Design considerations for high-power external cavity laser diodes
- Long wavelength lasers and their applications
- High-brilliance diode lasers for spectral beam combination
- Laser diodes optimised for external cavity operation
- Reliability of external cavity laser diodes
- Beam combining approaches for high-brightness direct diode laser systems
- Diode laser platforms for multi-kw applications
- Outlook for volume manufacturing of high-brightness laser diode systems
- Advances in diode pumped solid state lasers
- Applications for diode laser technology in:
Industrial & Material Processing - Healthcare & Biophotonics - Displays - Energy - Aerospace and Security.

The meeting comprises a programme of invited speakers, a poster session of contributed papers and time will be allowed for networking with other delegates.

Poster Submission:

Email please to info@enlightenmeetings.co.uk and quote "Poster submission/High Power Lasers" in the subject line.

Authors should submit a 2-page abstract in a similar style to an example downloadable here:

www.photonex.org/downloads/HPDLS-Paper-Example-Template.pdf

(Also available as a Word document on the website).

Deadline for poster submissions: 20th September 2013.

Authors will receive acceptance notification on the 26th September.

MEETING ATTENDEES

To register as an attendee for this meeting please go to **WWW.PHOTONEX.ORG** and register.

Once registered you will be sent regular updates.

