Abstract deadline: Jan.12th, 2003

wlt.de/ lpm2003

4th International Symposium on Laser Precision Microfabrication

Munich
June 21-24, 2003

2nd Announcement / Call for Abstracts



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

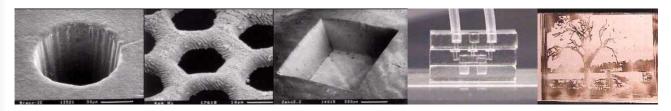
The 4th International Symposium on Laser Precision Microfabrication is due to take place from **June 21st to 24th**, **2003**, at the New Trade Fair Munich, and is directly related to the WLT conference **LIM** – Lasers in Manufacturing. Also, *Laser 2003: World of Photonics*, one of the largest international 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 ${\bf February\ 13th,\ 2003}$.

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.





Topics

The LPM 2003 focuses on reporting and discussing progress in the field of lasers and their applications in precision microfabrication. All laboratories and industrial development departments active in the field of laserbased 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

A Special Session on EUV lithography is planned. The submission of abstracts for this special session is 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)

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- Koji Sugioka (RIKEN, Japan)
- Henry Helvajian (The Aerospace Corporation, USA)

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- Juergen Reif (University of Cottbus, Germany)
- Tomokazu Sano (Osaka University, Japan)
- Masaaki Tanaka (Mistubishi Electric, Japan)
- Osamu Wakabayashi (Gigaphoton, Japan)
- Kunihiko 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 (UK):

"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-Microstepper tool"

