

LAKE LOUISE XI

The Eleventh Lake Louise Workshop on Tandem Mass Spectrometry

Thursday 3rd December

8.30 Welcome and Announcements

Simon Gaskell, Chair

8.35 P. Iannitti, A. Weimann, J. Beck, J.A. Burgess and **Margaret Sheil** (University of Wollongong, Australia): *Tandem mass spectrometry of oligonucleolides and drug-DNA adducts*

9.20 **John Klassen** (University of Alberta, Edmonton): *Gas-phase acidities of the nucleobases*

9.40 Discussion

10.00 Break

10.20 **Gordon McKay** (University of Saskatchewan, Saskatoon): *Development of a quantitative analysis for Bupropion and its metabolites using MRM*

10.40 **Ken Tomer** et al. (NIEHS, Research Triangle Park, NC, USA): *HIV glycopeptide characterization using the QTOF hybrid MS*

11.00 ^{Daniel B}
~~Chris Lock~~ (Institute for Marine Biosciences, Halifax): *The separation and characterisation of peptides by combined micro-HPLC Qq-TOF*

11.20 ^{Gery Krupps}
~~Peter Verhaert~~ et al. (Innogenetics, Gent, Belgium): *MALDI-PSD and ESI-TOF MS/MS for de novo sequencing of neuropeptides*

11.40 Discussion

12.00 Lunch

Pierre Thibault, Chair

13.30 **Frank Turecek** (University of Washington, USA): *Variable time and photoexcitation studies in NRMS*

14.15 **Richard Vachet** et al. (Naval Research laboratory, Washington DC, USA): *Using ion-molecule reactions to study the structure of metal complexes*

14.35 **John Holmes** (University of Ottawa): *An appraisal of the kinetic method for determining proton affinities*

14.50 Discussion

15.10 Break

- 15.30 Kenneth L. Ray and Gary Glish (University of North Carolina, Chapel Hill, NC, USA): *Hadamard transform quadrupole ion trap mass spectrometry*
- 15.50 Glenn Legault et al. (Trent University, Peterborough): *Ion trap analysis of arachidonic acid arising from long-term potentiation in rat brain*
- 16.10 Paul Kebarle, Michael Peschke and Arthur T Blades (University of Alberta): *Towards a metallo-enzyme ion-ligand thermochemistry and what we can learn from it*
- 16.30 Discussion
- 16.45 Break
- 18.00 Dinner

Orval Mamer, Chair

- 20.00 Einar K. Fridriksson, Barbara Baird, David Holowka, and Fred W. McLafferty (Cornell University, Ithaca, NY, USA): *Studies of IgE antibodies, 190 kDa, with Fourier-transform tandem mass spectrometry*
- 20.30 Gabi V. Koellisch (University of Bayreuth, Germany), Peter D. Verhaert (Innogenetics, Gent, Belgium), and Klaus H. Hoffmann (University of Bayreuth, Germany): *Tandem mass spectrometry and butterfly neurohormones - the TOF connection*
- 21.00 Poster session

Friday 4th December

Gary Glish, Chair

- 8.30 Mike Bowers (University of California, Santa Barbara, CA, USA): *Conformations of macromolecules in the gas phase: the latest news*
- 9.15 Luke Hanley et al. (University of Illinois at Chicago, USA): *Shattering of SiMe_3^+ during surface-induced dissociation*
- 9.35 ~~Jim Scrivens~~ ^{Peter Verhaert} et al. (ICI, Cleveland, UK): *Tandem mass spectrometric aspects of polymer microstructure*
- 9.55 Discussion
- 10.10 Break
- 10.30 Pierre Thibault, Li Jianjun (Institute for Biological Sciences, Ottawa), Bruce Thomson (Sciex), Nicholas Bings, Cameron D. Skinner, Can Wang, and D. Jed Harrison (University of Alberta): *Development of microfabricated devices with low dead volume connection for capillary electrophoresis-electrospray mass spectrometry: enhanced sample throughput for protein identification*

