

# ***Special* PSE 2020**

Based on the 17<sup>th</sup> International Conference  
on Plasma Surface Engineering

Erfurt, Germany

September 7 – 10, 2020

## **Partner Country Session Czech Program Highlights**

## Czech Program Highlights at *Special* PSE 2020

### Partner Country Session

Tuesday, September 8, 2020 | 16:45 – 18:00 | Halle 1

Overview to Czech Partners for plasma and ion surface engineering

Plenary Lecture

***“Pathways for the preparation of functional coatings by simulations at various scales”***

Jiri Houska, University of West Bohemia, Plzen, Czech Republic

### Czech Oral Presentations during *Special* PSE 2020

#### Tutorial 2 | Pulsed Plasmas and Their Applications

Monday, September 7, 2020 | 9:30 – 17:15

***“Overview of Pulsed Plasma Power Supplies”***

Zdenek Hubička, Czech Academy of Science, Prag, CZ

#### Event A

Tuesday, September 8, 2020 | 10:30 – 16:30 | Carl Zeiss Saal

Session A1 | Simulation and modelling of growth, structure and properties

***“Maximum achievable N content in amorphous nitrides”***

Jiri Houska, University of West Bohemia, Plzen, CZ

***“Magnetron sputtering into deep grooves”***

Pavel Mareš, HVM PLASMA, Prague, CZ

Session A2 | Analytics of film structures & properties

***“Thermal stability of nanoparticle thin films characterized by x-ray scattering methods”***

Tereza Košutová, Charles University, Prague, CZ

Session A3 | Plasma Diagnostics and Simulation of Plasma Processes

***“Time-resolved optical emission spectroscopy of a unipolar and a bipolar pulsed magnetron sputtering discharge operated in an argon/oxygen gas mixture”*** – Keynote Lecture

Martin Cada, Institute of Physics CAS, v. v. i., Prague, CZ

***“Computer-aided engineering of industrial PVD and PECVD coating chambers: past victories, future challenges”***

Adam Obrusnik, PlasmaSolve s.r.o., Brno, CZ

## Event C

Tuesday, September 8, 2020 | 10:30 – 16:10 | Panorama Saal

Session C1 | Plasma Polymerization

***“Plasma polymerization on porous materials: role of sticking coefficients on the penetration depth”***

Miroslav Michliček, CEITEC Masaryk University, Brno, CZ

Session C2 | Thermochromic and sensoric coatings

***“Tailored ITO deposition at room temperature for optical and electrochemical bio-sensors”***

Vitezslav Stranak, University of South Bohemia, Ceske Budejovice, CZ

## Event D

Wednesday, September 9, 2020 | 10:00 – 17:30 | Carl Zeiss Saal

Session D1 | Energy conversion related coatings

***“Hybrid Reactive High Power Impulse Magnetron Sputtering System used for the Deposition of Semiconductor Thin Films for Photoelectrochemical Applications.”***

Zdeněk Hubička, Institute of Physics CAS, Prague, CZ

## Event E

Wednesday, September 9, 2020 | 10:00 – 16:30 | Halle 1

Session E2 | PVD 2 - Magnetron sputtering

***“Magnetron sputtering of Sn acetylacetonate coatings for sensor applications”***

Jiří Bulíř, Institute of Physics, CAS, Prague, CZ

## Event F

Wednesday, September 9, 2020 | 10:30 – 17:00 | Panorama Saal

Session F1 | Plasma and ion source technologies

***“Time-resolved Langmuir probe diagnostics of a bipolar high power impulse magnetron sputtering discharge.”*** – Keynote Lecture

Rainer Hippler, Institute of Physics CAS, Prague, CZ

## Event G

Thursday, September 10, 2020 | 10:30 – 13:30 | Panorama Saal

Session G1 | Plasma treatment

***“Comparison of four atmospheric pressure plasma jets applied for treatment of polypropylene”***

Katerina Polaskova, Masaryk University, Brno, CZ