

24<sup>th</sup> International Conference on  
SURFACE MODIFICATION  
TECHNOLOGIES (SMT 24)

**September 7 - 9, 2010**

**Dresden, Germany**

International Congress Center

DRESDEN  
concept



# Program



**Fraunhofer**

IWS



# Foreword

DRESDEN  
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Ladies and Gentlemen,

Following the highly successful SMT-conferences of the last years, SMT 24 in Dresden again will bring together the international community of science and industry. The focus of the conference will be on different technologies for surface modification technologies as well as materials and analytics. Plenary lectures by internationally renowned speakers and contributed oral presentations will offer you excellent opportunities to become acquainted with the latest developments in the field of thermal spraying, laser technology, PVD, CVD and tribology. Sufficient time will be available for discussions on challenges and solutions, new materials and processes as well as with cooperation partners.

Dresden with its numerous scientific research institutes of Fraunhofer, Max-Planck, Leibniz and Helmholtz Association and the University of Technology Dresden, connected in an alliance named DRESDEN-concept, is proud of being the host of the conference.

Eckhard Beyer

Conference Chairman

Executive Director for Fraunhofer IWS, Dresden, Germany

Chair for Laser and Surface Technology at the Institute of Surface and Manufacturing Technology, University of Technology at Dresden, Germany.

Conference Co-Chairmen

Dr. Tangali S. Sudarshan

President & CEO, Materials Modification Inc.,  
Fairfax, VA, USA

Dr. Lutz-Michael Berger

Group Leader Fraunhofer IWS,  
Dresden, Germany

# Scientific committee

**Lutz-Michael Berger**, Fraunhofer IWS, Dresden, Germany  
**Eckhard Beyer**, Fraunhofer IWS and University of Technology Dresden, Germany  
**Joe Buhagiar**, University of Malta, Tal-Qroqq, Malta  
**Frank Gärtner**, Helmut-Schmidt-University, Hamburg, Germany  
**Kenneth Holmberg**, VTT, Espoo, Finland  
**Jan Ilavsky**, Argonne National Laboratories, Argonne, IL, USA  
**Stefan Kaskel**, University of Technology Dresden, Germany  
**Seiji Kuroda**, National Institute for Materials Science, Tsukuba/Japan  
**Andres Lasagni**, Fraunhofer IWS, Dresden, Germany  
**Andreas Leson**, Fraunhofer IWS, Dresden, Germany  
**Christoph Leyens**, University of Technology Dresden, Germany  
**Luca Lusvarghi**, University of Modena and Reggio Emilia, Modena, Italy  
**Yolanda de Miguel**, Labein-Tecnalia, Bilbao, Spain  
**U. Kamachi Mudali**, Indira Gandhi Centre for Atomic Research, Kalpakkam, India  
**Per Nylén**, University West, Trollhättan, Sweden  
**Lech Pawlowski**, Ecole Nationale Supérieure de Chimie, Villeneuve d'Asq, France  
**Dilip Sarkar**, University of Quebec, Montreal, QC, Canada  
**Igor Smurov**, Ecole Nationale D'Ingénieurs de Saint-Etienne, St. Etienne, France  
**Tangali S. Sudarshan**, Materials Modification, Inc., Fairfax, VA, USA  
**Petri Vuoristo**, Tampere University of Technology, Tampere, Finland  
**Mathias Woydt**, BAM, Berlin, Germany

# Program

## Monday, 6. September (get together)

**17:00** Join us Monday afternoon between 17:00 – 18:00 for registration and a Meet & Greet! See your old friends & colleagues and make new ones. Help us welcome first time attendees. Registered attendees will receive a drink!

