

Program for the 28th Annual Trent Conference on Mass Spectrometry August 8th – 11th, 2011

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Monday, August 8th

5:00 pm Dinner: Geneva Court Dining Room	
Evening Session Chair: Saunder Mommers (<i>University of Ottawa</i>)	
6:30 pm	Welcome: Paul Mayer
6:40	Poster Introductions : 3 min per poster for Monday evening poster session
7:10	Monday Evening Poster Session at Copeland Hall, Chair: Sander Mommers
9:10 or so	Social, 4 th floor of Geneva Lodge

Tuesday, August 9th

7:45 am Breakfast: Geneva Court Dining Room	
Morning Session I Chair: Paul Mayer (<i>Ottawa</i>)	
9:00 am	“From diatomic molecules to eight thousand two hundred and three-atomic molecules: MS-based biomolecule analysis at the Trent Conference on Mass Spectrometry over the past decade: A tutorial and perspective by Jeffrey C. Smith” Jeffrey C. Smith (Carleton)
10:00	“Characterization and Quantification of free Fatty acids and triacyl glycerol during the development of <i>Onopordum acanthium</i> seeds” Moufida Oueslati and Paul Mayer (University of Ottawa)
10:20	“Quantification of low abundance plasma proteins by immunoaffinity purification, reverse phase nanoflow chromatography and selected reaction monitoring” Declan Williams , Leroi V. DeSouza , and K. W. Michael Siu (York University)
10:40	Coffee Break
Morning Session II Chair: Maxim V. Berezovski (<i>Ottawa</i>)	
11:00	“A quantitative mass spectrometry-based proteomic and phosphoproteomic analysis of VSV-infected K562 cells” Matthew P. Huebsch and Jeffrey C. Smith (Carleton)
11:20	“Quantitative lipidomics of K562 leukemic cells infected with Vesicular Stomatitis Virus” Shira Joudan , Lennart Trouborst and Jeffrey C. Smith (Carleton)
11:40	“Enzyme Mechanisms and Dynamics Studied by Time-Resolved Electrospray Ionization:

	Pre-steady state kinetics of Chymotrypsin” <u>Araby Jeganathan</u> and Derek Wilson (York)
12:10 pm Group Photo	
12:30 Lunch: Geneva Court Dining Room	
5:00 Dinner: Geneva Court Dining Room	
Evening Session Chair: Greg Koyanagi (York)	
6:10	“IRMPD Spectroscopic Study of Solvated $[\text{Ca}(\text{AlaGly-H})]^+$, $[\text{Ca}(\text{GlyAla-H})]^+$, $[\text{Na}(\text{AlaGly})]^+$, and $[\text{Na}(\text{GlyAla})]^+$ Complexes in the Gas Phase” <u>Maryam B. Moghaddam</u> and Travis D. Fridgen (Memorial University of Newfoundland)
6:30	“Structures of bare and hydrated $[\text{Pb}(\text{AminoAcid-H})]^+$ complexes using infrared multi-photon dissociation spectroscopy: Deprotonation at amine” <u>Michael B. Burt</u> , Sarah G. A. Decker, Chad G. Atkins, Mark Rowsell, and Travis D. Fridgen (Memorial University of Newfoundland)
6:50	“Lead-catalyzed oxidation of DNA: oxidation of guanine by hydrogen peroxide” <u>Laura Banu</u> , Voislav Blagojevic and Diethard K. Bohme (York University)
7:10	Tuesday Evening Poster Session at Copeland Hall, Chair: Sander Mommers
9:10	Social Part II, 4 th floor of Geneva Lodge

