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8th Multidimensional Chromatography Workshop - MOECC

Thursday January 5th, 2017

8:30 am – Registration and Coffee/Tea

9:00 am Opening Remarks

9:10 am The Logic of Comprehensive Two-Dimensional Gas Chromatography **John Seeley** (Oakland University)

10:00 am GCxGC-TOFMS of Synthetic Pyrethroids in Food **Jack Cochran** (The Pennsylvania State University)

10:20 am Morning Break

10:50 am Metabolomic Investigation of inflammatory bowel disease phenotypes using GCxGC-HRTOFMS **Jef Focant** (University of Liège)

11:10 am Profiling ignitable liquid residues (ILRs) and potential interfering compounds during arson and arsonous wildfire investigations **Court Sandau** (Chemistry Matters Inc.)

11:30 am Evaluation of Emerging Contaminants in Great Lakes Fish using comprehensive two-dimensional gas chromatography coupled to high resolution mass spectrometry **Sujan Fernando** (Clarkson University)

11:50 pm Lunch Break

Poster 12:30 pm- Thermodynamic predictions of retention time - a round robin study **Rachel Gleiberman** (University of Alberta)

1:00 pm Effective Ways for the Analysis of Complex Samples by UHPLC - How Many Dimensions Do We Need? **Joachim Weiss** (Thermo Fisher Scientific)

1:20 pm Towards an automated untargeted method for microcystins analysis using a 2DLC-HRQToFMS **Xavier Ortiz** (Ontario Ministry of the Environment and Climate Change)

1:50 pm Further non-targeted analysis of polycyclic aromatic compounds in environmental samples from the oil sands **Derek Muir** (Environment and Climate Change Canada)

2:10 pm A Method Development Software Tool for Comprehensive Two-dimensional Gas Chromatography Evaluated for GCxGC-TOFMS **Mark Merrick** (LECO Corporation)

2:30 pm Afternoon Break

2:50 pm Simple models for second-column retention-time variability across peaks from GCxGC

Davis Rempe (University of Nebraska)

3:10 pm Reverse fill/flush flow modulation for the routine application of GCxGC to real-world analyses

Matt Edwards (SepSolve Analytical)

3:30 pm Variable-energy electron ionization for GCxGC forensic blood VOC profiling

Lena M. Dubois (University of Liège)

3:50 pm VOCtopsy: GCxGC profiling of VOCs for the virtual autopsy toolkit

Katelynn A. Perrault (University of Liège)

Friday January 6th, 2017

8:30 am – Registration and Coffee

9:00 am Changing landscapes – from GCxGC to LCxLC

Tadeusz Gorecki (University of Waterloo)

9:30 am Exploring canola volatiles of healthy and stressed plants by GCxGC – TOFMS

James Harynuk (University of Alberta)

9 50 am Extinguishing the challenges associated with fire debris analysis using GCxGC-TOFMS

Katie Nizio (University of Technology Sydney)

10:10 am Morning Break

10:40 am Improved coverage of naphthenic acid fraction compounds by comprehensive two-dimensional gas chromatography coupled with high resolution mass spectrometry

David Bowman (McMaster University)

11:00 am Using estimates of environmental partitioning properties mapped on GCxGC chromatograms to predict the properties of petroleum fluids and the environmental behavior of petroleum compounds

Jonas Gros (Texas A&M University)

11:20 am Applications of Thermal Desorption coupled to GCxGC-TOFMS for Hydrocarbon Fingerprinting of Unconventionally Exploited Shale Rocks

Paulina Piotrowski (Pennsylvania State University)

11:40 am Setting up Simultaneous Acquisition of TOF-MS and FID Data with GCxGC

Christina Kelly (LECO Corporation)

12:00 pm Lunch Break

1:00 pm Investigation of archeological mysteries by GCxGC-HRTOFMS and GCxGC-MS/MS **Pierre-Hugues Stefanuto** (Dartmouth College / University of Liège)

1:20 pm Atmospheric Pressure Photo Ionization for GCxGC? Putting POPs in the Spotlight **Robert Di Lorenzo** (The Hospital for Sick Children)

1:40 pm The Benefits of High Resolution Accurate Mass Measurements and Comprehensive Chromatography For Metabolomics Studies

David Alonso (LECO Corporation)

2:00 pm Mapping Environmental Partitioning, Transport and Uptake Properties of Complex Mixtures Using GCxGC

Deedar Nabi (Bigelow Laboratory for Ocean Sciences)

2:20 pm – Afternoon Break

2:40 pm Determination of Haloacetic Acids in Drinking Water using Two-Dimensional Ion Chromatography (2-D IC)

Carl Fisher (Thermo Fisher Scientific)

3:00 pm Comparison of Extraction Techniques for the Determination of Emerging Contaminants in Penn State Wastewater Utilizing GCxGC-TOFMS

Kyra Murrell (Pennsylvania State University)

3:20 pm Achieving Greater GCxGC Orthogonality: Characterizing Column Polarity

Roman Jaramillo (Pennsylvania State University)

3:40 pm Ion mobility spectrometry (IMS) drift time, a novel dimension to ToF MS: characterization of laboratory-generated secondary organic aerosol and ambient particulate matter

Shunyao Wang (University of Toronto)

4:00 pm Closing Remarks