## Tuesday, 7. September

08:00 Registration

### Opening (Room 1)

09:00 Welcome address  
Eckhard Beyer  
Conference Chairman



## Plenary Session (Room 1)

- 09:30 A Socratic approach to surface modification: the example of thermal spray  
**Michel Jeandin (plenary)**  
*Competence Center for Spray Processing, Evry Cedex, France*

### Thermal Spray (Room 1)

- 10:00 Analysis of multimaterial coatings deposited by detonation spraying  
**Igor Smurov**  
*Director of DIPI Laboratory, Saint-Étienne, France*
- 10:20 Development of plasma spray parameters for ceramic coatings in gas turbines  
**Georg Mauer**  
*Forschungszentrum Jülich GmbH, Institut für Energieforschung (IEF-1), Jülich, Germany*

### Processing I (Room 2)

- Surface modification of textile materials by polyelectrolyte layers and metall organic frameworks  
**Hans-Jürgen Buschmann**  
*DTNW, Krefeld, Germany*
- Influence of SF<sub>6</sub> and N<sub>2</sub> plasma immersion techniques on PET and PVC polymers: optical and morphological characterization  
**J. R. R. Bortoleto**  
*Universidade Estadual Paulista, Brazil*

- 10:40 Coffee break with technical exhibition

# Tuesday, 7 September

## Thermal Spray (Room 1)

11:10 Cold spraying of hard Zn-alloy coatings for print applications  
**Koichiro Onizawa**  
*Helmut Schmidt University, Hamburg, Germany*

11:30 Photocatalytic properties of suspension plasma sprayed TiO<sub>2</sub> coatings obtained on different substrates  
**Leszek Latka**  
*Service of Thermal Spraying, Villeneuve d'Ascq, France*

11:50 Elevated temperature corrosion of thermally sprayed and clad coatings in simulated chlorine containing environments  
**Hanna Pokhmurska**  
*Technical University Chemnitz, Germany*

12:10 Mullite suspension plasma spraying: effects of particles size distribution on coating structure  
**A. Denoirjean**  
*University of Limoges, Limoges cedex, France*

12:30 Lunch break with technical exhibition

## Processing I (Room 2)

Tailoring graphene layers with crystallographic orientation control  
**Peter Nemes-Incze**  
*Research Institute for Technical Physics and Materials Science, Hungary*

Plasma Induced Graft Polymerization (PIGP) of flame retardant monomers onto textiles of natural origin  
**J. Levalois-Grützmaier**  
*Department of Chemistry and Applied Biosciences, Zürich, Switzerland*

How surface modifications can reduce the cleaning efforts in food processing  
**Marc Mauermann**  
*Fraunhofer Application centre for Processing Machines and Packaging Technology, Dresden, Germany*

Surface modification of polyester fabrics by grafting pH / thermo-responsive microgels with UV-irradiation  
**Pelagia Glampedaki**  
*University of Twente, Enschede, Netherlands*



## Laser processing I (Room 1)

13:40 Experimental investigation of a composite behaviour under ultra-short laser-shock loading

**Elise Gay**

*PIMM/Arts et Métiers ParisTech, Paris, France*

14:00 Micro- and sub-micrometer modification of tetrahedral amorphous carbon films

**Teja Roch**

*Fraunhofer Institute for Material and Beam Technology, Dresden, Germany*

14:20 Mathematical modeling of short and ultrashort laser action on metals

**Vladimir Mazhukin**

*Keldysh Institute of Applied Mathematics, Moscow, Russia*

14:40 Tribological properties of super-hard amorphous carbon (ta-C) layers micro-structured by FS-laserpulses

**Katja Günther**

*University of Applied Sciences Mittweida, Germany*

15:00 Coffee break with technical exhibition

## Characterization I (Room 2)

Qualitative adhesion testing of coatings vs. pull-off and centrifuge test

**Uwe Beck**

*Federal Institute for Materials Research and Testing, Berlin, Germany*

Characterisation of glass-ceramic coatings based on barium disilicate for stainless steel

**Ahmet Capoglu**

*Gebze Institute of Technology, İstanbul Caddesi, Turkey*

Influence of sensor contact on the thermal conductivity values of thermal barrier coatings: part 1 experimental

**Nicholas Curry**

*University West, Trollhättan, Sweden*

Influence of sensor contact on the thermal conductivity values of thermal barrier coatings: part 2 modelling

