



20th International Symposium on Separation Sciences

Saturday, August 30, 2014

09:00 - 19:00	Registration		
16:00 - 16:50	Opening ceremony		
Session: New trends in separation sciences Chairs: Corradini D., Sandra P.			
17:00 - 17:40	PL 1	Lindner W.	Effects of mobile phase variations on the retention and enantioselectivity characteristics of zwitterionic chiral stationary phases for acids, bases and ampholytes
17:40 - 18:20	PL 2	Švec F.	Monolithic thin layers with new chemistries including metal nanoparticles for rapid and efficient TLC-MALDI MS separations
18:20 - 18:50	L1-Sa	Buszewski B.	Comparison of ultra high performance liquid chromatography and conventional liquid chromatography for the study of antisense oligonucleotides
18:50 - 19:20	L2-Sa	Krylov S.	Kinetic Size-Exclusion Chromatography with Mass Spectrometry Detection (KSEC-MS): an Approach for Solution-Based Label-Free Kinetic Analysis of Protein-Small Molecule Interactions
19:30	Welcome party		

Sunday, August 31, 2014

Session: Fundamentals, Method development		Chairs: Klebovich L., Lindner W.
08:30 - 09:00	L3-Su	Weiss J. High resolution or high throughput separations of ionic compounds with 4µm ion-exchange materials
09:00 - 09:30	L4-Su	Bolanča T. Artificial intelligence in ion chromatography
09:30 - 09:50	L5-Su	Molnar L. The role of tolerance limits in Quality by Design conform UHPLC method development
09:50 - 10:10	L6-Su	Miyabe K. Development of New Moment Equations for Chromatography Based on Langmuir Type Reaction Kinetics
10:10 - 10:30	L7-Su	Roth M. Near- and supercritical water as a tool to enhance efficiency of glass- and fused silica-based separation devices
10:30 - 11:00	Coffee break	

Session: Pharmaceutical applications			Chairs: Buszewski B., Švec F.
11:00 - 11:30	L8-Su	Klebovich I.	New trends of bioanalytics in pharmacokinetics and drug metabolism
11:30 - 12:00	L9-Su	Lehotay J.	HPLC Separation of some enantiomers. Interaction study.
12:00 - 12:20	L10-Su	Tesařová E.	Experience with saccharide-based chiral stationary phases for separation of enantiomers
12:20 - 12:40	L11-Su	Coman V.	Pharmaceuticals as micropollutants in the Romanian Tisza river watershed
12:40 - 13:00	L12-Su	Kumirska J.	Development of methods for the derivatization of pharmaceuticals prior to GC-MS analysis
13:00 - 14:00		Lunch	
14:00 - 15:00		Poster session I	

Session: MS, Polymers			Chairs: Schoenmakers P., Vovk I.
15:00 - 15:30	L13-Su	Corradini D.	Optimization of HPLC and capillary electrophoretic separations of biomolecules: the art of combining theoretical aspects and practical experience
15:30 - 16:00	L14-Su	Berek D.	Size exclusion chromatography – a blessing and curse of polymer science and technology
16:00 - 16:20	L15-Su	Gertsjuk M.	HPLC investigations of biocompatible polymers purification
16:20 - 16:40	L16-Su	Holčápek M.	Comparison of SFC/MS and UHPLC/MS techniques in the lipidomic characterization of biological samples
16:40 - 17:00	L17-Su	Liu H.	Rapid analysis of phospholipid molecular species by LC-MS
18:00 - 20:00		Boat trip	
21:00 - 22:00		CEEGS meeting	

Monday, September 1, 2014

Session: Microfluidics			Chairs: Foret F., Kašička V.
08:30 - 09:00	L18-Mo	Novotný M.	Capillary Separations and Mass Spectrometry in Cancer-related Glycomic Investigations
09:00 - 09:30	L19-Mo	Gilar M.	Chromatographic performance of microfluidic titanium tiles
09:30 - 09:50	L20-Mo	Macka M.	Portable capillary LC: A modular medium pressure system based on a microfluidic platform and designed with off-the-shelf components
09:50 - 10:10	L21-Mo	Vespaľec R.	The impact of ion pairing on mobility of ions in methanol, and on sensitivity their indirect photometric detection
10:10 - 10:30	L22-Mo	Petr J.	Development of low cost microfluidic devices based on paper and foil
10:30 - 11:00		Coffee break	

