

# 8<sup>th</sup> Cross-Border Seminar on Electroanalytical Chemistry (CBSEC)

Meinsberg

31.03. – 02.04.2026



# Programme

TUESDAY, MARCH 31

**10:00 – 12:30**      **Registration**

**13:00**              **Opening (J. Barek, F.-M. Matysik...)**

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**13:30**              **Opening lecture: 3D printing for production of PDMS microfluidics and its application in microanalysis**  
Prof. P. Tuma, Prague/CZ

**PhD Student Session 1** (Chair: Jan Dismas Burianek, Prague/CZ)

**Advanced Materials for Electrochemical Applications – Part I**

**14:00**              **L1 Electrochemical Characterization of Carbon Nanotubes/Polylactic Acid Composite Electrodes Influenced by 3D-Printing Parameters and Activation**  
Ghazaleh Kholafazadehastamal, Prague/CZ

**14:20**              **L2 Towards Scalable Solid-State Nanopore Fabrication: From SiN<sub>x</sub> Membranes to DNA Translocation**  
Nima Hagkish, Meinsberg/GER

**14:40**              **L3 From Wine to Cosmetics: MOF-Nanozyme Sensors and Chemometrics for Phenolic Antioxidant Quality Control**  
Michaela Heinzka, Brno/CZ

**15:00**              **Coffee Break**

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**PhD Student Session 2** (Chair: Nima Hagkish, Meinsberg/GER)

**Advanced Materials for Electrochemical Applications – Part II**

**15:20**              **L4 Modified metal electrodes for electrochemical quantification of urea in dialysate and blood**  
Lorenzo Sembranti, Prague/CZ

- 15:40**                    **L5 Tafel Analysis of Corrosion Resistance of Novel Titanium Alloys in Hank's Solution**  
Lucie Zaloudková, Brno/CZ
- 16:00**                    **L6 Characterization of galvanostatically nickel-coated nickel mesh electrodes**  
Daniel Vojvoda, Prague/CZ
- 16:20**                    **Coffee Break**
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**PhD Student Session 3 (Chair: Michaela Heinzka, Brno/CZ)**  
**Advanced Materials for Electrochemical Applications – Part III**

- 16:40**                    **L7 Mixed ionic-electronic conductive polymers as coatings on carbon nanofoam electrodes for selective ion binding**  
Marfa Wulf, Hamburg/GER
- 17:00**                    **L8 Characteristics of hydrocarbon-based proton-exchange membranes for electrochemical hydrogen compression**  
Tomas Jedlicka, Prague/CZ
- 17:20**                    **L9 Influence of Pt-alloy Composition and Carbon Support on the Activity and Stability of HT-PEMFCs Catalysts**  
Jan Dismas Burianek, Prague/CZ
- 18:00**                    **Move to “Waldidylle”**
- 19:00**                    **Get-together / BBQ**

**WEDNESDAY, APRIL 01**

**PhD Student Session 4 (Chair: Sofiia Ivakh, Prague/CZ)**  
**Capillary Electrophoresis**

- 09:00**                    **L10 Optimization of CE-MS Parameters for the Analysis of Amino Acids**  
Renata Píplová, Prague/CZ

- 09:20**                    **L11 Hyphenation of Electrochemistry, Capillary Electrophoresis, and Mass Spectrometry for Detailed Oxidation Mechanism Studies of Tyrosine**  
Seyedehelaha Bagherimetkazini, Regensburg/GER
- 09:40**                    **L12 Extension of non-aqueous capillary electrophoresis towards reductive amperometric detection**  
Martin Koall, Regensburg/GER
- 10:00**                    **Coffee Break**
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**PhD Student Session 5** (Chair: Tomas Jedlicka, Prague/CZ)

**Miscellaneous Topics in Electrochemistry**

- 10:20**                    **L13 Single-protein detection with supracolloidal molecular transporters and nanopores**  
Chris Peniel Danasekar, Dresden/GER
- 10:40**                    **L14 Locally resolved corrosion characterization of complex functional surfaces – A methodological extension of the microcell technique**  
Lukas Böttger, Chemnitz/GER
- 11:00**                    **L15 Electrochemical and Spectroscopic Screening of Diphenylisobenzofuran Derivates as Potential Singlet Fission Candidates**  
David Gabaj, Prague/CZ
- 11:20**                    **L16 Electrochemically grafted 4-nitrobenzenediazonium (4-NBD) salt on diamond electrodes for biosensing applications**  
Aashutosh Dube, Prague/CZ
- 11:40 – 12:40**        **Lunch Break**
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**PhD Student Session 6** (Chair: Seyedehelahe Bagherimetkazini, Regensburg/GER)

**Voltammetric Techniques and Reaction Mechanism Studies**

- 12:40**                    **L17 Voltammetric determination of salinomycin**  
Sofiia Ivakh, Prague/CZ
- 13:00**                    **L18 Electrochemical degradation of levamisole hydrochloride using a BDD electrode and methods to monitor the process**  
Sanay Prakash, Prague/CZ
- 13:20**                    **L19 Polarography as an operational analytical method in Li-ion battery recycling**  
Ladislav Bříza, Usti nad Labem/CZ
- 13:40**                    **L20 Development of structured boron-doped diamond electrodes for anodic oxidation of paracetamol**  
Fazal Wahab, Prague/CZ
- 14:00**                    **L21 Comparative voltammetric study of the genotoxic compound fluoren-9-one at different electrodes**  
Svetlana Pucovsky, Prague/CZ
- 14:20**                    **L22 Microfluidic-electrochemical in situ detection of pharmaceutical water contaminants using magnetic nanoparticles**  
Xhensiana Ndreka, Brno/CZ
- 14:40**                    **L23 Investigation of the oxidation mechanism of the topical drug tapinarof in aqueous media**  
Lucie Dostálková, Prague/CZ
- 15:00**                    **L24 Determination of Warfarin using voltammetry and Batch Injection Analysis with amperometric detection**  
Victoria Zuzicová
- 15:20**                    **End of the Scientific Programme of Day 02**
- 15:20**                    **Start of the Excursion**

**16:00**                    **Begin of Boat Tour “Kriebstein Dam”**

**18:00**                    **Dinner (Gaststätte zur Wendeschleife)**

**20:00**                    **Return to “Walddidylle”**

**THURSDAY, APRIL 02**

**09:00**                    **Metrohm Workshop – Part I**  
**Using Potentiostats Effectively: Precision, Pitfalls, and Best Practices**  
**for High-Quality Electrochemical Data**

S. Haug, Metrohm

**10:00**                    **Coffee Break**

**10:20**                    **Metrohm Workshop – Part II**  
**Using Potentiostats Effectively: Precision, Pitfalls, and Best Practices**  
**for High-Quality Electrochemical Data**

S. Haug, Metrohm

**11:20**                    **Closing Ceremony**

**11:30**                    **Guided Tour Kurt-Schwabe Institute (optional)**

**12:30**                    **End of the Seminar (lunch boxes available)**

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