**Nicholas Curry**

*University West, Trollhättan, Sweden*

# Tuesday, 7 September

## Thermal Spray II (Room 1)

- 15:30 Enhanced conditions for high strength coating  
**Frank Gärtner**  
*Helmut Schmidt University, Hamburg, Germany*
- 15:50 Optical diagnostics of dispersed particles flow at detonation spraying  
**V. Ulianitsky**  
*Laurentiev Institute of Hydrodynamics, Novosibirsk, Russia*
- 16:10 Characterisation of plasma-sprayed SrFe<sub>12</sub>O<sub>19</sub> coatings for electromagnetic wave absorption  
**Markus Brühl**  
*RWTH Aachen University, Aachen, Germany*
- 16:30 Suspension plasma sprayed oxide ceramic coatings: structure and properties  
**Ghislaine Bertrand**  
*Université de Technologie de Belfort Montbéliard, Belfort, France*

## Diffusion/Electrochem (Room 2)

- Influence of manganese on the pack boriding behaviour of pure iron  
**Yuecel Gencer**  
*Gebze Institute of Technology, Gebze-KOCAELI, Turkey*
- Electrochemical deposition of TiO<sub>2</sub> nanoparticles from Ti-6Al-4V machining Chips  
**Zohair Sarajan**  
*Islamic Azad University-Yazd Branch, Yazd, Iran*
- The investigation of the formation of multi-layered diffusion coatings on steel and its surface properties  
**Erdem Sesen**  
*Istanbul Technical University, Istanbul, Turkey*
- Glow discharge plasma nitriding – role of hydrogen  
**Subroto Mukherjee**  
*Institute for Plasma Research, Gujarat, India*



### Thermal Spray II (Room 1)

16:50

Interface characterization of titanium coatings on aluminum light alloys obtained by cold gas spraying

**Núria Cinca**

*Thermal Spray Centre of Barcelona, Spain*

### Diffusion/Electrochem (Room 2)

Optimization of kovar electropolishing conditions

**Gokhan Demirci**

*Aselsan Inc., Akyurt Ankara, Turkey*

## Poster session (MARITIM International Congress Center), Wine & Cheese

17:30

Paper posters will be on display during the whole conference in order to give participants enough time for studying them. In addition, a special poster session will be held on Tuesday evening at 17:30 enabling the authors to present and explain their research projects and outcomes.

**Wine and cheese will be served.**

Details on the poster session may be found at [www.smt-24.com](http://www.smt-24.com).

**The submission of poster presentations is possible until to the start of the conference.**

# Wednesday, 8 September

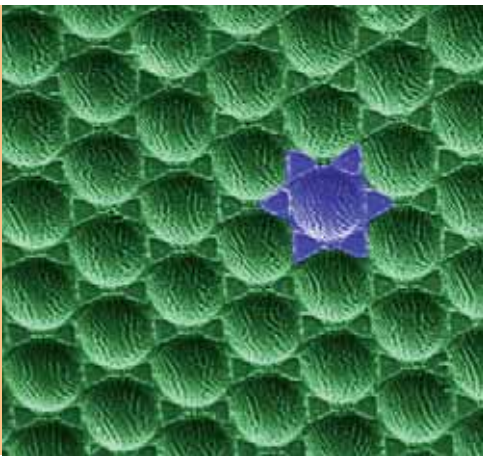
## Laser processing II (Room 1)

- 09:00 Fine structured surfaces generated by a single step laser cladding process  
**Albert Grüninger**  
*Laser Zentrum Hannover e.V., Hannover, Germany*
- 09:20 Features of manufacturing 3D functional parts by selective laser melting  
**I. Yadroitsev**  
*DIPi Laboratory, Saint-Étienne, France*
- 09:40 Characterization of a martensitic stainless steel coating deposited by high speed laser cladding  
**V. Ocelik**  
*University of Groningen, Groningen, Netherlands*
- 10:00 Selective laser melting of martensitic precipitation hardening stainless steel powder  
**Maria Averyanova**  
*National Engineering School of Saint Etienne, France*

