

Submission of Papers

Contributed papers for oral or poster presentation are invited for the previously mentioned conference topics.

Abstracts should be submitted with a minimum length of 300 words and a maximum length of one page. The abstracts have to be submitted via internet. Please find more information at <http://www.pse2006.net>.

The abstracts are to be submitted not later than January 31st, 2006. The authors are requested to indicate their preferred type of presentation (oral: 15 min plus 5 min discussion, or poster) and the appropriate conference topic.

Conference Proceedings

The proceedings of the conference will be published as a regular issue of an international journal. All manuscripts will be refereed as customary for original papers. Regular conference contributions will be limited to 4, keynote lectures to 6, and plenary lectures to 10 journal pages. Please, find more information at the conference website.

Conference Language

All abstracts and manuscripts must be submitted in English. The invited and contributed talks as well as the poster presentations will be given in English, which is the official conference language.

Venue

The location of the 10th International Conference on Plasma Surface Engineering is again the congress center of Garmisch-Partenkirchen. Situated 60 miles (110 km) south of München, Garmisch-Partenkirchen is a well-known resort in the foothills of the Bavarian Alps, nestling in an enchanting landscape of mountains, lakes, villages, baroque churches and famous castles of the Bavarian kings. It is easy to reach by train from München Main Station and München International Airport. Access by car via Autobahn A95 from München to Garmisch-Partenkirchen is also straightforward.

Social Program

Conference delegates and accompanying persons are invited to join a welcome reception on Sunday evening, September 10, 2006 and the reception by the Mayor of Garmisch-Partenkirchen. Following the tradition of the previous PSE conferences, the conference dinner will be held as a "Bavarian Evening" on Wednesday, September 13, 2006.

Accommodation

Because Garmisch-Partenkirchen and Upper Bavaria are very popular in the fall season, an early hotel reservation is strongly recommended. Please, make your reservation with your registration.

Conference Schedule and Calendar

The technical program of the conference, including the plenary lectures, oral and poster sessions will be arranged from Monday to Friday. The official opening takes place on Monday, September 11, 2006 at 9 a. m.

Important Dates for the Conference

Registration opens from March 1st, 2006
Early Registration up to July 1st, 2006

Abstract submission deadline
(only electronically via the website) January 31st, 2006

Confirmation of accepted abstracts April 2006

Preliminary program available
at the conference website June 1st, 2006

Manuscripts submission deadline
(only electronically to publisher,
instructions will follow) September 12, 2006

Information and Registration

All information about the conference are available at the conference website. If you require to receive the newsletter concerning PSE 2006, please, order it via conference website. Registration via the conference website only, after March 1st, 2006.

Local Organizing Committee

Scientific Program
Forschungszentrum Rossendorf
Prof. Dr. Wolfhard Möller
Postfach 51 01 19 e-mail:
D-01314 Dresden, Germany w.moeller@fz-rossendorf.de

Secretariat:
Europäische Forschungsgesellschaft Dünne Schichten e. V.
Dr. Ludwig van Loyen Tel: +49 (0) 3 51 8 71- 83 75
Gostritzer Straße 61 63 Fax: +49 (0) 3 51 8 71- 84 31
D-01217 Dresden, Germany e-mail: vanloyen@efds.org

European Joint Committee on Plasma and Ion Surface Engineering (EJC/PISE)

Prof. Dr. G. Bräuer (Chairman)
Fraunhofer-Institut für Schicht- und Oberflächentechnik
Bierenroder Weg 54 e Tel: +49 (0) 5 31 2 15 - 55 01 / 55 00
38108 Braunschweig Fax: +49 (0) 5 31 2 15 - 59 01
Germany

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Tenth International Conference on Plasma Surface Engineering

Conference and Exhibition

First Circular and Call for Papers



PSE 2006

September 10 - 15, 2006
Garmisch-Partenkirchen
(Germany)

www.pse2006.net

Organized by:

European
Joint Committee on
Plasma and Ion
Surface Engineering
(EJC/PISE)

Main Sponsor:

IonBond



Tenth International Conference on Plasma PSE 2006 Surface Engineering

Scope of the PSE Conference:

Applications of plasma and ion beam techniques in surface engineering and their fundamentals

The 10th International Conference PSE will set a new milestone with its big anniversary. The sustaining success of the PSE is reflecting the increasing requirements of new surface technologies in industry. This conference every two years has aided the know-how-transfer from R&D to industrial applications. By exchanging the scientific know-how with the industrial applications the PSE is an excellent forum for a dialogue between these groups. The high scientific level combined with this special feature has made the PSE so successful. Therefore, the forthcoming conference will focus more actively on these exchanges of experiences.

With the 10th repetition in 2006 the PSE will continue its successful history since 1988. During this time the plasma surface engineering has made a lot of scientific and practical developments.

With the new scientific progresses in the field of nanotechnologies further potential for the future have opened already new doors.

Expecting again more than 600 delegates from Europe and overseas countries together with an industrial exhibition will be one of the biggest events in the field of plasma surface engineering.

