

LAKE LOUISE VII

The Seventh Lake Louise Workshop on Tandem Mass Spectrometry

Thursday 1 December

8.50 Welcome and announcements

MS/MS IN ION TRAPS (Gary Glish, Chair)

9.00 **Fred McLafferty** (Cornell University, Ithaca, NY): High mass, high resolution tandem mass spectrometry

9.45 Brian E. Winger, **John A. Castoro**, Long-Sheng Sheng and Joe Campana (Extrel FTMS, Madison, WI): Advances in peptide and protein sequencing by using MALDI- and ESI-FTMS

10.05 Frank H. Laukien, **Gary H. Kruppa**, and John Wronka (Bruker, Billerica, MA): Tandem mass spectrometry on large multiply charged ions in electrospray FTMS

10.25 Discussion

10.45 Coffee

11.05 **Ray March** (Trent University, Peterborough): Applications of ion trap MS/MS in analytical chemistry

11.25 **Greg Wells** (Varian, Walnut Creek, CA): Techniques and applications of MS/MS in ion traps

11.45 **Mike McDonnell** and William Schnute (Thermo Instruments Canada and Finnigan MAT): Advances in ion trap MS/MS

12.05 Discussion

12.30 Lunch

APPLICATIONS OF TANDEM MS (Paul D'Agostino, Chair)

14.00 **John Headley** (National Hydrology Research Centre, Saskatoon): Environmental application of MS/MS for the study of the persistence of herbicide residues in prairie wetlands

14.20 **Chester Mirocha** (University of Minnesota, St. Paul, MN): Analysis of fumonisin derivatives by CF/FAB and MS/MS

14.40 Ian Mylchreest and **Clay Campbell** (Finnigan MAT, San Jose, CA): Advances in automated MS/MS switching for routine LC/MS/MS

- 15.00 **Coffee**
- 15.20 **Mike Morris** and **Brian N. Green** (Fisons Instruments, UK): Potential of ES-MS and ES-MS/MS for identifying hemoglobin β -chain variants
- 15.40 **John Stults** (Genentech, South San Francisco, CA): Advances in peptide mass fingerprinting for protein database searching
- 16.00 **Discussion**
- 16.20 **Poster viewing**
- 18.00 **Dinner**

TIME-OF-FLIGHT ANALYZERS IN TANDEM MS (Simon Gaskell, Chair)

- 20.00 **Robert J. Cotter** (Johns Hopkins University, Baltimore, MD): Tandem time-of-flight mass spectrometry
- 20.45 **Ken Standing** (University of Manitoba, Winnipeg): TOF measurements of daughter ions with parent ion selection by gating or correlation
- 21.15 **Bob Bateman** and **Martin Green** (Fisons Instruments/VG Analytical, Manchester, U.K.): Design and performance data for a combined magnetic sector/time-of-flight mass spectrometer
- 21.35 **Discussion**

Friday 2 December

PHARMACEUTICAL APPLICATIONS OF TANDEM MS (Gordon McKay, Chair)

- 9.00 **Richard Yost** (University of Florida, Gainesville): Fundamentals, instrumental advances and pharmaceutical applications
- 9.45 **Jim Yergey** (Merck Frosst, Pointe Claire-Dorval): How important is MS/MS in a pharmaceutical drug discovery environment?
- 10.05 **Discussion**
- 10.25 **Coffee**
- 10.45 **Jack Henion** (Cornell University, Ithaca, NY): Bioanalytical trace analysis with minimal sample preparation by LC-MS/MS
- 11.30 **Gordon McKay** (University of Saskatchewan, Saskatoon): Comparative pharmacokinetics of fluphenazine using MRM techniques

11.50 **Bori Shushan** (Sciex, Thornhill): Medical, pharmaceutical and biopharmaceutical applications of triple quad MS/MS using atmospheric pressure ion sources

12.10 **Discussion**

12.30 **Lunch**

Afternoon free

19.30

for 20.00 **Workshop Dinner**

Saturday 3 December

INSTRUMENTATION AND MECHANISMS IN TANDEM MS (Bob Boyd, Chair)

9.00 **John Holmes** (University of Ottawa): High Energy Collisions; What Do the Observations Tell Us?

9.45 **Bob Boyd, Pierre Thibault, and Mike Morris** (NRC, Halifax): Performance of an rf-only quadrupole collision cell operated at high pressures

10.05 **Discussion**

10.25 **Coffee**

10.45 **Alex Harrison** (University of Toronto): Why are B-type ions stable in peptide spectra?

11.05 **Paul Kebarle and John Klassen** (University of Alberta, Edmonton): Determination of threshold energies for CID of protonated peptides

11.25 **Simon Gaskell and Kathy Cox** (UMIST, Manchester, UK): Acid/base interactions in protonated peptides

11.45 **Discussion**

12.00 **Close**

POSTER PRESENTATIONS

Paul D'Agostino (DRES, Suffield): GC-MS/MS of irritants

Frank H. Laukien, Gary H. Kruppa, and Paul Kowalski (Bruker, Billerica, MA): Time-of-flight parent ion selection for PSD analysis of peptide mixtures

Julie Leary and Martin Kohler (University of California, Berkeley): Post-column addition of metal salts to an oligosaccharide mixture: on-line LC-MS/MS using electrospray ionization

Frank A. Londry (Trent University, Peterborough): Systematic errors affecting peak position: a quadrupole ion trap study

John Louris, Paul Kelley, and Dane Karr (Teledyne, Mountain View, CA): The use of filtered noise field in ion isolation for MS/MS in the Paul ion trap

Leo J. Milward and Richard Feicht (Agriculture Canada, Calgary): MS/MS analysis of sulfonamide residues in honey

N. Pidskalny, S. Haddad, Gordon McKay and Kam K. Midha (University of Saskatchewan, Saskatoon): Optimization of a solid probe tip design for MRM analysis

Dawn E. Riegner and Gary L. Glish (University of North Carolina, Chapel Hill, NC): Relationship between ion temperature and experimental parameters for CID with a quadrupole ion trap