## Bioapplication I (Room 2)

- TiO<sub>2</sub> nanotubes for stimulated cell response: A potential nanoscale coating on titanium  
**Sebastian Bauer**  
*University Erlangen-Nuremberg, Erlangen, Germany*
- Surface engineering of magnesium and its alloys for bio-implant application  
**Jyotsna Dutta Majumdar**  
*Indian Institute of Technology Kharagpur, West Bengal, India*
- Integration of structured gel-matrices in a modular, perfusion 3D-cell culture system  
**Niels Schilling**  
*Fraunhofer Institute for Material and Beam Technology, Dresden, Germany*
- Coating of 316L stainless with hema and glycerol dimethacrylate via electropolymerization to improve bio-compatibility  
**Duygu Korsacilar**  
*Dokuz Eylül University, Izmir, Turkey*

10:20 Coffee break with technical exhibition



## Plenary Session (Room 1)

- 10:50 Tribology of coated surfaces – A modelling approach to prediction of wear  
**Kenneth Holmberg (plenary)**  
*VTT Technical Research Centre of Finland, Espoo, Finland*
- 11:20 Application of PVD coatings for protection of components in the hot section of aeroengines  
**Uwe Schulz (plenary)**  
*German Aerospace Center, Köln, Germany*

## Wear/Tribology (Room 1)

- 11:50 Tungsten-based wear and corrosion protective coatings for casting molds  
**Viktor E. Drescher**  
*Technical University Berlin, Germany*
- 12:10 Fretting wear behaviour of controlled ball impact treated aluminium alloy  
**R. Gnanamoorthy**  
*Indian Institute of Information Technology, Chennai, India*

## PVD/CVD (Room 2)

- Nanostructured titanium nitride (TiN) thin films deposited by cylindrical magnetron Sputtering  
**Ramkrishna Rane**  
*F.C.I.P.T. - Institute for Plasma Research, Gandhinagar, India*
- The defect structure for the ultra-nano-crystalline diamond films synthesized in H<sub>2</sub>-containing Ar/CH<sub>4</sub> plasma  
**I-Nan Lin**  
*Tamkang University, Tamsui, Taiwan*

- 12:30 Lunch break with technical exhibition

# Wednesday, 8 September

## Wear/Tribology (Room 1)

13:40 Highly stressed rolling contacts:  
Thin film coatings or novel steel grades?  
**Mathias Woydt**  
*Federal Institute for Materials Research  
and Testing, Berlin, Germany*

14:00 Analysis of mobile renewal technology  
for the backhoe bucket bores  
**Andris Ratkus**  
*Riga Technical University, Riga, Latvia*

14:20 In-situ microtribology with high local  
resolution  
**Wolfgang P. Weinhold**  
*Innowep GmbH, Würzburg, Germany*

14:40 Fluoro-hydro alkyne self-assembled  
monolayer on silicon  
**Sidharam Pujari**  
*Laboratory of Organic Chemistry  
Wageningen University Dreijenplein,  
Netherlands*

## PVD/CVD II (Room 2)

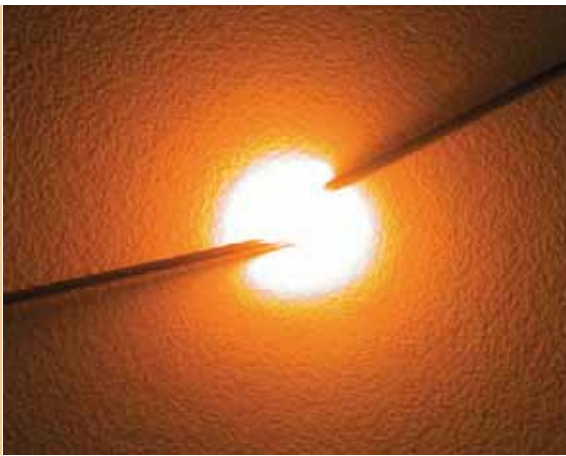
Aluminum containing films prepared by  
plasma immersion ion implantation and  
deposition  
**Guilherme Fernandes Nielsen**  
*Unesp- Sorocaba- Technological Plasmas  
Laboratory, Brazil*

Diamond and DLC films deposited by  
high-current glow discharge with hollow  
cathode  
**Stephan Linnik**  
*National Research Tomsk Polytechnic  
University, Tomsk, Russia*

Co-sputter deposition of nano  
structured composite coatings of copper  
doped titanium nitride  
**Kishor Kumar Kalathiparambil**  
*Institute for Plasma Research, Gujarat,  
India*

