

LAKE LOUISE XIII
The Millenium Lake Louise Workshop on Tandem Mass Spectrometry

Thursday 30 November

8:15 Opening Remarks - **Gary Glish**

Chair - John Klassen

8:20 **John Holmes** (U. Ottawa) *The Scientific Legacy of Fred Lossing and the Present Status of Gas Phase Ion/Energy Relationships*

9:10 **Johan K. Terlouw** (McMaster U.) *Tandem Mass Spectrometry and the Enolization of Dimethylphosphonate: Theory and Experiment in Concert*

9:35 **Diethard Bohme** (York U.) *Studies of Metal-Ion Chemistry with a Novel ICP/SIFT Tandem Mass Spectrometer*

10:00 Discussion

10:10 Break

10:35 **M. Anna Trikoupis** (McMaster U.) *Lowering Large 1,2-H Shift Barriers by Proton-Transport Catalysis: the Challenging Case of the Pyridine Radical Cation*

11:00 **Kimio Isa** (Fukui U.) *MS/MS works in Fukui University from 1985 to 2000 - Affinity Measurements, Clusters Ions, and Oxidation/Reduction Behavior*

11:25 **Paul Kebarle**, Arthur Blades, Michael Peschke (U. Alberta) *Dependence of the Sensitivity of Analytes in ESI, on the Surface Activity and Concentration of the Analyte and the Presence of other Electrolytes in the Solution*

11:50 Discussion

12:00 Break for Lunch

Chair - Gary Glish

13:30 **Carol Robinson** (Oxford) *Folding and Binding In Macromolecular Complexes*

14:20 **John Klassen** (U. Alberta) *Thermal Decomposition of Protein Complexes Investigated by BIRD-FTMS*

14:45 **Peter Verhaert**, Alexander Loboda, Ken Standing (Biomolecular Mass Spectrometry NV Organon Netherlands, Sciex, U. of Manitoba) *Tandem MS Neuropeptide Sequencing Directly from Tissue Using MALDI Quadrupole Orthogonal TOF Technology*

15:10 Discussion

15:20 Break

- 15:35 **K.W. Michael Siu** (U. Toronto) *Molecular Radical Cations of Oligopeptides*
- 16:00 **Simon J. Gaskell**, Shabaz Mohammed, Francesco Brancia, Luciana Jansen, Janine Gielbert (UMIST) *Investigation Of Peptide Ion Fragmentations Using Energy-Resolved SID*
- 16:25 **Tony Sullivan** (UMIST) *Controlling Peptide Ion Fragmentation by Selective Chemical Derivatization*
- 16:50 **Doug Simmons** (U. Western Ontario) *Time-Resolved ESI-MS with Online H/D Exchange: A New Method for Monitoring Protein Folding Reactions in Solution*
- 17:15 Discussion
- 17:25 Break for Dinner

Chair - Orval Mamer

- 20:00 **Anne H. Payne** (U. North Carolina) *Thermally-assisted IRMPD in the Quadrupole Ion Trap*
- 20:25 **Cheryl Moody** (U. Toronto) *High Performance Liquid Chromatography Coupled with Tandem Mass Spectrometry for the Determination of Perfluoroalkanesulfonates and Perfluorocarboxylates in Surface Water Samples Collected After an Accidental Fire-fighting Foam Release*
- 20:50 Discussion
- 21:00 POSTERS (with Beer and Wine)

Friday December 1

Chair - Gord McKay

- 8:15 **Mark Powell** (Bristol-Myers Squibb) *Use of Parallel LC/MS/MS Bioanalysis to Improve Sample Throughput in Conjunction with Multiplexing And Column Stacking*
- 9:05 **Mark A. Olsen, Paul G. Cummings** (SmithKline Beecham Pharmaceuticals) *LC/MS, MSⁿ, and LC/NMR--Structural Elucidation in a Chemical Development Environment*
- 9:30 **Mike Morris** (Micromass) *Tandem Mass Spectrometry in the Clinical Arena*
- 9:55 Discussion
- 10:05 Break
- 10:30 **John Patterson** (Canadian Food Inspection Agency, Centre for Veterinary Drug Residues) *Detecting the Use of Unregistered Growth Promoters: Multi-Residue Analysis of Beta-Agonists by LC/MS/MS*

10:55 **Richard Sleeman** (Mass Spec Analytical Ltd.) *Contraband Detection by Tandem Mass Spectrometry*

11:20 **P.C. Burgers**, P.J.A. Ruttink, S.Z. Ackloo, J.K. Terlouw (Hercules Inc.) *Carrageenan Analysis: A Combined MALDI-TOF and ESI Study*

