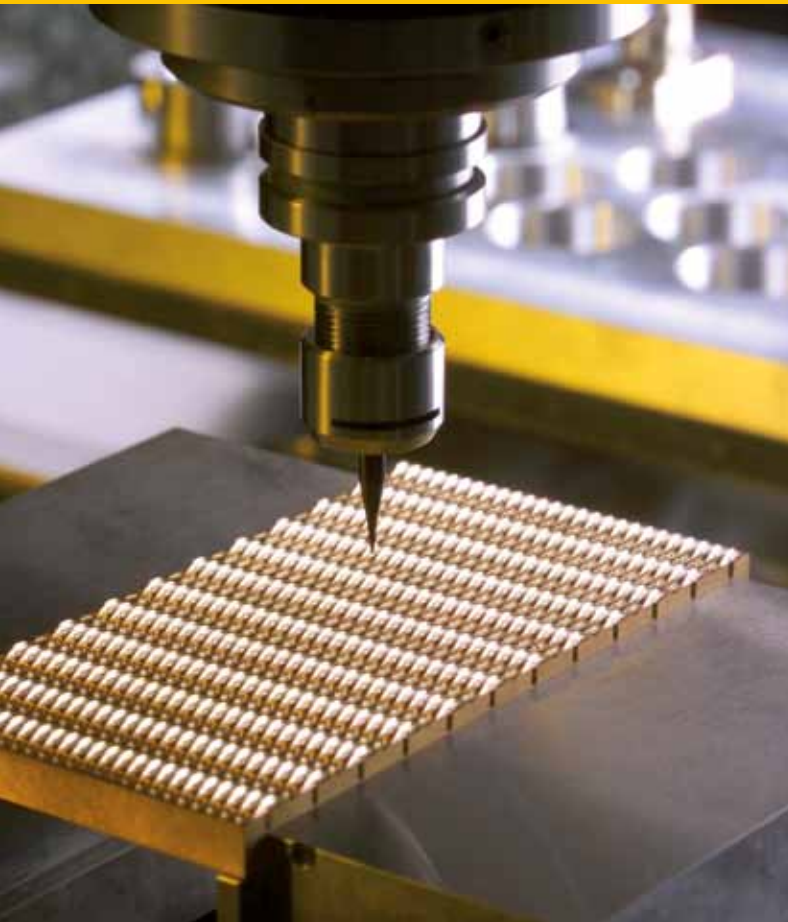


3RD AACHEN PRECISION DAYS



THE CONFERENCE

On February 28 and 29, 2012 the Fraunhofer Institute for Production Technology IPT will be holding the “3rd Aachen Precision Days” – an international conference with a thematic focus on precision and ultra-precision manufacturing addressed at participants from industry and research.

The conference focuses on the current status of technology as well as ongoing developments and research approaches for the production of precision and micro components. The main focus will be put on processes and machine technology for the manufacturing of complex and large-scale precision components. Materials as well as tools for the application in precision and ultra-precision manufacturing will be another subject of discussion. Furthermore, challenges and potentials of automated precision assembly will be discussed.

The “3rd Aachen Precision Days” will provide a clear and structured insight into technological limitations of micro-precision technology. Technical presentations with interdisciplinary topics will introduce the participants to current developments of process chains for the production of precision and micro-precision components. Professional presentations held by industrial partners will provide an insight into current possibilities and main areas of development and serve as sources of inspiration for further developments of manufacturing possibilities.

REGISTRATION

Registration and registration fee

To register, please fill out, sign and send the attached registration form by post or by fax to the address/fax number given. Once you are registered, you will receive an invoice for the participation fee amounting to € 700. If we receive your registration before November 25, 2011 we will allow you a facility of € 100. Should you cancel before January 27, 2012, we will refund the registration fee minus an administrative charge of € 100. All prices quoted here are subject to the current rate of value added tax.

Conference languages

The presentations will be held in German and English and interpreted simultaneously.

Conference venue

Pullman Aachen Quellenhof
Monheimsallee 66, 52062 Aachen, Germany

Organizers

Fraunhofer Institute for Production Technology IPT
Steinbachstrasse 17, 52074 Aachen, Germany

Contact

Dipl.-Ing. Philipp Kolb
Phone +49 241 8904-422
zpm@ipt.fraunhofer.de

ORGANIZERS

Fraunhofer Institute for Production Technology IPT

The Fraunhofer IPT develops integrated systems solutions for clients in modern production industries. We focus on development and optimization of process technology, production metrology and corresponding machines and production concepts. Quality and technology management as well as purchasing complete our offer for integrating new technologies into the companies grown organizational structures.

Center for Precision and Micro Technology (ZPM)

The Center for Precision and Micro Technology (ZPM) was set up by the Fraunhofer IPT to bundle technological competencies in ultra precision and micro technology. In the field of process technology, metrology and machine development we are your competent partner for bi- and multilateral development projects.