The presentations will contribute to the clarification of relationships between the different process parameters as well as the modified surface coatings and thin films. A basic understanding of the different processes is already in the situation that more and more industrial applications for industrial products and consumables are already applied with increasing market shares.

Conference Topics

1. Deposition and surface modification processes

- PVD, PACVD, hybrid processes
- Plasma Diffusion Treatment
- Ion beam, laser and plasma immersion processing
- Plasma polymerization
- Atmospheric plasma processing
- Pulsed plasmas (high-rate deposition, ionization of sputtered atoms)

2. Protective, tribological and functional coatings

- Wear, erosion, corrosion and oxidation resistance, low friction, low stress, etc.
- Barrier coatings
- Biocompatible and antibacterial coatings
- Transparent oxide thin films for electronics, optics and photocatalysis
- Films for solar and fuel cells

3. Nanocomposite films and other advanced coatings

- Origin of enhanced properties and temperature stability
- Size and shape dependent phenomena
- Super hard and super tough films
- Multilayers, super lattices, nanostructured films, nc-C, etc.
- Optical, magnetic and other composites
- Films with high-temperature oxidation resistance exceeding 1000 °C

4. Properties and characterization of films, coatings and modified surfaces

- Electrical, mechanical, optical, thermal, barrier, decorative properties
- Physical properties
- Thin films and surface characterization and analysis

5. Advanced plasma and ion sources

- New PVD, ion, etching and surface treatment sources
- Characterization and diagnostics

6. Material design and modeling

- Interaction with surfaces, film growth, ion implantation, etc.
- Computer simulation
- Model prediction of new materials

7. Industrial applications, engineering and standardization

- Hard and super hard protective coatings
- Low friction coatings
- High precision optical coatings
- Large area coatings
- Photovoltaic, flat panel displays, magnetic, electronic and electro-optical devices, etc.
- Glass, polymer, textile treatment
- In-situ process control
- Medical and photo catalytic coatings
- Standards
- Applications in automobile, aircraft, optical, energy, environmental, packaging, decorative, bio, medical, nano and MEMS industry, etc.

8. Emerging techniques

- Nanostructures
- Nanocrystallization from amorphous phase
- Low temperature crystallization
- High-rate, high-power pulsed sputtering

Contributed papers from universities, institutes and especially from industry are welcome. Recent developments and progress in the above listed areas will be surveyed by **invited talks**. In addition the individual sessions will be introduced by a number of **keynote speakers**.

Saturday / Sunday, September 09 - 10, 2006

Tutorial: Fundamentals and Trends of Plasma Surface Processing

The Tutorial will cover the fundamentals of selected modern plasma processes and their applications in research and industry. Lectures will be given by internationally recognized senior scientists.

The Tutorial will be organized by the German PISE Group (AK Plasma) in cooperation with EFDS, and chaired by Professor Dr. W. Möller, Research Centre Rossendorf, Dresden.

Tuesday, September 12, 2006 (afternoon)

Workshop: Successful Applications of Plasma and Ion-based Processes

Speakers from industrial companies will discuss specific practical examples of the successful implementation of plasma and ion-based processes in product applications. Special attention will be paid to the performance and cost benefits obtained. The workshop will be organized by the VDI Technology Center Physical Technologies in cooperation with the Society of Vacuum Coaters (SVC).

Tuesday / Wednesday, September 12 - 13, 2006

Industrial Exhibition / Exhibition Evening

An industrial exhibition, where manufacturing and service companies will find excellent opportunities to present their products and announce their services, will again constitute an important part of the meeting. The exhibition area will be located in the main hall close to the conference desk. An Industrial Evening is planned on Tuesday. Interested companies and organizations should contact the conference management as soon as possible.

Job Placement Center / Technology Placement Center

At PSE 2006 a "Job Placement Center" will be set up as a contact point for job seekers and organizations recruiting new personnel.

The "Technology Placement Center" will act as an intermediary for scientific / technological queries and will support cooperative ventures and proposals for problem-solving.

Conference Fees

Regular registration fee	€ 480
Payment after July 1 st , 2006	€ 510

The registration fee includes the conference proceedings, book of abstracts, welcome reception as well as Industrial Evening. It does not include the Tutorial on Saturday / Sunday and the Bavarian Evening.

Regular registration fee for students	€ 220
Payment after July 1 st , 2006 for students	€ 250

The students' fee does not include the proceedings and the Tutorial on Saturday / Sunday and the Bavarian Evening.

Two-days ticket	€ 290
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This special ticket is only valid for the conference and exhibition on Tuesday and Wednesday including book of abstracts and Industrial Evening.

Tutorial:
Fundamentals and Trends of Plasma Surface Processing

Regular:	€ 300
Students:	€ 150

This ticket is only valid for the Tutorial on Saturday and Sunday.

Bavarian Evening	€ 40
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Participation is only possible with this additional ticket.

Accompanying persons	€ 60
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Fee includes welcome reception, Industrial Evening as well as Bavarian Evening.