WORKSHOP PROGRAM

4th International Workshop on Capillary Electrophoresis and Microchip Technology - 2nd Meeting of Liquid Chromatography

May 29, 2023

08:30 a.m.: **Registration** (badge pick up)

09:30 a.m.: **Opening session**

10:00 a.m.: **Advancements in immunoaffinity capillary electrophoresis for use in diagnostic testing**
Dr. Norberto A. Guzman
Director of Research at Princeton Biochemicals Inc., Princeton, New Jersey, U.S.A.

10:30 a.m.: **Coffee Break**

11:00 a.m.: **Using multi-material fused deposition modeling (FDM) for one-step 3D printing of a microfluidic capillary electrophoresis device with integrated electrodes for capacitively coupled contactless conductivity detection**
Dr. Dosil Pereira de Jesus.
Institute of Chemistry, University of Campinas, Campinas, Brazil

11:30 a.m.: **The metabolomics workflow**
Dr. Marina Franco Maggi Tavares
Institute of Chemistry, University of Sao Paulo, Sao Paulo, Brazil

12:00 pm.: **Lunch**

14:00 p.m.: **Characterization of retention interactions in liquid chromatography by linear free energy relationships**
Dr. Martí Rosés
Department of Chemistry, University of Barcelona, Barcelona, Spain

14:30 p.m.: **Quality assurance (QA) and quality control (QC) practices of LC–MS based untargeted metabolomics**
Dr. Monica Patricia Cala Molina
Department of Chemistry, University of Los Andes, Bogota, Colombia

15:00 p.m.: **Simultaneous Analysis of Enzyme Structure and Activity by Kinetic CE-MS**
Dr. Maxim V. Berezovski
Department of Chemistry and Biomolecular Science, University of Ottawa, Ottawa, Canada

15:30 p.m.: **Coffee Break**

16:00 p.m.: **A eletroforese capilar e suas potencialidades analíticas: estudo de casos**
Dr. Marcone Augusto Leal de Oliveira

Department of Chemistry, Federal University of Juiz de Fora, Juiz de Fora, Brazil

16:30 p.m.: Chiral analysis of functional organic molecules and drugs by capillary electrophoresis
Dr. Václav Kašička
Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences, Prague, Czechia

17:00 p.m.: Thermodynamics of liquid chromatography
Dr. Attila Felinger
Department of Analytical and Environmental Chemistry, University of Pécs, Pécs, Hungary

17:30 p.m.: Closing of the 1st day

May 30, 2023

09:00 a.m.: Applications of capillary and microchip electrophoresis in proteomics and peptidomics
Dr. Václav Kašička
Institute of Organic Chemistry and Biochemistry of the Czech Academy of Sciences, Prague, Czechia

09:30 a.m.: The proteomic analysis of breast cell line exosomes reveals disease patterns and potential biomarkers
Dr. Maxim V. Berezovski
Department of Chemistry and Biomolecular Sciences, University of Ottawa, Ottawa, Canada

10:00 a.m.: Coffee Break

10:30 a.m.: The combination of high throughput screening and untargeted metabolomics to foster the development of novel drugs for neglected diseases
Dr. Marina Franco Maggi Tavares
Institute of Chemistry, University of Sao Paulo, Sao Paulo, Brazil

11:00 a.m.: Water absorption capacity of hydrophilic interaction liquid chromatography columns
Dr. Martí Rosés
Department of Chemistry, University of Barcelona, Barcelona, Spain

12:00 m.: Lunch

14:00 p.m.: Retention and efficiency in SFC
Dr. Attila Felinger
Department of Analytical and Environmental Chemistry, University of Pécs, Pécs, Hungary

14:30 p.m.: An integrated modular unit composed of an analyte concentrator immunoaffinity device for use in a commercial capillary electrophoresis instrument
Dr. Norberto A. Guzman

Director of Research at Princeton Biochemicals Inc., Princeton, New Jersey, U.S.A.

15:00 p.m.: **Monolithic stationary phases for capillary liquid chromatography**
Dr. Carla Beatriz Grespan Bottoli
Institute of Chemistry, University of Campinas, Campinas, Brazil

15:30 p.m.: **Coffee Break**

16:00 p.m.: **Mass spectrometry as an analytical tool for the evaluation of pesticide translocation in vegetative endotherapy**
Dr. Carla Beatriz Grespan Bottoli
Institute of Chemistry, University of Campinas, Campinas, Brazil

16:30 p.m.: **Untargeted metabolomics as a valuable Tool for food quality Improvement during food processing**
Dr. Monica Patricia Cala Molina
Department of Chemistry, University of Los Andes, Bogota, Colombia

17:00 p.m.: **CE-UV as a versatile tool for targeted metabolomics analyses of biological samples and food**
Dr. Ana Valéria Colnaghi Simionato
Institute of Chemistry, University of Campinas, Campinas, Brazil

17:30 p.m.: **Closing remarks** (certificates pick up)