

Abstract
deadline:
**Jan.12th,
2003**

wlt.de/
lpm2003

**4th International Symposium on
Laser Precision Microfabrication**

LPM 2003
Munich
June 21-24, 2003

2nd Announcement / Call for Abstracts

supported by:



The organization committee is pleased to announce the key dates of LPM 2003 in Munich, Germany.

The 4th International Symposium on Laser Precision Microfabrication is due to take place from **June 21st to 24th, 2003**, at the New Trade Fair Munich, and is directly related to the WLT conference **LIM – Lasers in Manufacturing**. Also, *Laser 2003: World of Photonics*, one of the largest international trade shows in lasers and optics, takes place on the same ground from June 23rd to 26th.

Deadline for paper submission will be the first day of the conference.

The proceedings will be published by SPIE.

Location

The symposium will take place in **Munich (München), Germany**, which is well known for large trade shows as an area of industrial concentration and, of course, for the "Oktoberfest".



Call for Abstracts and Papers

Abstracts for LPM 2003 are due **January 12th, 2003**, and should be submitted via the LPM website (www.wlt.de/lpm2003).

Alternatively, they may be submitted by mail to **WLT c/o ILT (Steinbachstr. 15, 52074 Aachen, Germany)** or to **JLPS c/o Miyamoto Laboratory (Dep. of Manufacturing Science, Osaka University, 2-1, Yamada-Oka, Suita, Osaka, 565-0871, Japan)**. In any case, all abstracts should arrive by January 12th, 2003.

Please include details on the main author (title, name, organization address, phone, fax, e-mail) and other authors (title, name, organization), a short abstract title, the abstract itself (consisting of no more than 200 words) and up to five keywords. Please add whether you prefer an oral or a poster presentation.

The notification of accepted papers is scheduled for **February 13th, 2003**.

The large city with many traditional and historic buildings is located in the south of Germany, about 150 km from the Alps. Whether by road, rail or air, Munich is easy to reach and offers excellent travel connections:

- by air – direct flights to Munich Airport available from numerous international and all European cities,
- by rail – high-speed trains (ICE, IC and EC) travelling in all directions operating to and from Munich at hourly and half-hourly intervals,
- by road – important east-west and north-south connections via main European highways.

Accommodation

Arrangements have been made for reduced rates for hotel rooms during LPM 2003 and, if you wish, continuing on for Laser 2003. The hotel is conveniently located within walking distance of the fair grounds. More information on accommodations will be submitted with the registration forms.



LPM 2003

Information and
abstract submission:

wlt.de/lpm2003

Topics

The LPM 2003 focuses on reporting and discussing progress in the field of lasers and their applications in precision micro-fabrication. All laboratories and industrial development departments active in the field of laser-based microfabrication techniques are invited to present oral and poster contributions.

Topics to be covered are:

- fundamentals of laser-material interaction in micro-/nanomachining
- modeling and simulation
- ultra-short pulsed laser processing
- laser micro-drilling and -cutting
- laser patterning and texturing
- laser micro-welding
- laser micro-forming
- laser cleaning
- laser annealing
- surface modification
- laser trimming
- laser-assisted chemical processing
- micro devices and systems
- thin-film deposition
- medical and biological applications
- laser optics, new laser devices and beam delivery systems
- UV, VUV and EUV sources and applications

Special Session on EUV Lithography

We are planning to organize Special Session on EUV lithography. Submission of abstracts to this special session is also welcome.

Organization

The LPM 2003 will be organized by JLPS, WLT, RIKEN and SPIE, and in association with the WLT conference LIM – Lasers in Manufacturing 2003.

General Chair:

- Isamu Miyamoto (Osaka University, Japan)

Co-Chairs:

- Andreas Ostendorf (Laser Zentrum Hannover, Germany)
- Koji Sugioka (RIKEN, Japan)
- Henry Helvajian (The Aerospace Corporation, USA)
- Rui Vilar (University of Lisbon, Portugal)
- Kunihiko Washio (NEC, Japan)
- Xian Fan Xu (Purdue University, USA)
- Akehito Yoshida (Matsushita Electric Industrial, Japan)

Program Committee:

- David Ashkenasi (LMTB Berlin, Germany)
- Dieter Baeuerle (Johannes Kepler University Linz, Austria)
- Boris Chichkov (Laser Zentrum Hannover, Germany)
- Jan Dubowski (NRC, Canada)
- Friedrich Dausinger (University of Stuttgart, Germany)
- Corey Dunsky (Electro Scientific Industries, USA)
- Gerd Esser (Bavarian Laser Zentrum, Germany)
- Arnold Gillner (Fraunhofer ILT, Germany)
- Malcolm Gower (Exitech Ltd., UK)
- Peter Herman (University of Toronto, Canada)
- Ingolf Hertel (Max-Born Institut Berlin, Germany)
- James Horwitz (Naval Research Laboratories, USA)
- Hideo Hosono (Tokyo Institute of Technology, Japan)
- Willem Hoving (Philips CFT, Netherlands)
- Yoshiro Ito (Nagaoka University of Technology, Japan)
- Kazuyoshi Itoh (Osaka University, Japan)
- Takahisa Jitsuno (Osaka University, Japan)
- Vitali Konov (GPI, Russia)
- C. Lee (In-Ha University, Korea)
- Y. F. Lu (University of Nebraska, USA)
- Hiroshi Masuhara (Osaka University, Japan)
- Johan Meijer (University of Twente, Netherlands)
- Simeon Metev (BIAS, Germany)
- Michel Meunier (Ecole Polytechnique Montreal, Canada)
- Hiroaki Misawa (Tokushima University, Japan)
- Hiroyuki Niino (AIST, Japan)
- Junji Nishii (AIST-Kansai, Japan)
- Etsuji Ohmura (Osaka University, Japan)
- Tatsuo Okada (Kyushu University, Japan)
- Toshihiko Ooie (AIST-Shikoku, Japan)
- Raj Patel (IMRA America, USA)
- Alan Petersen (Spectra Physics, USA)
- Juergen Reif (University of Cottbus, Germany)
- Uwe Stamm (XTREME Technologies GmbH, Germany)
- Michael Stuke (MPI, Germany)
- Vadim Veiko (St. Petersburg Institute of Fine Mechanics and Optics, Russia)

