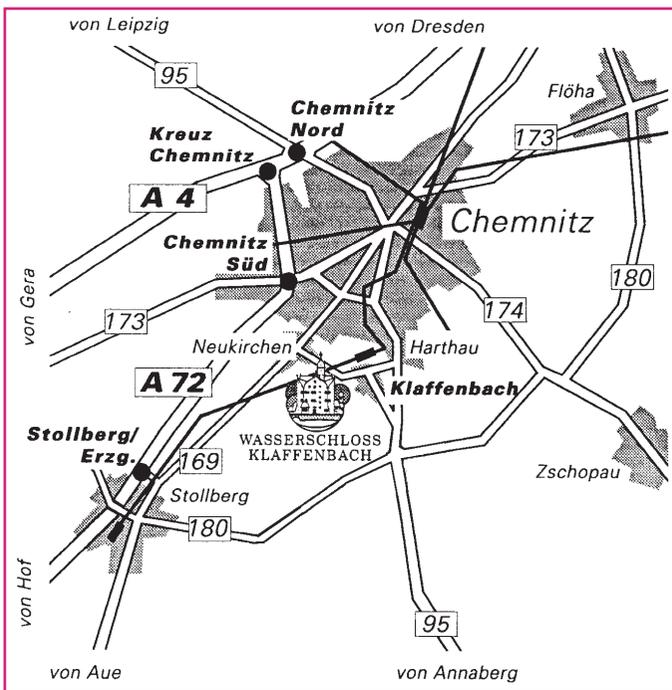


## General informations



**Venue:**  
Wasserschloss Klaffenbach  
Wasserschlossweg 6  
09123 Chemnitz  
Tel.: (0371) 2 6110  
[www.schlosshotel-klaffenbach.de](http://www.schlosshotel-klaffenbach.de)

**Attendance fee and arrival:**  
Arrival and accommodation are individually, the attendance fee of **EUR 150,-** contains coffee break, lunch and dinner, registration documents as well as the culture program.

### Organiser:



**3D-Micromac AG**  
Annaberger Str. 240  
D-09125 Chemnitz  
Tel.: +49 (0)371 400 43-0  
Fax: +49 (0)371 400 43-40  
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**Laser 2000 GmbH**  
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[contact@laser2000.de](mailto:contact@laser2000.de)

**More information: [www.laser2000.de](http://www.laser2000.de)**

Company/Institute \_\_\_\_\_ Department \_\_\_\_\_  
Name, first name \_\_\_\_\_ Titel \_\_\_\_\_  
Street \_\_\_\_\_ Number \_\_\_\_\_  
Zip code, city, country \_\_\_\_\_ eMail address \_\_\_\_\_  
Telephone with prefix \_\_\_\_\_ Sign and date \_\_\_\_\_

Yes, I will participate  
 No, I do not participate, but I am interested in further information  
The attendance fee of EUR 150,- will be invoiced after the registration. **Deadline for registrations is 14th August 2006.** I agree with the fact that my data are taken up to the list of participants and processed and stored for purposes of the ISL 06-Organisation.

**Fax +49 (0)8153/405-33**

**More information and easy on-line registration: [www.laser2000.de](http://www.laser2000.de)**

**Webcode: 9004**

## International Symposium on Laser-Micromachining



# ISL

CHEMNITZ

13th. - 14th.  
September 2006



### Technologies and Applications

- Applications in micro systems technology and SEMI-Industry
- New horizons with short and ultra short pulsed lasers
- New lasers and components

**Laser micro machining**

**Schlosshotel Klaffenbach**

**13th - 14th September 2006**



## Symposium topic

„Micro“ – one of the most mentioned words in the last years when it comes to technologies for the future. In almost all processes in industry the addition „Micro“ promises a more effective use of resources, lower production costs, producibility of new products, and after all the opening of new customer groups. This is also true for the laser machining. The questions that many end users have are: „How can micro technology open new markets for us? Is especially the laser micro machining a chance for our business?“

To answer these questions with innovative products, two leading companies of the laser sector came together in 2003 for a unique distribution partnership: Laser 2000 as one of the largest seller of laser technologies in Europe and 3D-Micromac AG as a specialist of systems for laser micro machining.

To give end users and laser specialists a new platform for information exchange and to present innovative solutions the first „International Symposium on Laser micro machining“ will be held this year in Chemnitz/Germany. With top-class lectures and speakers from industry and research the organizers want to point out the possibilities and chances of laser micro machining and give the participants an overview over novelties and solutions – individual and customer-oriented.

We look forward to your attendance and we expect exciting discussions and new impulses.



**Tino Petsch**  
CEO/President  
3D-Micromac AG



**Gerold Simke**  
Head of business area  
Laser micro machining  
Laser 2000 GmbH

## Wednesday, 13th September 2006

14:00 Salutation and opening speech\*:

„Optical technologies: world market, past and future“  
Prof. Dr. Gerd Marowsky, Laser-Laboratorium Göttingen e.V.