- 10.50 **Paul D'Agostino**, Lionel Provost and James Hancock (DRES, Suffield): *Packed Capillary LC-ESI-MS and MS/MS of CWC organophosphorus warfare agents, related compounds and their degradation products*
- 11.10 Carmai Seto, J. Stuart Grossert (Dalhousie University, Halifax), David S Waddell, Robert R Boyd and **Jonathan M Curtis** (Institute for Marine Biosciences, Halifax): *Remote-site fragmentation processes in long-chain alkyl ammonium ions from an electrospray source*
- 11.30 **J. Stuart Grossert**, Elizabeth Lewis and Robert L White (Dalhousie University, Halifax): *MS/MS studies on protonated derivatives of acetanilides*
- 11.50 Discussion
- 12.00 Lunch
- Afternoon free
- 19.30 for 20.00 Workshop Dinner

Saturday 5th December

Gordon McKay, Chair

- 8.30 **Ken Standing** (University of Manitoba): *Tandem MS measurements on hybrid quadrupole/time-of-flight instruments*
- 9.15 Robert H. Bateman, Robin Carruthers, John B. Hoyes, Anthony J. Gilbert, James I. Langridge, Kevin Malone, Robert S. Bordoli, and **Alan Millar** (Micromass UK, Manchester, UK): *The novel precursor scanning mode of a quadrupole time-of-flight hybrid tandem mass spectrometer*
- 9.35 **Igor Chernushevich** et al. (Sciex): *Parent ion scan improvements on a QqTOF tandem mass spectrometer*
- 9.55 Discussion
- 10.10 Break
- 10.30 **Don Douglas** et al. (University of British Columbia): *A linear ion trap time-of-flight system for MS/MS*
- 10.50 **Brian Musselman** (PerSeptive Biosystems, Framingham, MA, USA): *New developments in tandem TOF MS/MS*
- 11.10 ^{Ken Tomer}
~~Gary Kruppa~~ (Bruker Daltonics, Billerica, MA, USA): *Strategies for accurate mass measurement in MSⁿ with FTMS*
- 11.30 **Alex Harrison** (University of Toronto): *A comparison of skimmer-cone and quadrupole cell CID*
- 11.50 Myriam Ferro, Richard Jones, and **Simon Gaskell** (UMIST, Manchester, UK): *The formation and fragmentation of dimeric peptide ions during electrospray MS*
- 12.10 Close of Workshop

POSTERS

1. **Luke Hanley et al.** (University of Illinois at Chicago, USA): *Relative energies of peptide ion fragmentation by surface induced dissociation*
2. **Victor Nesati, Don Douglas et al.** (University of British Columbia): *Tandem MS of non-covalent protein-protein complexes*
3. **Alister Muir, Andrew Aubin and Dana Yurach** (Agriculture and Agrifoods Saskatoon Research Centre): *LC-MS/MS analysis of lignans in plasma and urine - problems and solutions*
4. **Lisa Cousins et al.** (MDS-Sciex Canada): *Radial excitation MS/MS and MS²MS in continuous beam quadrupoles*
5. **Anil Shukla, Helen de Clercq, Atish Sen, Sergey Rakov and Jean Futrell** (University of Delaware): *Surface-induced dissociations: A crossed-beam study*
6. **Francois Lépine et al.** (Institut Armand Frappier, Laval, Quebec): *Reactions of t-butylcyclohexyl esters with oxygen in the collision cell of an MS/MS*
7. **Yi-Min She, Ken Standing et al.** (University of Manitoba): *Studies on plant viral strain variation and evolution by tandem mass spectrometry*
8. **Alexandre Loboda, Ken Standing et al.** (University of Manitoba): *MALDI QqTOF: design and performance*
9. **John Headley et al.** (NHRI, Saskatoon): *Evaluation of the efficacy of photocatalysis combined with biofilm uptake for the attenuation of organic contaminants*
10. **Gary Kruppa** (Bruker Daltonics, Billerica, MA, USA): *Automated MSⁿ with FTMS*
11. **George Agnes** (Simon Fraser University, Burnaby, BC): *Alkali metal ion competition in solution, and in the gas phase, for the ligand poly(ethyl glycol)*
12. **George Agnes** (Simon Fraser University, Burnaby, BC): *Resonant ion ejection with supplemental AC fields in RF-only linear quadrupoles*
13. **Gord McKay, Lawrence Hogge, T. Gurnsey and R. Mazzei** (College of Pharmacy, U of Saskatchewan; MicroPharm Consulting): *Reproducibility of high sensitivity multiple reaction monitoring (MRM) data obtained using LC/MS/MS with doxazosin gabapentin analysis as examples*