Stress state of CVD TiCN<sub>k</sub>-Al<sub>2</sub>O<sub>3</sub> hard  
coatings  
**Christoph Czettl**  
*Materials Center Leoben Forschungs  
GmbH, Leoben, Austria*

15:00 Coffee break with technical exhibition



### Thermal Spray III (Room 1)

15:30 High velocity suspension flame spraying (HVSFS) of  $\text{Al}_2\text{O}_3$  coatings: Effect of the suspension composition on the microstructural and micromechanical properties

**Luca Lusvarghi**

*Università di Modena e Reggio Emilia, Modena, Italy*

15:50 High velocity suspension flame spraying (HVSFS) of  $\text{Al}_2\text{O}_3$  coatings: Effect of the suspension composition on the wear behaviour and residual stresses

**Giovanni Bolelli**

*Università di Modena e Reggio Emilia, Modena, Italy*

16:10 Multimaterial coatings deposited by detonation spraying

**A. Shtertser**

*Laurentiev Institute of Hydrodynamics, Novosibirsk, Russia*

16:30 Effect of powders and heat treatments on electrical conductivity of HPCS and LPCS Cu coatings

**Heli Koivuluoto**

*Tampere University of Technology, Finland*

### Processing III (Room 2)

Graphite like carbon as conductive coating for different applications

**Thomas Stucky**

*Fraunhofer Institute for Material and Beam Technology, Dresden, Germany*

Correlation between topography and wetting of morphologically different stainless steel surfaces modified by electropolishing

**Alfredo Calvimontes**

*Leibniz Institute of Polymer Research, Dresden, Germany*

Plasma electrolytic oxidation coating of synthetic Al-Mg binary alloys

**Mehmet Tarakci**

*Gebze Institute of Technology, Gebze-Kocaeli, Turkey*

Low-emissivity flexible surfaces with high vapor transmission

**Armando Ferreira**

*CeNTI, VN Famalicão, Portugal*



### Thermal Spray III (Room 1)

16:50

Cold gas spraying of Cu-based composites for high-power electronics

**Kerstin Donner**

*Helmut Schmidt University, Hamburg, Germany*

### Processing III (Room 2)

Continuous wide area depositing of silicon dioxide using Atmospheric Pressure CVD

**Sebastian Tschoecke**

*Fraunhofer Institute for Material and Beam Technology, Dresden, Germany*

### Evening reception with buffet (The Westin Bellevue Dresden)

19:00

We invite you to spend a glamorous evening at The Westin Bellevue Dresden. It is situated in the centre of Dresden and has an impressive view of the skyline of the Old Town, famous as the "Canaletto view" which the Venetian painter Bernado Belotto immortalised in his works in the 18th century. The famous gardens and terraces on the banks of the river Elbe with a wonderful view of the Church of our Ladies and Semper Opera House are an inviting place to pass the time. We hope that the great atmosphere will contribute to inspiring discussions.

The Westin Bellevue Dresden  
Große Meißner Straße 15  
01097 Dresden  
[www.westin-dresden.de](http://www.westin-dresden.de)

# Thursday, 9 September

## Superhydrophobicity (Room 1)

09:00 Superhydrophobic aluminum-based surfaces: Investigation of different types of HFCVD-generated thick-film coatings

**Michael Thieme**

*Dresden University of Technology,  
Germany*

09:20 Lotus Effect: Surfaces with roughness-induced superhydrophobicity, self Cleaning and Low Adhesion

**Bharat Bhushan**

*Ohio State University, Ohio, USA*

09:40 Facile one-step fabrication of nano-structured superhydrophobic coatings

**D. K. Sarkar**

*Centre Universitaire de Recherche sur  
l'Aluminium, Québec, Canada*

10:00 Engineering Surfaces with Extreme Wettability and Adhesion

**Feng Zhou**

*State Key Laboratory of Solid  
Lubrication, Lanzhou, China*

## Processing II (Room 2)

Hollow cathode plasma assisted AlTiSiN-thin film deposition by vacuum arc P<sup>+</sup>-technology for advanced wear protection of tools

