

# Program of the CECE 2018

Hotel Continental, Brno, Czech Republic, October 15 – 17, 2018

8:00 – 15:00            **Registration (Monday, Tuesday)**

## Monday, October 15

9:00 – 9:20            **Opening remarks and award of the Medal of Jaroslav Janak to Ludmila Krivankova**

9:20 – 9:55            **Jiří Homola**  
*Institute of Photonics and Electronics of the Czech Academy of Sciences, Prague, Czech Republic*  
PLASMONIC        BIOSENSORS        FOR        MEDICAL  
DIAGNOSTICS AND FOOD SAFETY

9:55 – 10:30          **Hans H. Gorris**  
*University of Regensburg, Institute of Analytical Chemistry, Chemo- and Biosensors, Regensburg, Germany*  
SINGLE MOLECULE IMMUNOASSAYS BASED ON  
PHOTON-UPCONVERSION NANOPARTICLES (UCNPs)

10:30 – 11:00          **Coffee break**

11:00 – 11:35          **Yann Astier**  
*Roche Sequencing Solutions, Pleasanton, CA, USA*  
EVOLUTION OF THE DIAGNOSTIC-PHARMA  
RELATIONSHIP TOWARDS HEALTH COORDINATES  
AND PERSONALIZED TREATMENT

11:35 – 12:10          **Hadar Ben-Yoav**  
*Ben-Gurion University of the Negev, Israel*  
INTELLIGENT MULTI-ELECTRODE ARRAYS FOR  
IN SITU BIOANALYSIS OF BIOFLUIDS

12:10 – 12:45          **Milan Hutta**  
*Comenius University in Bratislava, Bratislava, Slovakia*  
HUMIC SUBSTANCES FROM POINT-OF-VIEW OF  
ANALYTICAL CHEMISTS

- 12:45 – 14:20      **Lunch break – poster session**
- 14:20 – 14:55      **Jan Preisler**  
*Masaryk University, Brno, Czech Republic*  
MALDI MASS SPECTROMETRY IMAGING  
AT ACQUISITION RATES ABOVE 100 PIXELS/S
- 14:55 – 15:30      **Lumir Krejci**  
*Department of Biology, Faculty of Medicine, Masaryk  
University, Brno, Czech Republic, National Centre for  
Biomolecular Research, Faculty of Science, Masaryk University,  
Brno, Czech Republic, International Clinical Research Center,  
Center for Biomolecular and Cellular Engineering, St. Anne's  
University Hospital Brno, Brno, Czech Republic*  
DNA REPAIR AS A TARGET FOR THERAPY
- 15:30 – 16:05      **Milos V. Novotny**  
*Indiana University, Department of Chemistry, Bloomington, IN,  
USA*  
CAN HUMAN GLYCOME BE COMPREHENSIVELY  
COVERED?
- 16:30 – 18:00      **Invited speaker's visit to the Mendel Museum**  
**(<http://mendelmuseum.muni.cz/en/>)**
- 19:00                **Conference dinner with the traditional Moravian music**

## **Tuesday, October 16**

- 09:30 – 10:05      **Andras Guttman**  
*University of Pannonia, Veszprém, Hungary*  
AUTOMATED SEQUENCING OF N-LINKED CARBO-  
HYDRATES
- 10:05 – 10:40      **Zbyněk Prokop**  
*Masaryk University, Brno, Czech Republic*  
DROPLET-BASED ENZYMOLOGY: HIGH-THROUGHPUT  
ANALYSIS OF NOVEL BIOCATALYSTS
- 10:40 – 11:10      **Coffee break**

