

## **Winter School on Functional Coatings**

**January 23-27, 2012**

### **School description:**

Surfaces have a very important role for the function of many products. Surface treatments and coatings can modify the surface properties strongly and can thus contribute to achieve new or improved product functions. One of the most important areas of functional coatings is tribology, where hard and superhard coatings are applied to increase the wear resistance, to improve the anti-adhesion tendency or to change the friction coefficient of a substrate.

This school will give an introduction to the state of the art of tribological thin-film coatings: material composition, deposition processes and analysis techniques. This will be achieved by lectures as well as by practical demonstrations and trainings. This topic will be complemented by an introduction to Design of Experiments (statistical experiment planning). The school is part of the Marie-Curie Initial Training Network "Macro, Micro and Nano Aspects of Machining" (MaMiNa). It is open for MaMiNa Early Stage Researchers as well as for external participants. It addresses master students, doctoral candidates and postdoctoral researcher.

The school is split in part A that will take place in Lodz, Poland and part B, which will take place in Braunschweig, Germany.

**Hosts:**

- Institute of Materials Science and Engineering, Mechanical Engineering Faculty of the Technical University of Lodz (LUT), Poland
- Fraunhofer Institute for Surface Technology and Thin Films IST, Braunschweig, Germany

**General Programme:**

? Theoretical lectures (total 2 days)

? Practical work (total 1 day)

? 2 evening social events

Download detailed program:

[in english](#)

in polish [1](#) , [2](#)

## **Terms of participation**

Participation is possible for both parts or only for part A or part B. Please apply for each part separately following the deadline, see below! As the number of participants is restricted the registration will be made on a first come ? first serve basis.

The participation is free of charge. It includes lunches, drinks during the breaks and documentation (book ?Functional Coatings? by Prof. Bogdan Wendler + CD of the presentations). Participants must pay for their travel and accommodation. Expenses during the social events are not included.

### **Deadline for application: January 4, 2012**

Application for part A (Lodz): By e-mail to [m.makowka@gmail.com](mailto:m.makowka@gmail.com)

Application for part B (Braunschweig): By e-mail to [seda.eras@ist.fraunhofer.de](mailto:seda.eras@ist.fraunhofer.de)

Together with the registration acknowledgement you will receive information about travel and accommodation.

## **Places**

Part A: Institute of Materials Science and Engineering, Technical University of Lodz, Stefanowskiego 1/15, 90924 Lodz, Poland (Next airport is Warsaw).

Further information about part A:

Technical University of Lodz

Prof. Bogdan Wendler, Head Dept. Coatings? Engineering

Phone +48 426 312 265

E-mail [bogdan.wendler@p.lodz.pl](mailto:bogdan.wendler@p.lodz.pl)

Part B: Fraunhofer Institute for Surface Engineering and Thin Films IST, Bienroder Weg 54 E, 38108 Braunschweig, Germany (Next airport is Hannover).

Further information about part B:

Fraunhofer IST

Dr. Jan Gäbler, Project Manager Department Diamond Technology

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