Session: Capillary electrophoresis			Chairs: Gilar M., Novotný M.
11:00 - 11:30	L23-Mo	Foret F.	New approaches for CE/MS
11:30 - 12:00	L24-Mo	Kašíčka V.	Affinity capillary electrophoresis applied to investigation of noncovalent bindings of (bio)molecules
12:00 - 12:20	L25-Mo	Alazzam A.	Deregulated genes by separation of living cells using dielectrophoresis
12:20 - 12:40	L26-Mo	Chung D.S.	Headspace in-tube microextraction coupled with capillary electrophoresis
12:40 - 13:00	L27-Mo	Pospichal J.	On-line pre-concentration and pre-separation in electrophoresis using stationary reaction boundary
13:00 - 14:00		Lunch	
14:00 - 15:00		Poster session II	
Session: Young Scientists			Chairs: Lehotay J., Tesařová E.
15:00 - 15:30	L28-Mo	Vovk I.	Chromatographic methods for the analysis of phytonutrients in the extracts of edible plants and food supplements
15:30 - 15:45	YS 1	Ancillotti C.	HPLC determination of selected sugars and phenolic compounds as markers of plant response to abiotic stresses in the model plant <i>Nicotiana Langsdorffii</i>
15:45 - 16:00	YS 2	Bocian S.	Novel chemically bonded stationary phases that imitate natural cell membrane
16:00 - 16:15	YS 3	Curri van S.	Towards The Production of Highly Efficient Polymeric Monolithic Columns for HILIC Separations of Small Molecules
16:15 - 16:30	YS 4	Jędrkiewicz R.	Modern sample preparation techniques as a tool for chloropropanols determination in baby food samples
16:30 - 16:45	YS 5	Pantò S.	The on-line combination of liquid chromatography with a three-dimensional gas chromatography preparative instrument for the rapid collection of high amounts of pure solutes from complex mixtures
16:45 - 17:00	YS 6	Soukup J.	Water adsorption on polar stationary phases in aqueous normal-phase liquid chromatography
17:00 - 17:30		Coffee break	
18:00 - 20:00		Symposium dinner (30 €)	

Tuesday, September 2, 2014

Session: 2D HPLC, Monoliths, Detection methods

Chairs: Berek D., Bolanča T.

08:30 - 09:00	L29-Tu	Mondello L.	Comprehensive two-dimensional liquid chromatography coupled to mass spectrometry as a powerful tool in food analysis
09:00 - 09:20	L30-Tu	Jandera P.	Advantages of monolithic columns in one-, two- and three-dimensional HPLC
09:20 - 09:40	L31-Tu	Liu Z.	On Nanoscale Confinement Effects in Chromatography
09:40 - 10:00	L32-Tu	Macko T.	Gradient, critical and two-dimensional liquid chromatography of polyolefins
10:00 - 10:20	L33-Tu	Markuszewski M.	Molecularly imprinted solid-phase extraction of cocaine and benzoylecgonine followed by qualitative analysis with HPLC-TOF-MS in wastewater samples
10:20 - 10:40	L34-Tu	Horna A.	Online liquid chromatography electrochemistry mass spectrometry present use and future prospect
10:40 - 11:10		Coffee break	

Session: Hyphenated techniques

Chairs: Jandera P., Mondello L.

11:10 - 11:50	PL 3	Sandra P.	State-of-the-art GC-MS and LC-MS in non-targeted metabolite profiling: analysis of serum of patients in different stages of chronic kidney disease
11:50 - 12:30	PL 4	Schoenmakers P.	Hardware and software tools to facilitate better and easier comprehensive two-dimensional liquid chromatography (LCxLC)
12:30 - 13:15		Best poster award, Closing ceremony, Farewell drink	
14:00		Sightseeing of Prague	

PL - plenary lecture, L - lecture, YS - young scientist competitive oral presentation