11:45 Discussion

11:55 Lunch

19:00 BANQUET Cocktails

19:30 BANQUET Dinner

Saturday December 2

Chair - Simon Gaskell

8:00 **Jennifer Brodbelt** (U. Texas) *Infrared Multiphoton Dissociation and Metal Complexation for Characterization of Biologically Active Compounds*

8:50 **Don Douglas** (U. British Columbia) *Linear Ion Traps*

9:15 **Alex Mordehai** (Agilent Technologies) *Enhancement of Sensitivity to a Benchtop Ion Trap Mass Spectrometer*

9:40 **Gary Kruppa** (Bruker Daltonics) *New Experimental Sequences for MS/MS with FTMS*

10:05 Discussion

10:15 Break

10:35 **Mark Harrison** (Thermo Finnigan) *Improved Resolution and Transmission in a Triple Quadrupole Using Hyperbolic Rods*

11:00 **Daniel Boismenu**, Cinta Sebastia, Diego Spertini, Luc Varin, Christine, Jacques, Orval A. Mamer, Lawrence Hogge (McGill U.) *Analysis of Glucosinolates by Electrospray MS/MS*

11:25 **Maciej Bromirski** (U. Manitoba) *Orthogonal Injection MALDI of Proteins and DNA with an IR Laser*

11:50 **Kenneth L. Ray**, **Gary L. Glish** (U. North Carolina) *Acquiring Multiple MS/MS Spectra Simultaneously by Multiplexing*

12:05 Discussion

12:10 Close

POSTERS

Charting the Proteomes of Organisms with Unsequenced Genomes by MALDI Quadrupole Time-of-Flight Mass Spectrometry and BLAST Homology Searching (Andrej Shevchenko, A. Loboda, S. Sunyaev, Anna Shevchanko, P. Bork, Il. Chernushevich, W. Ens, **K.G. Standing**, EMBL, Sciex, U. Manitoba)

Pharmacokinetic Profiles After Succinylcholine IV Administration In Humans (Julie J. Roy, **Daniel Boismenu**, France Varin François Donati, Orval A. Mamer, McGill U.)

Cyclosporin A in Brain Tissue and Blood Following Intra-Carotid Injections in Normal and Stroke-Induced Rats (Pascal Vachon, Francis Beaudry, Line Ste-Marie, **Jane Montgomery**, Notre Dame Hospital, Montreal)

State-Dependent Fragmentation of Anions Formed at Different Resonance Energies (**Robert B. Cody**, JEOL)

Rapid Protein Characterization Using Microflow LC/MS/MS With Database Searching (**Linda Lopez**, Agilent Technologies)

Identification and Quantitation of Abscisic Acid and its Metabolites by Reaction Monitoring LC-MS (Stephen J. Ambrose, **Douglas Olson**, Andrew R.S. Ross, NRC Saskatoon)

Resolving Coeluting Isomers in Gas Chromatographic Analysis by Tandem Mass Spectrometry (**C.C. Chou**, Wastewater Chemistry Laboratory Environmental Monitoring and Technical Services San Diego)

Formation of $\{n(M+HCl)+mHCl+M+H\}^+$ Types Ions Observed in CAD Spectra - FAB/MS Measurements of Hydrochlorides of Amines and Diamines (**Kimio Isa**¹, Reiko Tsukamoto¹, Hideyuki Takezawa¹, Ryuji Nakata¹, Shigeki Matsumura², Yasushi Iizuka³, ¹Fukui University, ²Forensic Science Lab, Fukui Prefectural Police Headquarters, ³Nippon-shinyaku)

LC-MS Applications In Polymer And Environmental Chemistry (**Paul Mayer**, U. Ottawa)

LC/MS/MS As A Confirmation Tool In The Determination Of A Sulfolane Metabolite In Wetland Vegetation Exposed To Sour Gas-Contaminated Ground Water (**Kerry M. Peru**, **John Headley**, Environment Canada)

Bioanalytical Quantification in Drug Discovery: Fast Isocratic Vs Ultra-Fast Gradient Chromatography (**Leslie Romanynshyn**, Merck Research Laboratories)

Electrospray Mass Spectrometric Analysis of Environmental Samples for Compounds Scheduled Under The Chemical Weapons Convention (**Paul A. D'Agostino**, James R. Hancock, Lionel R. Provost, Defence Research Establishment Suffield)

Amino Acid Sequence Dependence of In-Source Decay Fragmentation (**Robert W. Olafson**,
Kenneth Walsh, Lowell Ericsson, Samuel Purvine, Arnold M. Falick, U Victoria, U Washington,
PE Biosystems)

SmartFrag TM for Improved Quantiation with an Ion Trap (**Maryann Shen**, Bruker Daltonics)

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