**Martin Holzherr**

*VTD Vakuumtechnik Dresden GmbH,  
Germany*

Plasma treatment of commercial polymeric substrates that are transparent

**Péricles Lopes Sant'Ana**

*Universidade Estadual Paulista - UNESP,  
Sorocaba, Brazil*

Control mechanisms for self organized nanostructures on optical polymers surfaces

**Stefan Gäbler**

*Fresnel Optics GmbH, Apolda, Germany*

Materials treatment using CO<sub>2</sub> based plasma

**Larry Pershin**

*University of Toronto, Canada*

10:20 Coffee break with technical exhibition

# Thursday, 9 September

## Thermal Spray IV (Room 1)

- 10:50 Sub-micrometer structured alumina based coatings manufactured by suspension plasma spraying for tribological applications: process, structure and properties  
**Ghislain Montavon**  
*University of Limoges, France*
- 11:10 3D temperature and trajectory analysis of a particle stream in a plasma spraying torch  
**Emanuele Ghedini**  
*University of Bologna, Italy*
- 11:30 Influence of composition and spray process on dissolution of wear resistant thermal spray coatings in different chemically aggressive electrolytes  
**Petri Vuoristo**  
*Tampere University of Technology, Finland*
- 11:50 The annular injection unit of disperse materials in thermal plasma flow  
**E.V. Kartaev**  
*Russian Academy of Sciences, Novosibirsk, Russia*

## Bioapplication II (Room 2)

- Small pyroelectrical crystals immobilized in polydimethylsiloxane as electron donor in biochemical redox reactions  
**Florian Schmieder**  
*Institut für Lebensmittel- und Bioverfahrenstechnik, Dresden, Germany*
- Tantalum coatings on CoCrMo alloys for hip and knee joints substitution  
**Cristina Balagna**  
*DISMIC-Politecnico di Torino, Italy*
- Tuning specific biomolecular interactions using electro-switchable oligopeptide surfaces  
**Paula M Mendes**  
*University of Birmingham, United Kingdom*
- Coating of titanium and titanium di-oxide by pulsed laser deposition on Ti-6Al-4V for bio-implant application  
**Jyotsna Dutta Majumdar**  
*Indian Institute of Technology Kharagpur, West Benga, India*

12:10 Lunch break with technical exhibition



### Laser processing III (Room 1)

- 13:30 On-line monitoring in selective laser melting technology  
**Maria Doubenskaia**  
*Ecole Nationale d'Ingénieurs de Saint-Étienne, France*
- 13:50 Effectiveness of techniques for removal of release agent on aluminium die-cast surface  
**Elena Minin**  
*Technische Universität Braunschweig, Germany*
- 14:10 Powder cladding efficiency in laser cladding, and the effect of powder stream characteristics and its thermal interactions  
**Juansethi Ibarra-Medina**  
*The University of Manchester, United Kingdom*
- 14:30 Numerical simulation and experimental visualization of two-phase flow at coaxial powder injection in direct metal deposition  
**O.B. Kovalev**  
*Russian Academy of Sciences, Novosibirsk, Russia*

### Characterization II (Room 2)

- Quantification of the porous microstructure of the thermal barrier coatings ceramic layers  
**Jan Ilavsky**  
*Argonne National Laboratory, Argonne, USA*
- Chemical modification of a photo definable epoxy resin with polyamines to improve adhesion with electroless deposited copper  
**David Schaubroeck**  
*TFCG Microsystems, Zwijnaarde, Belgium*
- Establishment of Relationships between Coating Microstructure and Thermal Conductivity in Thermal Barrier Coatings by Finite Element Modelling  
**Mohit Kumar Gupta**  
*University West, Trollhättan, Sweden*
- An application of Instrumentation and Control engineering for measurement of Surface Properties and kinetics of molecular aggregation process in surfactant solutions  
**Manish T. Thakker**  
*Dharmsinh Desai University, Nadiad, India*

# Thursday, 9 September

## Laser processing III (Room 1)

## Characterization II (Room 2)

14:50 Metal matrix composite parts fabricated by direct metal deposition: analysis of processing conditions and material properties  
**D. Novichenko**  
*Director of DIPI Laboratory,  
Saint-Étienne, France*