FEBRUARY 28, 2012



8:45 Welcome
Prof. Dr.-Ing. Christian Brecher, WZL of the RWTH Aachen and Fraunhofer IPT, Germany

9:00 Microlithography in the next decade
Jos Vreeker, ASML Netherlands B.V., The Netherlands

Materials and processes for precision manufacturing

9:30 Nickel-phosphorous coatings for diamond machining
Steve Deisher, TechMetals, Inc., United States of America

10:00 Coffee Break

10:30 Enabling ultra precision diamond turning of steel and difficult to cut materials
Benjamin Bulla, son-x GmbH, Germany

11:00 Dynamic mold temperature control – A new process window for the manufacture of high quality polymer parts
Guido Peters, gwk Gesellschaft Wärme Kältetechnik mbH, Germany

11:30 Development of customized UV curable lacquers for the manufacturing of high quality optical components
Dr. Xin Li, Microsharp Corporation Ltd, United Kingdom

12:00 Lunch

Automated precision assembly

13:30 Challenges and first results on the way to the automated production of highly compact miniature laser
Wolf Seelert, Coherent GmbH, Germany

14:00 Economic and automated precision assembly of optical components
Joachim Hardt, Rohwedder Micro Assembly GmbH, Germany

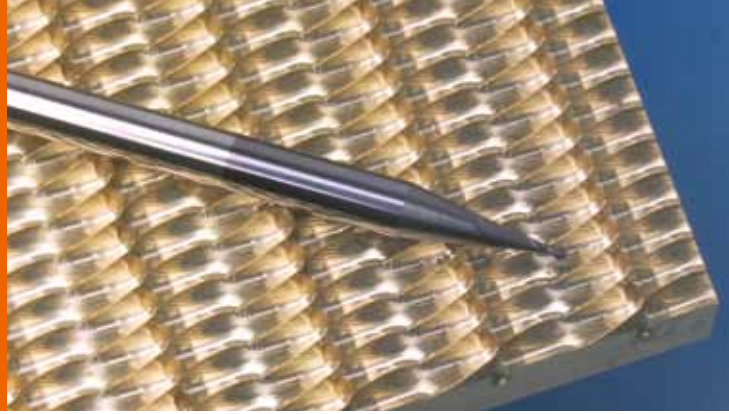
14:30 Wafer level based manufacturing of optical modules
Dr. Christian Holme, Kaleido Technology ApS, Denmark

15:00 Coffee Break

15:30 Shuttle to Fraunhofer IPT, Shop Floor Visit

20:00 Conference dinner

FEBRUARY 29, 2012



Manufacture of complex geometries

- 9:00 **Design of optical freeform surfaces**
Prof. Dr. Harald Ries, OEC AG, Germany
- 9:30 **Ultra-precision milling of optical components**
Patrick Hurst, Moore Nanotechnology Systems, LLC,
United States of America
- 10:00 Coffee Break
- 10:30 **Machine tools for manufacture of complex polymer optics**
Dr. Michael Mauderer, Satisloh AG, Germany
- 11:00 **Challenges and potentials of CAM in micro and ultra-precision manufacturing**
Walter van Doorne, Delcam GmbH, Germany
- 11:30 **Manufacturing techniques for the production of freeform infrared components**
Martin Benzing, Il-VI Deutschland GmbH, Germany
- 12:00 Lunch

- 13:30 **Process chain for the replication of polymer optics**
Rainer Klar, Innolite GmbH, Germany

Manufacture of large-scale precision components

- 14:00 **Production of optical microstructures on light guides**
Tobias Wersig, polyscale GmbH, Germany
- 14:30 Coffee Break
- 15:00 **Micro- and nanostructuring of films by roll to roll processes**
Dr. Andreas Giessmann, Coatema Coating Machinery GmbH, Germany
- 15:30 **Polishing and metrology technology for metre class off-axis and freeform optics**
Richard Freeman, Zeeko Ltd, United Kingdom
- 16:00 End of conference

REGISTRATION

I hereby confirm my registration at a participation fee of € 700 for the conference "3rd Aachen Precision Days". If I send this registration before November 25, 2011 I will receive a facility of € 100.

Please send registration back to us by fax: +49 241 8904-198

Surname* _____

Name* _____

Title _____

Company/Institute* _____

Department _____

Street/PO Box* _____

Zip code/Town/Country* _____

Phone* _____

E-Mail* _____

Signature _____

Date _____

*Required information

I agree that my name and business address will be included in the published list of participants and electronically processed and stored for organizational purposes.

Please fill out this form and send it back to us either by post to the address below or by fax to +49 241 8904-198.

Please register participants individually by making a copy of the form for each registration.

Fraunhofer-Institut für Produktionstechnologie IPT
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