### 15:00 - 16:00 Femtosecond laser

**Material processing with UV femtosecond pulses**

*Dr. Peter Simon, Laser-Laboratorium Göttingen e.V.*

**3D micro structuring of glasses and metals using femtosecond laser pulses**

*Steffen Weißmantel, Laserinstitut Mittelsachsen e.V.*

**Material processing with femtosecond pulses**

*Dr. Thomas Höche, 3D-Micromac AG*

### 16:20 - 17:20 Short pulsed laser

**Manufacturing with highest precision – where are the limits of laser processing?**

*Dr.-Ing. habil. Andreas Ostendorf, Laser Zentrum Hannover e.V.*

**Laser micro machining using ultra short pulsed lasers with different wavelengths and machine concepts,** *Jens Hänel, 3D-Micromac AG*

**Production in sealed separative enclosures – a perspective on future demands on cleanroom technology,** *Joachim Ludwig, COLANDIS GmbH*

### 17:40 - 18:40 Free swing lesson...

**Swing like Bernhard Langer**

You will learn swinging, pitching and chipping. A condensed version of the rules of golf and etiquette are included. This is a good value that provides the fastest way to start playing. Why not learn here and play here!

### 15:00 - 16:00 High end laser machining

**Laser micro technology for integrated-optical components of polymer basis**  
*Prof. Dr. Simon Metev, BIAS - Bremer Institut für angewandte Strahltechnik*

**Micro structuring of wide band-gap materials using fluorine laser pulses**  
*Prof. Dr. Günther Reißer, Laserinstitut Mittelsachsen e.V.*

**Laser Backside Etching – principles and applications,** *Prof. Dr. Bernd Rauschenbach, Leibniz-Institut für Oberflächenmodifizierung e.V. (IOM)*

### 16:20 - 17:20 Laser in MEMS production

**Laser trimming of silicon micro mirror devices**

*Dr.-Ing. Christian Kaufmann, TU Chemnitz, Zentrum für Mikrotechnologien*

**Laser trimming of fibre arrays**

*Dr. Michael Schmidt, Bayerisches Laserzentrum*

**High precision and cost efficient? – micro assembling on the test bench**  
*Dr. Arnd Menschig, MiLaSys technologies GmbH*

### 17:40 - 18:40 Laser applications

**Laser drilling with helical drilling optic system,** *Welf Wawers, ILT Aachen*

**Laser in SEMI-Industry,** *Dr. Bernd Keiper, 3D-Micromac AG*

**Micro machining in Japan,** *Akimi Watanabe, BEAMS Inc.*

from 19:00 evening program with dinner and music

## Thursday, 14th September 2006

09:00 Salutation and opening speech:

„fs lasers in micro materials processing“  
Prof. Dr. Wolfgang Kautek, Universität Wien, Inst. f. Physikalische Chemie

### 09:50 - 10:50 Micro laser sintering

**RAPID – not just simple prototyping, actual trends**

*Prof. Dr.-Ing. habil. Gerd Witt, Universität Duisburg-Essen*

**e-Manufacturing,** *Dr. Hans J. Langer, EOS AG*

**Micro laser sintering – actual developments**

*Prof. Dr. Horst Exner, Laserinstitut Mittelsachsen e.V.*

**Industrial micro laser sintering of metallic materials**

*Tino Petsch, 3D-Micromac AG*

### 11:30 - 12:10 Excimer laser

**Application report of excimer lasers in ophthalmic industry**

*Jürgen Ruppel, Optiswiss AG*

**Unveiling of new solutions for progressive lens engraving and inking**

*Gerold Simke, Laser 2000 GmbH*

### 09:50 - 10:50 Laser sources

**Advanced diode-pumped femtosecond lasers**

*Eric Mottay, Amplitude Systèmes*

**ps-lasers with programmable pulse sequences for micro processing**

*Bernhard Klimt, LUMERA LASER GmbH*

**Nano second laser sources in industrial environments**

*Dr. Frank Maßmann und Dipl. Phys. André Schirrmacher, IB Laser AG*

### 11:30 - 12:10 Laser applications

**Printed RFID-systems produced by reel-to-reel process**

*Dr. Reinhard Baumann, TU Chemnitz*

**Laser sintering on the example material SiC**

*Dr. Reinhard Lenk, IKTS Dresden*

**Power and energy measurement for industrial applications**

*Dr. Andreas Stangassinger, Laser 2000 GmbH*

### 12:10 - 13:10 Lunch

afterwards **departure or optional culture program:** Visit with us Dresden, a city of art and culture. Discover the beauty of this city with a boat travel on the Elbe river and an opera attendance in the world-famous Semperoper. We invite you cordially and look forward to a beautiful finale.

\* all lectures are in english