- 11:10 – 11:45      **Doo Soo Chung**  
*Seoul National University, Seoul, Korea*  
LIQUID EXTRACTION SURFACE ANALYSIS COUPLED  
WITH CAPILLARY ELECTROPHORESIS
- 11:45 – 12:20      **Iuliana M. Lazar**  
*Virginia Tech, Biological Sciences, Health Sciences and  
Carilion School of Medicine, Blacksburg, VA, USA*  
SPECTROMETRY AND PROTEOMICS AT THE CROSS  
ROADS OF TECHNOLOGY AND BIOLOGY
- 12:20 – 14:10      **Lunch break – poster session**
- 14:10 – 14:45      **Christian G. Huber**  
*University of Salzburg, Department of Biosciences and  
Christian Doppler Laboratory for Biosimilar Characterization,  
Department of Molecular Biology, Salzburg, Austria*  
MOLECULAR CHARACTERIZATION OF BIO-  
THERAPEUTIC PROTEINS: CONCEPTS AND  
CHALLENGES FOR SEPARATION SCIENCE, MASS  
SPECTROMETRY, AND COMPUTATIONAL BIOLOGY
- 14:45 – 15:20      **Jiří Fajkus**  
*Photon Systems Instruments, Drásov, Czech Republic*  
STATE OF THE ART TECHNOLOGIES FOR PLANT  
PHENOTYPING
- 15:20 – 15:55      **Tomasz Bączek**  
*Medical University of Gdańsk, Department of Pharmaceutical  
Chemistry, Gdańsk, Poland*  
COMPARATIVE STUDY ON AMINO ACIDS MEASURED  
IN PLASMA, CEREBROSPINAL FLUID AND EXHALED  
BREATH CONDENSATES
- 15:55 – 16:15      **Frantisek Foret**  
*Institute of Analytical Chemistry of the Czech Academy of  
Sciences, Brno, Czech Republic*  
TBA
- 16:15 – 16:30      **Invitation to CECE 2019, Gdańsk, Poland**
- 16:40                **City walk with invited speakers**

## Wednesday, October 17

- 9:00 – 9:15            **CECE Junior opening**
- 9:15 – 9:45            **Vladislav Dolnik**  
*Alcor BioSeparations LLC, Palo Alto, CA, USA*  
BORATE BUFFERS FOR CZE IN BARE CAPILLARIES
- 9:45 – 10:00         **Miloš Dvořák**  
*Institute of Analytical Chemistry of the Czech Academy of Sciences, Brno, Czech Republic*  
HOLLOW FIBRE-LIQUID PHASE MICROEXTRACTION OF BASIC DRUGS FROM DRIED BLOOD SPOTS
- 10:00 – 10:15        **Antonín Bednařík**  
*Central European Institute of Technology (CEITEC), Masaryk University, Brno, Czech Republic*  
MALDI-MS IMAGING OF C=C POSITIONAL ISOMERS OF LIPIDS ENABLED BY PATERNÒ-BÜCHI PHOTO-DERIVATIZATION
- 10:15 – 10:30        **Michal Vasina**  
*Loschmidt Laboratories, Department of Experimental Biology and RECETOX, Faculty of Science, Masaryk University, Brno, Czech Republic*  
HIGH-THROUGHPUT CHARACTERIZATION OF SUBSTRATE SPECIFICITY OF HALOALKANE DEHALOGENASES BY USING CAPILLARY MICROFLUIDICS
- 10:30 – 10:45        **Tomas Vaclavek**  
*Institute of Analytical Chemistry of the Czech Academy of Sciences, Brno, Czech Republic*  
MICROFLUIDIC DEVICE FOR CELL COUNTING AND ELECTRICAL LYSIS
- 10:45 – 11:15        **Coffee break**

- 11:15 – 11:30      **Filip Smrčka**  
*Department of Chemistry, Faculty of Science, Masaryk University, Brno, Czech Republic*  
THE UREASE BIOSENSOR BASED ON Eu(III) TERNARY COMPLEX OF DO3A LIGAND
- 11:30 – 11:45      **Antonín Hlaváček**  
*Institute of Analytical Chemistry of the Czech Academy of Sciences, Brno, Czech Republic*  
MEASURING PHOTON-UPCONVERSION LUMINESCENCE FROM DROPLETS IN MICROFLUIDIC CHIPS
- 11:45 – 12:00      **Karolína Kolářová**  
*Institute of Biophysics of the Czech Academy of Sciences, Brno, Czech Republic*  
CHARACTERIZATION OF ALLIUM TELOMERE REPEAT BINDING PROTEINS
- 12:00 – 12:15      **Martin Lyčka**  
*Mendel Centre for Plant Genomics and Proteomics, Central European Institute of Technology, Masaryk University, Brno, Czech Republic*  
INTENSITYANALYSER: WEB TOOL FOR ASSESSMENT OF TELOMERE LENGTHS FROM TERMINAL RESTRICTION FRAGMENT ANALYSIS
- 12:15 – 12:45      **Čtírad Hofr**  
*LifeB - Laboratory of interaction and function of essential Biomolecules Chromatin Molecular Complexes, CEITEC and NCBR, Faculty of Science, Masaryk University, Brno, Czech Republic*  
HOW TO TRAIN OUR CELLS TO BECOME YOUNGER – QUANTITATIVE BIOPHYSICS OF HUMAN TELOMERASE AND ITS GUARD SHELTERIN
- 12:45 – 12:50      **Closing remarks**
- 12:50                **Lunch break – poster removal**