

Agenda for the 4th Multidimensional Chromatography Workshop Jan 8 & 9, 2013 in Toronto, Canada

Tuesday, January 8th

8:30 - **Opening Remarks**

8:45 - Multidimensional Chromatography – past, present, future
Philip Marriott, Monash University, Victoria Australia

9:30 - Optimization aspects of comprehensive two-dimensional gas chromatography
Tadeusz Gorecki, University of Waterloo, Waterloo, ON

10:00 - **Break**

10:30 - Study of complex VOC mixtures by GCxGC-TOFMS
Jef Focant, University of Liege, Liege Belgium

11:10 - The Use of GCxGC TOFMS for Forensic Applications
Frank L. Dorman, K Organtini, J. Westland, E. Ly, A. Brockman, J. Stubleski, Penn State, State College PA, USA

11:40 - Bidimensional Retention Normalization in GCxGC: Advances and Perspectives.
Jean-Marie Dimandja, Spelman College, Atlanta GA, USA

12:10 - **Lunch**

12:50 - High Speed Deans Switch for GCxGC Separations: Principles and Applications
John Seeley, A. Ghosh, S. Seeley Oakland University, Rochester MI, USA

1:20 - How soft ionization, high mass resolution and a comprehensive data analysis could further enhance the significance of GCxGC-TOFMS.
Thomas Gröger, M. Schäffer, M. Saraji, M. Sklorz, M. Eschner, J. Wendt, R. Zimmermann, Helmholtz Zentrum, Munich, Germany

1:50 - GCxGC-TOFMS for Chlorinated Dioxin and Furan Analysis in South Africa
Jack Cochran, EJ Reiner, T. Kolic, K. MacPherson, L. Quinn, M. Brits, C. Swiegelaar, J. de Vos, P. Gorst-Allman, Restek, Bellefonte PA, USA

2:20 - **Break**

2:40 - Time controlled Cryogenic Zone Compression (t-CZC) GC-HRMS – can we detect attogram amounts of TCDD?
Dirk Krumweide, Thermo Fisher, Bremen Germany

3:10 - Identification of New Markers of Wood Smoke Exposures in Firefighters using GCxGC-TOF-MS
Sujan Fernando and **Brian McCarry**, McMaster University, Hamilton ON

3:40 - Analysis of blubber extracts of *Peponocephala Electra* by GC x GC-high resolution TOF-MS.
Teruyo Ieda, Gerstel Japan

4:10 - GCxGC for Space Science - Opportunities and Challenges for Deep Space Organic Analysis.
Mark Libardoni, Southwest Research Institute, San Antonio TX, USA

Wednesday, January 9th

- 8:30** - Using GCxGC-TOF/MS to elucidate metabolome differences in complex biological matrices.
Catherine Rawlinson, Joel P. A. Gummer, Robert D Trengove, Murdoch University, Perth Australia
- 9:00** - Identifying biomarkers of *P. aeruginosa* antibiotic susceptibility using GCxGC-TOF and Statistical Compare.
Heather Bean, JM Dimandja, J.E. Hill University of Vermont, Burlington, VT, USA
- 9:30** - Investigating GCxGC separations using selective column chemistry and compound derivatization pairings for common metabolomics chemical compounds.
Julie Kowalski, Michelle Misselwitz, Jack Cochran, Restek, Bellefonte PA, USA
- 10:00** - **Break**
- 10:20** - Benefits of GCxGC-TOFMS approach for chemical characterization of environmental risk factors in the Sudden Infant Death Syndrome (SIDS) and Sudden Intrauterine Unexplained Death (SIUD)
Daniela Cavagnino, A. Siviero, A. Mantegazza, V. Termopoli, P. Palma, G. Famiglini, A. Cappiello, Dani Instruments, Italy
- 10 50** - Multidimensional LC for shotgun proteomics
Herman Lam, Ivan Chu, Ricky Ng, Ricky Kong, S.O. Siu, Maggie Lam, Yuen Zhao and Edward Lau. CVG, Toronto, ON
- 11:20** - Planar Microfluidics in Multidimensional Chromatography"
H.J. Cortes, R. Shellie, J. Luong, K. Parlevliet. **H. J. Cortes** Consulting, LLC., Midland, MI. USA
- 11:50** - Further exploration in the quest of orthogonally
PH Stefanuto, JM Dimandja, JF Focant, University of Liege, Liege Belgium
- 12:15** - **Lunch**
- 1:00** - Characterizing human decomposition odour: an application of Thermal Desorption-GCxGC-TOFMS
Sonja Stadler, PH Stefanuto, M Brokl, JF Focant, S Forbes University of Ontario Institute of Technology, Oshawa, ON
- 1:25** - Making sense of the fume: GCxGC TOFMS analysis of mainstream tobacco smoke
M Brokl, L Bishop, C Wright, C Liu, K McAdam, JF Focant, : University of Liege, Liege Belgium
- 1.50** - GCxGC Analyses of Naphthenic Acid Esters in Oil Sands Composite Tailings
Dave Bowman, B. E. McCarry, McMaster University, Hamilton ON
- 2:25** - **Break**
- 2:40** - The Analysis of Mixed Bromo/Chloro Planar Compounds Produced as Combustion Byproducts
Kari Organtini, Frank L. Dorman and Mark Merrick, Penn State, State College PA, USA
- 3:05** - Utilizing GCxGC – TOFMS to Improve the Data Quality for the Analysis of Fire Debris
Jessica Westland, K. Organtini, P. Richards, C. Sandau, F. Dorman Penn State, State College PA, USA

3:30 - The use of mass defect plots for the identification of (novel) halogenated contaminants in the environment
Karl Jobst, L. Shen, V. Taguchi, P. Helm, E.J Reiner

3:55 - Open Forum with Manufacturers

4:40 - Closing Remarks