Characterization of organic solar cells materials and structures by spectroscopic ellipsometry  
**Christine WALSH**  
*SOPRALAB, Courbevoie, France*

15:10 Closing remarks

15:20 Coffee break with technical exhibition

**16:00 End of the conference**

## Lab view (Fraunhofer IWS)

**16:30** Transportation from the MARITIM International Congress Center to the Fraunhofer IWS will be provided.



## **Sponsoring**

As a sponsor you position your company or institution with a clearly perceptible presence within a selected circle of participants. During the event we offer various possibilities to you to “fly your flag” during the conference and to get into conversation with your potential customers. Take advantage of sponsoring for positioning within an existing target group, and also to increase your profile in a new industry. We would gladly provide you with an individual offer – please do not hesitate to contact us.

## **Exhibition**

For an optimum presentation of your company or institution, make use of the exhibition held in parallel with the conference. Take the opportunity to position your products and services purposefully and branch specifically. Take advantage of the accompanying exhibition at the centre of the branch meeting for your optimal product presentation and make valuable contacts. During the conference you will meet the key players of the industry - with pinpoint accuracy, concisely and with a minimum of organizational expenditure. We are looking forward to sending you further information.

Please visit [www.smt-24.com/exhibition/exhibition.php](http://www.smt-24.com/exhibition/exhibition.php) for detailed information.

### Contact

Henry Teuber

Phone: +49 (0)351 / 83391-3092

E-mail: [henry.teuber@iws.fraunhofer.de](mailto:henry.teuber@iws.fraunhofer.de)

# Organization

## Event location

MARITIM International Congress Center  
Ostra-Ufer 2, 01067 Dresden, Germany  
[www.dresden-congresscenter.de](http://www.dresden-congresscenter.de)

## Conference organization

Dr. Ralf Jäckel  
Phone +49 351 83391-3444  
[ralf.jaeckel@iws.fraunhofer.de](mailto:ralf.jaeckel@iws.fraunhofer.de)

Henry Teuber  
Phone +49 351 83391-3092  
[henry.teuber@iws.fraunhofer.de](mailto:henry.teuber@iws.fraunhofer.de)

Fraunhofer Institute for Material and Beam Technology IWS  
Winterbergstraße 28, 01277 Dresden, Germany  
[www.iws.fraunhofer.de](http://www.iws.fraunhofer.de)

**Conference language:** English (no simultaneous translation)

## Accommodation

Each participant is responsible for his/her own hotel accommodation. The organizers have reserved rooms in a few hotels in Dresden. Please pay attention to the reservation deadlines as the number of rooms available is limited. The list of recommended hotels is available at [www.smt-24.com/accomodation/accommodation.php](http://www.smt-24.com/accomodation/accommodation.php)

## Conference website

For further information, please visit [www.smt24.com](http://www.smt24.com).

# Participation

## Conference fee

Attendees	EUR 560,00
Speakers and poster presenters	EUR 420,00
Students* (with proceedings)	EUR 200,00
Students* (without proceedings)	EUR 150,00
Accompanying person (evening program)	EUR 50,00

The conference fee includes all technical sessions, the abstract booklet and conference proceedings, lunch and coffee break refreshments as well as the participation in the evening reception. (payable on receipt of the invoice)

\* copy of student ID required

## Registration

Deadline **13 August, 2010**

Cancellation of registration is possible by 13 August, 2010.  
After this date, the full amount will be charged.

Online registration is possible at [www.smt-24.com/registration/registration.php](http://www.smt-24.com/registration/registration.php).

