Call for Papers

We are calling for papers giving the latest information on research and development in the field of Laser synthesis and processing of advanced materials. Please help to make this symposium your own and a common success.

Abstract submission
Abstracts should be submitted online via the official E-MRS website www.emrs-strasbourg.com.

Please take care, that you choose the right Symposium P when submitting your abstract.

In case you have problems with abstract submission, please contact one of the organizers (Peter Schaaf, pschaaf@uni-goettingen.de).

Abstract Deadline: January 15, 2007

Proceedings
All contributions (talks and poster) will be published in the conference proceedings of the symposium, which will appear as a special issue of Applied Surface Science (www.elsevier.com). All papers will be refereed. Detailed instructions for paper submission will be provided.

Support
A limited amount for support is available.

Information
If you wish further information please visit the official E-MRS website or contact one of the organizers.

www.emrs-strasbourg.com

Abstract Deadline: January 15, 2007
E-MRS 2007 Symposium P:

**Scope**
The use of laser technologies is in the forefront of research in nanotechnology, biology, medicine, art conservation, and applications in industry. Recent advances in ultrafast laser processing include the writing of waveguides in bulk glass, micromechanical devices in polymers and subcellular nanosurgery in vivo. It is the objective of this symposium to bring together material scientists, physicists, chemists and engineers, to share the recent progress, identify critical problems, devise promising solutions and construct technology roadmaps for the application of laser technologies to new functional and advanced materials.

The particular goals of this symposium are: (1) to provide a forum for reporting the latest advances in concepts and methodologies in laser material interaction and processing; (2) evaluate and compare emerging concepts and technologies; (3) identify scientific and technological impact areas; (4) determine promising approaches for industrial applications; (5) provide an interdisciplinary forum for sharing the complementary knowledge, problems, and interests.

The symposium will focus on the unique possibilities that the laser techniques offer for processing in micro-and nano-electronics, magnetics, photonics and optics, thin film growth, surface modifications of metals, polymers and biomaterials as well as for the fabrication of contamination-free colloidal particles of particular interest for biochemistry and biotechnology. Contributions are sought in all areas of laser-material interaction for the synthesis, processing and diagnostics of advanced materials.

**Laser synthesis and processing of advanced materials**

**Abstract Deadline: January 15, 2007**

**Topics (not exclusive)**
- Fundamentals of laser material interactions: ultrafast laser processes, modeling and simulation
- Laser-induced plasma: dynamics, modeling, simulation, application
- Nanoscience and nanotechnology: synthesis and processing of clusters, nanoparticles, nanotubes; nanoscale processing, nearfield techniques.
- Pulsed laser deposition and synthesis of advanced materials: new materials and devices, diagnostic tools. Applications in communications, sensors, actuators.
- Analytical applications: diagnostics, LIBS, MALDI, mass analysis and microprobes.
- Laser surface treatment: applications in industry and art conservation.
- Micro and nano-processing laser applications in manipulation, direct-printing, lithography, 3D structuring, waveguide writing and micromachining, device production, organic electronics (OLED, organic data storage).
- Laser applications in biology and medicine

**Invited Speakers**
Richard Häglund (Vanderbilt University, U.S.A.), Stefano Taccheo (Politecnico di Milano, Italy), Alfred Cerezo (University of Oxford, UK), Marta Castillejo (Instituto Rocosolano, CSIC, Madrid), Klaus Sokolowski-Tinten (Universität Duisburg-Essen, Germany), Kishan Dolakia (St. Andrews University, UK), Yuri Suzuki (UC Berkeley, USA). A limited number of further invited talks will also be chosen from the submitted abstracts.

**Common Sessions**
Common sessions with other symposia will be organized.

**Sponsors**
The list of sponsors to the symposium will be included in the second announcement and the official E-MRS website and the program.

**Best Talk/Best Poster**
We intend to choose the best oral presentation (not invited) and some best posters of the symposium. Prizes will be handed over in an official ceremony.

**Student Awards**
Student awardees will be chosen among the presenting students registered to the symposium. We welcome suggestions for this prize (please send nomination, student's vita and some details about research to one of the organizers). Forms and information are found at www.emrs-strasbourg.com

**Registration**
Details about registration and conference fees are available on the official E-MRS website.

**Accommodation**
Details about accommodation in Strasbourg are available on the official E-MRS website. Strasbourg is a very lively and busy European town and early reservation is advised.

www.emrs-strasbourg.com