

## **Saturday, October 24<sup>th</sup>**

**8:00-9:00 Registration and Continental Breakfast**  
(John Hodgins Engineering Building, Lobby)

**Morning Session I**  
**Chair: Giuseppe Melacini**

(John Hodgins Engineering Building, 2<sup>nd</sup> Floor, Rm. 264)

9:00-9:15 Opening Remarks

9:15-10:00 Plenary Lecture: Rams Ramamoorthy

10:00-10:20 Proton Detection for Signal Enhancement in Solid-State NMR Experiments on Mobile Species in Membrane Proteins  
**Meaghan E. Ward**, Emily Ritz, Mumdooh A. M. Ahmed, Vladimir V. Bamm, George Harauz, Leonid S. Brown, Vladimir Ladizhansky  
*University of Guelph*

10:20-10:40 Molecular Organization of Lipid-Bound and Amyloid Fibrils of Human Serum Amyloid A by Solid-State NMR  
**Jason Yau**, Karen Simonetti, Sympascho Young, Quanh Huyhn, Simon Sharpe  
*Hospital for Sick Children*

**10:40-10:55 Coffee Break**  
(John Hodgins Engineering Building, Lobby)

10:55-11:15 Probing Modularity and Transitions of Spider Wrapping Silk Conformation by NMR  
**Muzaddid Sarker**, Marie-Laurence Tremblay, Kathleen E. Orrell, Lingling Xu, Xiang-Qin Liu and Jan K. Rainey  
*Dalhousie University*

11:15-11:35 Monitoring the Formation of a Zeolitic Imidazolate Framework Using <sup>111</sup>Cd Solid-State NMR  
**Christopher O'Keefe**, C. Mottillo, T. Frišćić and R. W. Schurko  
*University of Windsor*

11:35-11:55 Detection of Sodium-Oxygen Battery Discharge Products with Solid-State NMR  
**Zoë E. M. Reeve**, Kristopher J. Harris, Christopher J. Franko, Hossein Yadegari, Victor Terskikh, Xueliang Sun, and Gillian R. Goward  
*McMaster University*

11:55-12:15 Understanding Guest Gas Dynamics Within Metal-Organic Frameworks  
**Bryan E.G. Lucier**, Yue Zhang, Shoushun Chen, Yuanjun Lu, Hendrick Chan, Yining Huang  
*University of Western Ontario*

**12:30-14:00 Lunch at The Phoenix**

**Afternoon Session**

**Chair: Gillian Goward**

*(John Hodgins Engineering Building, 2<sup>nd</sup> Floor, Rm. 264)*

14:00-14:20 <sup>31</sup>P CODEX NMR With Powder-Average Modelling for Measuring Lateral Diffusion in Multiplexed Lipid Bilayers  
**Angel Lai** and Peter M. Macdonald  
*University of Toronto*

14:20-14:40 The Effect of Unsaturated Lipids and Cholesterol on Bicelles: Liquid Disordered - Liquid Ordered Phase Coexistence  
**Miranda L. Schmidt** and James H. Davis  
*University of Guelph*

14:40-15:00 Characterization of Ln<sup>3+</sup>-doped Nanoparticles Using Solid-State NMR  
**David A. Hirsh**, B. Richard, B.E.G. Lucier, A.M. Ritcey, and R. W. Schurko  
*University of Windsor*

**15:00-15:15 Break**

15:15-15:35 Solids NMR Characterization of Nanoparticles with Mixed Ligand Shells  
Safiya Allie and **Linda Reven**  
*McGill University*

15:35-15:55 Dynamic Nuclear Polarization Solid-State NMR of Membrane Proteins with Covalently Attached Cysteine-Specific Biradicals  
Maxim A. Voinov, **Daryl B. Good**, Meaghan E. Ward, Sergey Milikisiyants, Marc Caporini, Melanie Rosay, Rachel A. Munro, Milena Ljumovic, Leonid S. Brown, Vladimir Ladizhansky, Alex I. Smirnov  
*University of Guelph*

15:55-16:15 Investigating the Halogen Bond Donor by Covalent <sup>35</sup>Cl Solid-State NMR  
**Patrick M.J. Szell** and David L. Bryce  
*University of Ottawa*

**16:30-18:30 Poster Session (University Club)**

**18:30-22:00 Banquet at University Club**

## **Sunday, October 25<sup>th</sup>**

**8:00-9:00**      **Coffee and Continental Breakfast** (*JHE Lobby*)

### **Morning Session II**

**Chair: Alex Bain**

(*John Hodgins Engineering Building, 2<sup>nd</sup> Floor, Rm. 264*)

9:00-9:45      Plenary Lecture: Mike Noseworthy

9:45-10:05      Inhibition & Activation of Parkin

**Jacob Aguirre**, Condos T.E.C., Mercier, P., and Shaw, G.S.

*University of Western Ontario*

10:05-10:25      Intra-Ligand Allostery Induces Ligand Selectivity in the cAMP-Binding Domain of HCN

**Stephen Boulton**, Bryan VanSchouwen, and Giuseppe Melacini

*McMaster University*

10:25-10:45      Design and Characterization of a Disruptor Peptide to the E2A-PBX1:CBP/p300 Complex

**David N. Langelaan**, Marina R. Lochhead, David P. LeBrun and Steven P. Smith

*Queen's University*

**10:45-11:00**      **Coffee Break**

(*John Hodgins Engineering Building, Lobby*)

11:00-11:20      Structural Elucidation of Novel Antifungal Natural Products Isolated from an Endophyte Fungus in Raspberry Leaves

**Kevin M. N. Burgess**, Ashraf Ibrahim, Dan Sørensen and Mark W. Sumarah

*NSERC Visiting Fellow*

11:20-11:40      Congenital Hyperinsulinism-causing Mutations Cause Misfolding and Change Molecular Interactions in SUR1 NBD1

**Claudia Alvarez**, Marijana Stagljar, and Voula Kanelis

*University of Toronto*

11:40-12:00      Role of Dynamics in the Auto-Inhibition and Activation of the Hyperpolarization-Activated Cyclic-Nucleotide-Modulated (HCN) Ion Channels

**Bryan VanSchouwen**, Madoka Akimoto, Maryam Sayadi, Federico Fogolari and Giuseppe Melacini

*McMaster University*

**12:00-12:10**      **Poster Award Announcement and Closing Remarks**