



2nd STARSS conference on Separation Science

within a research project STARSS (Specialized Team for Advanced Research on Separation Science), Reg. No. CZ.02.1.01/0.0/0.0/15_003/0000465

DAY 1: Sunday 25. 11. 2018

12:00 – 14:00

REGISTRATION

14:00 – 14:15

Welcoming address

Prof. Petr Solich, Prof. František Švec - Faculty of Pharmacy, Charles University, Hradec Králové, CZ

SFx SESSION

14:15 – 15:00

Supercritical carbon dioxide and gas expanded liquids in separation science
Prof. Charlotta Turner, Lund University, Lund, Sweden

15:00 – 15:35

UHPSFC/MS: a powerful tool for the analysis of biological samples
Dr. Denise Wolrab, University of Pardubice, Pardubice, CZ

15:35 – 16:10

Coupling of chiral and achiral stationary phases in SFC
Mgr. Petra Riasová, Faculty of Pharmacy, Charles University, Hradec Králové, CZ

16:10 – 16:45

Strategies for the quantification of carotenoids using SFC-QqQ-MS/MS
Dr. Daniel Molins Delgado, Lund University, Lund, Sweden

16:45 – 17:15

Coffee-break and discussion

SAMPLE PREPARATION SESSION I

17:15 – 17:50

Current trends in sample preparation techniques for food analysis
Dr. David Moreno Gonzáles, Faculty of Pharmacy, Charles University, Hradec Králové, CZ

17:50 – 18:25

New types of nanofibrous polymers based on dopamine-universal coating for solid phase extraction
Mgr. Martina Háková, Faculty of Pharmacy, Charles University, Hradec Králové, CZ

18:30 – 20:30

Welcome reception

DAY 2: Monday 26. 11. 2018

08:00 – 9:00 Registration

SFE WORKSHOP

09:00 – 10:00 Supercritical fluid extraction (SFE) – a tutorial
Prof. Charlotta Turner, Lund University, Lund, Sweden

10:00 – 12:30 SFE workshop in the laboratory 913
Dr. Veronika Pilařová, Faculty of Pharmacy, Charles University, Hradec Králové, CZ

12:30 – 14:00 Lunch

MASS SPECTROMETRY IN LIFE SCIENCES

14:00 – 14:30 LC-MS based metabolomics and lipidomics in study of effects of cyclin-dependent kinase 4/6 inhibitors regarding selectivity
Dr. Jitka Široká, Palacký University, Olomouc, CZ

14:30 – 15:00 Hospital toxicology: Mass spectrometry in services of clinical medicine
Dr. Vít Šesták, Faculty hospital, Hradec Králové, CZ

15:00 – 15:30 Emerging new syntetic drugs in practice-Three overdose cases
Dr. Monika Židková, Medical Faculty, Charles University, CZ

15:30 – 16:00 Screening of micro-pollutants in healthcare facility area using LC-MS/MS. Passive and spot sampling
Dr. Klára Michalíková, Institute of Microbiology of the CAS, Prague, CZ

16:00 – 16:30 Coffee-break and discussion

2D-TECHNIQUES SESSION

16:30 – 17:00 Two-dimensional Liquid Chromatography: From Basic Principles to Recent Trends
Assoc. Prof. Petr Česla, University of Pardubice, Pardubice, CZ

17:00 – 17:30 Nanofibers as novel sorbents for on-line solid phase extraction in chromatographic systems
Assoc. Prof. Dalibor Šatínský, Faculty of Pharmacy, Charles University, Hradec Králové, CZ

17:30 – 18:00 Automatic investigation of the bioaccessibility of phthalates and bisphenol A from microplastics in seawater under flow-through dynamic extraction conditions using an on-line switching valve HPLC system
Mgr. Kateřina Fikarová, Faculty of Pharmacy, Charles University, Hradec Králové, CZ

18:00 – 21:00 Conference dinner

DAY 3: Tuesday 27. 11. 2018

08:00 – 9:00 Registration

CHROMATOGRAPHY – DIFFERENT POINTS OF VIEW

- 09:00 – 09:40 Mass transfer phenomena in liquid chromatography
Dr. Deirdre Cabooter, KU Leuven, Leuven, Belgium
- 09:40 – 10:10 My 30 years with polymer monoliths: past, present, and perspectives
Dr. Tatianna Tenikova, Saint-Petersburg State University, St. Petersburg, Russia
- 10:10 – 10:40 Chromatography and flow methods
Dr. Petr Chocholouš, Faculty of Pharmacy, Charles University, Hradec Králové, CZ
- 10:40 – 11:10 Metal oxide stationary phases – practical experience
Assoc. Prof. Radim Kučera, Faculty of Pharmacy, Charles University, Hradec Králové, CZ
- 11:10 – 11:40 Coffee-break and discussion

SAMPLE PREPARATION SESSION II

- 11:40 – 12:15 Molecularly imprinted polymers: a useful tool for selective sample treatment
Dr. Audrey Combes, ESPCI Paris, Paris, France
- 12:15 – 12:50 Automation of single drop extraction approaches based on the Lab-In-Syringe technique
Dr. Ivana Horstkotte-Šrámková, Faculty of Pharmacy, Charles University, Hradec Králové, CZ
- 12:50 – 14:15 Lunch

FLOW TECHNIQUES WORKSHOP

- 14:15 – 16:45 Workshop and discussion on flow techniques
Dr. Petr Chocholouš, Faculty of Pharmacy, Charles University, Hradec Králové, CZ
- 16:45 – 17:00 Closing remarks
Prof. František Švec, Prof. Petr Solich, Faculty of Pharmacy, Charles University, Hradec Králové, CZ
- 17:00 – 17:30 Farewell drink

Venue: Hradec Králové, Czech Republic

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