

## 14<sup>TH</sup> INTERNATIONAL SYMPOSIUM ON HIGH PERFORMANCE LIQUID PHASE SEPARATION AND RELATED TECHNIQUES (HPLC 2017)

This edition of the HPLC Symposium took place in Prague and was accommodated in the Prague Congress Centre, one of the most prestigious buildings in the city with a wonderful view of the city. It is one of the most important congress centers in Europe and, thanks to its capacity, can hold up to 9,300 people in more than 50 rooms and lounges. The Congress took place from the 19<sup>th</sup> to the 22<sup>nd</sup> June 2017.

This symposium was created in 1973 in Interlaken, Switzerland. Advances in the field of liquid-phase separation are highlighted at each meeting. Conferences alternate between Europe and the United States, and odd year's Europe meetings are accompanied by another meeting in Asia/Australia.

The International Symposium on High Performance Liquid Phase Separations is an international forum for the scientific discussion of methods of high performance liquid chromatography (LC) in its various forms, along with the complementary separation techniques such as electrophoresis, electrochromatography, field/flow fractionation, supercritical fluid chromatography and hyphenated techniques, such as LC/MS, CE/MS and SFC/MS.

The conference started with an opening plenary session and the welcome of the chairmen Michal Holcapek, Frantisek Foret, Pavel Jandera, Peter J. Schoenmakers and Gerard Hopfgartner. After that, there were four plenary lectures: the first one given by Prof. Gert Desmet (University of Brussels, Belgium) talking about 'Current state and future directions in liquid chromatography' followed by Prof. Zoltán Takáts (Imperial College of London, UK) regarding 'Ambient and LCMS lipidomic profiling of clinical samples - New era in cancer diagnostics'. The third one was given by Dr. Pat Sandra (Research Institute for Chromatography, Kortrijk, Belgium) talking about 'The LC toolbox for protein biopharmaceutical characterization' and the last one was given by Dr. Peter A. Willis (California Institute of Technology, Pasadena, USA) regarding 'Searching for life on ocean worlds with liquid phase separation systems'.

The next day four parallel sessions were run in different halls with the following topics: (i) Fundamentals, where the speakers talked about characterization of HPLC stationary phases, multidimensional separations, mechanisms of mass transport phenomena and stationary phases based on inorganic supports; (ii) HPLC applications, where the themes were based on forensics, doping and toxicology, proteomics, sample preparation, automation and metabolomics; (iii) young sessions and tutorials with different issues such as 2D-LC, separation mechanisms, proteomics and sample preparation and (iv) hyphenations talking about ion mobility in LC-MS, ion suppression and matrix effects, separation-high resolution MS and multidimensional chromatography and MS coupling. To finish the day, a great Czech beer party took place where we could taste the typical food and drink from this city.

Program schedule was similar for the following days. It is worth to point out that on the second day, supercritical fluid chromatography, novel high-efficient separation media, electromigration techniques, chiral separations, affinity separation, lipidomics, glycomic and glycoproteomics, metabolomics, chiral and achiral stationary phases, ultrahigh-resolution mass spectrometry, electrodriven separation and nanofluidic and microfluidic separation were the main topic treated. A marvelous organ concert in the Basilica of St. Peter and St. Paul were celebrated at the final of the second day.

The talks of the third day were focused on separation mechanisms and structural effects, organic polymer monolithic and particular materials, thermodynamics and separation mechanisms in LC, advances in stationary phases, recent advances in (bio)pharmaceuticals, food analysis, natural products, monolithic columns, among others. The Gala dinner was celebrated at the end of the day in the Zofin Palace a Neo-Renaissance building in Prague used as a cultural centre and a venue for concerts, conferences and exhibitions, situated on Slavic Island, an island in the river Vltava.

Thursday was the last day and the topics treated were data analysis, validation and chemometrics, ultrahigh resolution separation, clinical analysis, environmental analysis, ultra-high performance liquid chromatography, MS applications from inorganics to pharmaceuticals and high-throughput, and data processing and bioinformatics.

Moreover, every day during lunch time we had the opportunity to attend to the poster session, vendor seminars and technical exhibition where companies active in the field presented their last developments in instrumentation and applications in this field.

The closing plenary session consisted in the medal ceremony of University of Pardubice and three seminars given by Alberto Cavazzini, Norman Dovichi and Doo Soo Chung, talking about ultrafast chiral separations on modern chiral stationary phases, capillary electrophoresis as a tool for bottom-up proteomics and sample preconcentration techniques inline coupled with capillary electrophoresis-mass spectrometry, respectively. Finally, all of us were invited to the three following conferences: HPLC 2017 in Jeju. HPLC 2018 in Washington and HPLC 2019 in Milan.

To summarize, during the 5 days, 7 plenary lectures, 182 oral communications, 773 posters, 14 vendor seminars and the 1000 participants from many different countries made possible this exceptional congress.

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