### Contact

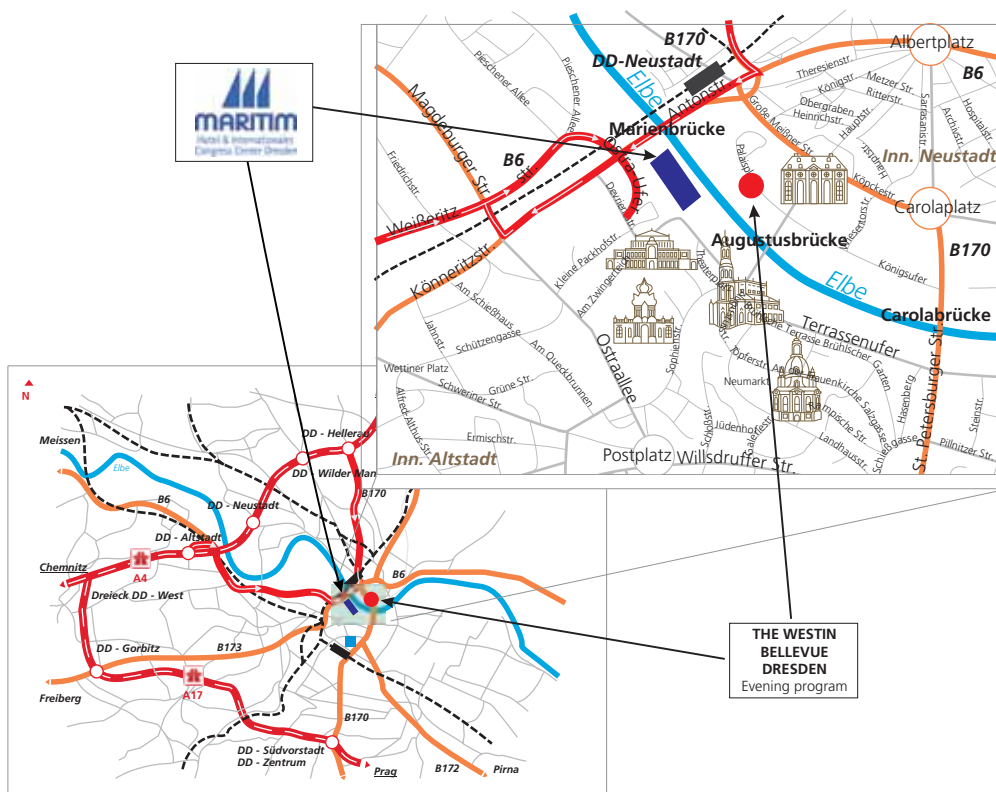
Henry Teuber

Phone: +49 (0)351 / 83391-3092

E-mail: [henry.teuber@iws.fraunhofer.de](mailto:henry.teuber@iws.fraunhofer.de)



## Travel information



Dresden International airport can be reached from the conference center within 30 minutes by taxi. There are direct flights to Frankfurt, Munich, Zurich, Vienna, Milan, London and Moscow

Detailed "How-to-find"-maps are available at the conference website (see point Accomodation).

**24<sup>th</sup> International Conference on  
SURFACE MODIFICATION TECHNOLOGIES (SMT 24)**  
September 7 - 9, 2010

Event location  
MARITIM International Congress Center  
Ostra-Ufer 2, 01067 Dresden, Germany

Registration fee (payable on receipt of the invoice):

- Attendees EUR 560,00
- Speakers and poster presenters EUR 420,00
- Students (with proceedings) (with ID) EUR 200,00
- Students (without proceedings) (with ID) EUR 150,00
- Accompanying person (evening program) EUR 50,00  
(copy of student ID required)

The conference fee includes all technical sessions, the abstract booklet and conference proceedings, lunch and coffee break refreshments as well as the participation in the evening reception.

Registration deadline: August 13, 2010

Cancellation of registration is possible by August 13, 2010.  
After this date the full costs will be charged.

Participation in the evening reception  
(The Westin Bellevue Dresden)  yes  no

**Registration (in block letters)**

Last name .....

First name .....

Institution .....

Billing address .....

Phone / fax .....

E-mail .....

Place / date .....

Signature .....

Firm stamp .....



**24<sup>th</sup> International Conference on  
SURFACE MODIFICATION TECHNOLOGIES (SMT 24)**  
September 7 - 9, 2010. International Congress Center Dresden

Please mail or fax to

Fax: +49 (0) 351 / 83391-3300

Fraunhofer-Institut für  
Werkstoff- und Strahltechnik IWS

Henry Teuber  
Winterbergstr. 28  
01277 Dresden  
Germany