

Agenda for the 5th Multidimensional Chromatography Workshop Jan 7 & 8, 2014 in Toronto, Canada

Tuesday, January 7th

Registration - 8:15-8:45 am

Opening remarks - 8:45 am

An introduction into Multidimensional Chromatography

Tadeusz Gorecki (U Waterloo)

9:00-9:30

GCxGC/TOF-MS analysis of hazardous or potentially hazardous chemicals in house dust.

Eunha Hoh (San Diego State)

9:30-9:50

GCxGC-(HR)MS For Comprehensive Characterization of City Dump Leachate and Non-target Screening to Identify Emerging Pollutants Poorly Removed in Sewage Treatment Plants

Peter Haglund (Umea U)

9:50-10:10

Coffee - 10:10-10:40 am

Environmental Forensics of Wastewater Samples for Determination of Emerging Contaminants

Frank Dorman (Penn State)

10:40-11:00

Pins and needles in the haystack: combining comprehensive gas chromatography and high-resolution mass spectrometry

Robert B. Cody (JEOL)

11:20-11:40

Pollution investigation by trees of semi-volatile organic compounds

Caroline Gauchotte-Lindsay (University of Glasgow)

11:40-12:00

Reading the decomposition chemistry of human remains with a new pair of glasses

J.-F. Focant (U Liege)

12:00-12:20

Lunch - 12:20-1:10 pm

Chemical Structure Shifts in GCxGC: A Closer Look

Jean-Marie Dimandja (Spellman)

1:10-1:30

Recent Developments in Fisher Ratio Analysis Software for GC x GC - TOFMS

Brendon A. Parsons (U Washington)

1:30-1:50

Thermodynamic tools for GC and GCxGC - The fun is just beginning

James Harynuk (U Alberta)

1:50-2:10

The use of GCxGC-ToFMS for the development of PCB signatures and its application for source identification and differentiation of colonies of storm petrels

Gwen O'Sullivan (Mount Royal)

2:10-2:30

Coffee - 2:30-2:50 pm

Development of PCB signatures, using GCxGC-ToFMS, and its application in age dating human exposure

David Megson (Plymouth U.)

2:50-3:10

I Still Love Barbeque: Analysis of Polycyclic Aromatic Hydrocarbons in Foodstuffs using a Modified QuEChERS Method and GCxGC-TOFMS

Julie Kowalski (Restek)

3:10-3:30

Increasing Resolution of Polycyclic Aromatic Hydrocarbons in Petroleum and Environmental Samples with a Selective GC Column and GCxGC-TOFMS

Michelle Misselwitz (Restek)

3:30-3:50

Identification and quantitation of complex PAHs mixtures in environmental samples using GCxGC/ToF-MS

Carlos A. Manzano (Environment Canada)

3:50-4:10

Single-stage cryogenic modulation in two-dimensional gas chromatography,

Ahmed Mostafa (U Waterloo)

4:10-4:30

Wednesday, January 8th

Discovering volatile biomarkers of chronic *P. aeruginosa* infections using GCxGC-TOFMS and GC Image

Heather D Bean (Dartmouth)

9:00-9:20

Metabolomic analysis of *Arabidopsis thaliana* with GCxGC-MS

Stephen E. Reichenbach (U Nebraska)

9:20-9:40

Human Biomonitoring: Parts Per Quintillion---A New Frontier for Toxicologists and Risk Assessors

Don G Patterson (AXYS)

9:40-10:00

New Strategies for Pre-Concentrating Volatile Organic Compounds for GC x GC Analysis

John V. Seeley (Oakland U)

10:20-10:40

Coffee - 10:40-11:10 am

A MEMS Thermal Modulator: A Technology Enabling Portable Comprehensive GCxGC

Katsuo Kurabayashi (U Michigan)

11:10-11:30

Multi-channel multi-dimensional GC
Xudong Fan (U Michigan)
11:30-11:50

Lunch - 12:10-1:00 pm

Scripting approaches in GCxGC for the identification of relevant unknown halogenated compounds in rural sediments
Miren Pena (U Toronto)
1:00-1:20

Profiling alkyl phosphates in industrial petroleum samples by comprehensive two-dimensional gas chromatography with nitrogen phosphorus detection
Katie Nizio (U Alberta)
1:20-1:40

Polyhalogenated Dibenzo-p-dioxins and Furans Generated as By-products of Combustion and Their Potential Health Effects on First Responders
Kari Organtini (Penn State)
1:40-2:00

Method Comparison for the Profiling of Decomposition Odour in Scent Reservoirs
Sonja Stadler (UOIT), Katelynn Perrault, Shari Forbes
2:00-2:20

Coffee - 2:20-2:40 pm

Fast method for explosives profiling
Pierre-Hugues Stefanuto (U Liege)
2:40-3:00

The assessment of hydroxylated PCBs and other environmental contaminants in water/sediment samples by GCxGC-ECD and GCxGC-TOFMS
Alina Muscalu (MOE)
3:00-3:20

Determination and Characterization of PFOS in the Environment using High Definition Mass Spectrometry (HDMS)
John Vukovic (Orebro U, Waters)
3:20-3:40

Silicone Separation from complex fuels by Comprehensive Two Dimensional Gas Chromatography (GC x GC) using valve based high speed Deans switch modulation.
Abhijit Ghosh (Oakland U)
3:40-4:00

Posters

P1: Analysis of Children with Autism and Controls: Part 1, Method Development Optimization and Quantification of Organic Toxins

Andrew Boggess (Duquesne U), Skip Kingston, Scott Faber, Logan Miller, John Kern

P2: Analysis of Children with Autism and Controls: Part II: Quantification of Inorganic Species and Biomarkers of Genotoxicity and Enzymatic / Antioxidant Activity

Skip Kingston (Duquesne U), Scott Faber, Gregory M. Zinn, Timothy Fahrenholz1, John Kern, Andrew Boggess

P3: Analysis of Children with Autism and Controls: Part III: Study Conclusions and Medical Findings

Scott Faber, Skip Kingston, Gregory M. Zinn, Timothy Fahrenholz, Andrew Boggess, Logan Miller, Dr. John Kern

P4: Homeland Defense in a Nuclear Event: Metals Analysis Utilizing Microwave Technology

Logan Miller (Duquesne U), Aurelie Soreefan, Matt Pamukcu, Mitch Rubenstein, "Skip" Kingston