Organizing Committee:

- Zhao-Gu Cheng (SIOFM, China)
- Friedrich Dausinger (University of Stuttgart, Germany)
- Gerd Esser (Bavarian Laser Zentrum, Germany)
- Burkhard Fechner (Lambda Physik, Japan)
- Jim Fieret (Exitech Ltd., UK)
- Enshi Fukumitsu (Hamamatsu Photonics, Japan)
- Arnold Gillner (Fraunhofer ILT, Germany)
- M. H. Hong (DSI, Singapore)
- Tony Hoult (Coherent Inc, USA)
- Juergen Ihlemann (Laser Laboratory Goettingen, Germany)
- Narumi Inoue (National Defence Academy, Japan)
- Takashi Ishide (Matsushita Heavy Industry, Japan)
- Shinichi Ishizaka (Japan Steel Works, Japan)
- Yoshiro Ito (Nagaoka University of Technology, Japan)
- Takahisa Jitsuno (Osaka University, Japan)
- Teruyoshi Kadoya (Trumph, Japan)
- Kazuo Kamada (Matsushita Electric Works, Japan)
- Hidehiko Karasaki (Matsushita Industrial Equipment, Japan)
- Kojiro Kobayashi (Osaka University, Japan)
- Christian Kulik (Laser Zentrum Hannover, Germany)
- William P. Latham (Air Force Research Laboratories, USA)
- J. M. Lee (Samsung Electronics, Korea)
- Simeon Metev (BIAS, Germany)
- Iroshi Miura (Shizuoka University, Japan)
- Takashi Miyoshi (Osaka University, Japan)
- Sumio Nakahara (Kansai University, Japan)
- Hirokuni Namba (Sumitomo Electric Industry, Japan)
- Hiroyuki Niino (AIST, Japan)
- Satoru Nishio (Tohoku University, Japan)
- Klaus Nowitzki (OptecNet Deutschland, Germany)
- Etsuji Ohmura (Osaka University, Japan)
- Toshihiko Ooie (AIST-Shikoku, Japan)
- Alberto Pique (Naval Research Laboratories, USA)
- Juergen Reif (University of Cottbus, Germany)
- Tomokazu Sano (Osaka University, Japan)
- Masaaki Tanaka (Mitsubishi Electric, Japan)

- Osamu Wakabayashi (Gigaphoton, Japan)
- Kunihiro Washio (NEC, Japan)
- Takehiro Watanabe (Chiba University, Japan)

Invited Speakers (tentative):

V. Panchenko,

IPLIT-RAN, Russian Academy of Science (Russia),

“New developments on laser microstructuring in Russia”

Stephen Chou,

Princeton University, (USA)

“New laser imprint process for silicon technology”

Isabelle Riant,

Alcatel CIT Corporate Research Center, (France)

“Laser induced index change and its application to optical devices”

Michael Fokine,

ACREO, (Sweden)

“Laser induced phenomena in a oxide glasses”

Peter G. Kazansky,

Optoelectronics Research Centre, (U.K.)

“Micro-machining with Fs laser pulses, embedded mirrors”

Andire Mysyrowicz,

Laboratoire d'Optique Appliquee, (France)

“Micro-machining with Fs laser pulses”

David Ashkenasi,

LMTB Berlin, (Germany)

“NIK-Engineering”

Costas Fotakis,

Foundation for Research & Technology-Hellas, Institute of Electrical Structure and Laser, (Greece)

(to be announced.)

Richard F. Haglund Jr.,

Vanderbilt University (USA)

“Materials and bio tissues processing using free electron Lasers”

Dieter Baeuerle,

Johannes-Kepler-University (Austria)

“Laser nanofabrication”

Takashi Yabe,

Tokyo Institute of Technology, Dep. Of Energy Sciences, (Japan)

(to be announced.)

Hiroyuki Niino,

Photoreaction Control Research Center, AIST (Japan)

“Surface microstructuring of transparent materials by laser-induced backside wet etching using excimer laser”

Michael Schmidt,

Bayerisches Laserzentrum gGmbH, (Germany)

“Laser microwelding”

B. Rethfeld

University Essen, (Germany)

“Theorie-energy transfer”

A.A. Maznev, K.A. Nelson

MIT, Dept. of Chemistry, (USA)

“Laser-induced grating”

Joerg Kickelhain,

LPKF Laser & Electronics AG, (Germany)

“Laser structuring of 3D-PCBs”

Rene Salathe

Applied Photonics Laboratory, EPFL Lausanne, (Switzerland)

(to be announced.)

Naohisa Matsushita,

Fujitsu Ltd, (Japan)

“Development of surface shape correction technology of magnetic head slider by laser microbending”

Invited Speakers of Special Session (tentative):

Akira Endo

GigaPhoton Inc. (Japan)

“EUV national project in Japan”

Martin Schmidt,

Groupe d'Applications des Plasmas, CEA - DSM/DRECAM/SPAM, (France)

“EUV-technology in Europe”

Uwe Stamm

Xtreme Technologies, (Germany)

“EUV-Technology development in Germany”

Malcolm C. Gower

Exitech Ltd., (UK)

“EUV-Micropattern tool”