Wednesday, August 10th

7:45 am Breakfast: Geneva Court Dining Room	
Morning Session Chair: Derek Wilson (York)	
9:00 am	“Comparing the Energy/Structure Relationship of Peptides/Saccharides Complexes using Electrospray Mass Spectrometry, Tandem Mass Spectrometry, RRKM Theory, Ion Mobility Spectrometry and Molecular Dynamics” <u>Amanda Comeau</u> , Justin Renaud, Paul Mayer (University of Ottawa)
9:20	“Gas phase activation of hydrocarbons by unsaturated bipyridinium ruthenium complex, $\text{Ru}(\text{bipy})_2^{2+}$: The effect of ligation of $\text{Ru}(\text{bipy})_2^{2+}$ with CO on the dehydrogenation of i-butane, and propane” <u>Ameneh Gholami</u> and Travis D. Fridgen (Memorial University of Newfoundland)
9:40	“Measuring Kinetic Isotope Effects Using Time-resolved Electrospray Mass Spectrometry” <u>Peter Liuni</u> and Derek J. Wilson (York)
10:00	“The Study of Electron Transfer and Bond Insertion Involving Metal Anions” <u>Alex Mungham</u> , Julie Roy and Paul Mayer (University of Ottawa)
10:20	Coffee Break
Morning Session II Chair: Jeffrey Smith (Carleton)	
10:40	“A meticulous investigation of the effects of substrate structure and charge state upon the energetics and conformations of non-covalent complexes” <u>Justin Renaud</u> and Paul M Mayer (University of Ottawa)
11:00	“Energetics of dissociation of PAHs and Dihydro-PAHs” <u>Brandi West</u> , Paul Mayer, Christine Joblin, Valerie Blanchet, Andras Bodi and

	Balint Sztaray (University of Ottawa)
11:20	“Atmospheric Pressure Chemical Ionization Mass Spectrometry of Volatile Organic Compounds, Potential Disease Bio-markers in Breath” <u>Vitaliy Kapishon</u> , Gregory K. Koyanagi and Diethard K. Bohme (York University)
11:40	“Kinetic Capillary Electrophoresis – Ion Mobility Mass Spectrometry (KCE-IM-MS) for Studying Conformational Changes of Nucleic Acid-Metal Complexes” <u>Gleb Mironov</u> and Maxim V. Berezovski (University of Ottawa)
12:00	“Evaluation of the performance of molecularly imprinted polymers for trace analysis of 2,4-dichlorophenoxyacetic acid in the environment” <u>Adam G. Beaton</u> , Geert Van Biesen, Christina S. Bottaro
12:20	Business Meeting
12:30 Lunch: Geneva Court Dining Room	
5:30 BBQ Supper Including Musical Entertainment by the 9-piece jazzband “ <u>Souper Jazz</u> ” with singer Mary Moore.	

Thursday, August 11th

8:00 am Breakfast: Geneva Court Dining Room	
Morning Session Chair: <i>Voislav Blagojevic (York)</i>	
9:20 am	“Analysis of protein dynamics by H/D exchange using FORTRAN language” <u>Shaolong Zhu</u> and Derek J. Wilson (York)
9:40	“Optimization of protein digestion using microfluidic immobilized trypsin columns” <u>Carlos Canez</u> , Jinal Patel and Jeffrey C. Smith (Carleton)
10:00	“Structurally Resolved Snapshots of Protein Dynamics on Millisecond Time-scale using a Microfluidic Device incorporating TRESI, HDX and Rapid Proteolytic Digestion” <u>Tamanna Rob</u> , Shaolong Zhu, Preet Kamal Gill and Derek Wilson (York University)
10:20	“Exploring Amyloidogenic Surfaces on Acylphosphatase from <i>Sulfolobus solfataricus</i> (Sso Acp) in the Native and Native-like State” <u>Yanfang Liang</u> , Tamanna Rob, Derek J. Wilson (York)
10:40	“Towards automating quantitative analyses of blood plasma lipids” <u>Lennart Trouborst</u> , Shira Joudan and Jeffrey C. Smith (Carleton)
11:00	“Novel microfluidic methods to methylate peptides and permit quantitative analysis using tandem mass spectrometry” <u>Karl Wasslen</u> and Jeffrey C. Smith (Carleton)
12:30 pm Lunch: Geneva Court Dining Room	