



1st International EJC-PISE Workshop

Scope of Workshop

Plasma Surface Engineering - Protective and Decorative Coatings

The 1st International Workshop is a new initiative of the European Joint Committee on Plasma and Ion Surface Engineering (EJC-PISE), well known as the organizer of the *International Conference on Plasma Surface Engineering (PSE)*, taking place every two years in Germany.

The aim of this International Workshop is to improve the scientific and industrial cross-border collaboration in the field of Plasma Surface Engineering in the Baltic Sea Regions. Moreover, the EJC-PISE workshops concentrated on applications of plasma and ion-/particle-beam surface and on practical problems.

The two-day Workshop in Riga, focussed on the topics of protective and decorative coatings, will be organized jointly by the European Society of Thin Films (Dresden, Germany), the BalticNet-PlasmaTec (Greifswald, Germany), and the Riga Technical University (Latvia).

Kindly invited to the Workshop are both scientists from research organizations as well as engineers from the industry, who are interested in new contacts and cooperation in the Baltic Sea Region.

Industry Exhibition

Manufacturers and sales companies of equipment, products and materials related to all areas of protective and decorative coatings based science, technology and applications are invited to participate in the industry exhibition. Institutions and organizations being engaged in the conference subjects are welcome to present their aims and activities. The exhibition stands will be placed in direct vicinity to the poster area. Because of the limited space available, exhibitors are recommended address the organising committee under brz@efds.org an early reservation.

Registration Fees

Regular registration fee	EUR 120
Registration fee for PhD-students	EUR 90
Registration fee for students	EUR 60
Registration fee for students without social events	EUR 40

The registration fee includes the conference proceedings on USB-Stick, exhibition, welcome reception as well as the Industrial Evening.

All stated conference fees are free of VAT.

In case of your cancellation the fee of EUR 20 will be charged before Mai 25, 2009. After that date, a refund is not possible.

Conference Proceedings

The sheets of the lectures will be published on USB-Stick for every regular full conference participant.

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

Riga, the capital of the Republic of Latvia, is situated on the Baltic Sea coast on the river Daugava. Eight hundred years have shaped the city's unique appearance and rich traditions. The Historic Centre of Riga has been declared an UNESCO World Heritage Site, and the city is particularly notable for its extensive Art Nouveau architecture. Riga is served by an international airport, located 13 km from the city centre, which is accessible by a frequent bus service or taxi. Riga can offer a range of hotels.

Information and Registration

Detailed information is available on the EJC-PISE website: www.ejc-pise.org,
Registration up to May 20, 2009

Registration is possible via internet: www.ejc-pise.org or by fax to +49 3834 550111.

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Plasma Surface Engineering – Decorative and Protective Coatings

Workshop and Industrial Exhibition

Second Circular



June 9–10, 2009
Riga, Latvia

www.ejc-pise.org

Organized by
European
Joint Committee on
Plasma and Ion
Surface Engineering

In Cooperation with

BalticNet-PlasmaTec



Riga Technical University



European Society
of Thin Films

Program

June 09, 2009, Tuesday

09:00 – 09:15 Welcome

Decorative and functional coatings

09:15 – 10:00 Peculiarities of Metal Coating Deposition on Polymer Fabric
Inguna Strazdina, SIDRABE and Riga Technical University

10:00 – 10:20 Improving the adhesion of sputtered metal coatings on PMMA using an ALD interlayer
David Cameron Advanced Surface Technology Research Laboratory

10:20 – 10:40 The Effect of a Plasma Pre-treatment on the Quality of Flock Coatings on Polymer Substrates
Thomas Bahnners, Deutsches Textilforschungszentrum Nord-West

10:40 – 11:00 Colour Effects, Surface Protection and - Design by Vacuum Deposition
Stephan Küper, LEYBOLD OPTICS

11:00 – 11:20 Application of plasma processes for functionalization of technical fibers and textiles
Andrejs Lusis, University of Latvia

Wear and surface protection

12:00 – 12:30 Optimization of wear protective DLC coatings by use of nanoindentation and Raman spectroscopy
Klaus Pagh Almtoft, Danish Technological Institute

12:30 – 12:50 Development of Oxidation Protective Coating for Advanced Aero Engines
Maik Fröhlich, DLR-German Aerospace Center

12:50 – 13:10 Design of Novel Metallic Corrosion Protective Coating on Steel Sheet by Means of Thin Film Technologies
Richard Weinhold, Dortmunder Oberflächenzentrum

13:10 – 13:30 Hard coatings on tools for woodworking-state of the art
Jerzy Ratajski, Technical University Koszalin

Biologically and organically active coatings

14:30 – 15:00 Deposition and physical properties of thin TiO₂ and N-doped TiO₂ films prepared by High Power Impulse Magnetron Sputtering
Vitezslav Stranak, University of Greifswald

15:00 – 15:20 White biogeneered ceramic surface for dental implants
Torsten Will, O.M.T. GmbH

Cooperation / Partnering

15:20 – 16:00 Financing of international research cooperation
Marko Häckel, neoplas GmbH & INP Greifswald

15:40 – 16:00 Bilateral and international financing of business cooperation
Alexander Schwock, BalticNet-PlasmaTec, Western Pomerania Technology Centre

16:00 – 17:00 Poster Session / Exhibition / brokerage event

June 10, 2009, Wednesday

Deposition processes

09:00 – 09:30 Latest results in HPPMS thin film coatings for cutting tools
Christoph Schiffers, CemeCon AG

09:30 – 09:50 High frequency electromagnetic resonant method for metals melting and vaporization
Janis Valdmanis, University of Latvia

09:50 – 10:10 Film Stress Relief: A Practical Guide to Adjusting Process Parameters
Uwe Krause, Advanced Energy Industries

10:10 – 10:30 The Art of Choosing the Right Power Supply
Ken Nauman, Advanced Energy Industries

10:30 – 10:50 HiPIMS: An improvement of magnetron sputtering,
Aijaz Asim, Linköping University

Basics and Characterisation

11:30 – 12:00 Material effects of using of impulse gas valve in IPD device
Krzysztof Zdunek, Warsaw University of Technology

11:30 – 11:50 Photo-, dual- and exoelectron spectroscopy to characterize Nanocoatings and nanostructures
Yuri Dekhtyar, Riga Technical University

11:50 – 12:10 Sp³ enhancing effects and stress optimisation in hard carbon materials
Stéphane Neuville, Tetrahedral Carbon Engineering

12:10 – 12:40 Closing Session – future activities

Organizing Committee

A. Schwock, Greifswald (D) - Workshop
K. Brzezinski, Dresden (D) - Industrial Exhibition
Y. Dekhtyar, Riga (LV) - Workshop

Secretariat:

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Conference Chairman

Prof. Y. Dekhtyar Riga Technical University (LV)

Conference Co-Chairmen

Prof. W. Blau EFDS, Dresden (D)

Programme Committee

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D. Cameron, Lappeenranta (FIN)
Y. Dekhtyar, Riga (LV)
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