

32nd MOOT NMR MiniSymposium, Ottawa *Program*



Friday October 25th, 2019

7:00 PM Informal Mixer, Lowertown Brewery (73 York St)

Saturday October 26th, 2019; Room E217, Minto Sports Complex (801 King Edward St)

8:30 AM Registration and coffee

8:50 AM Opening remarks

Session A: Biomolecular NMR

Session Chair: Natalie Goto, University of Ottawa 9:00 AM Kenote speaker: Elizabeth Meiering

1- Balancing protein stability and strain: (Mis)folding and function defined by NMR

9:40 AM 2 - Mechanisms of specific versus nonspecific interactions of aggregation-prone inhibitors and

attenuators

Stephen Boulton, McMaster University

10:05 AM 3 - Linking structure and mechanics in pyriform silk proteins

Jeffrey Simmons, Dalhousie University

10:30 AM Coffee break

Session B: New Methods

Session Chair: Barbara Blackwell, Agriculture and Agri-Food Canada

10:55 AM 4 - Examining the mechanism of EPAC1 inhibition by NMR spectroscopy

Hongzhao Shao, McMaster University

11:20 AM 5 - Membrane protein unfolding and stability investigated by solid-state NMR

Peng Xiao, University of Guelph

11:45 AM 6 - First in cell 2D ¹³C solid-state NMR assignments of *Chlamydomonas reinhardtii's* cell wall and

starch.

Alexandre Poulhazan, Université du Québec à Montréal

12:10 PM LUNCH

Session C: Solid-State NMR

Session Chair: Gang Wu, Queen's University

1:30 PM 7 - Non-Destructive methods in the analysis of soil

Will McCombs, University of Prince Edward Island

1:55 PM 8 - NMR Characterization of the origins of exceptional proton mobility in protic ionic liquid-based

fuel cell electrolytes.

Mohammad Hasani, Chalmers University of Technology

2:20 PM 9 - Observing effects of cardiolipin on α-synuclein using solid-state nuclear magnetic resonance

Justin Medeiros, University of Guelph

2:45 PM Coffee break

Session D: Biomolecular NMR

Gary Shaw, University of Western Ontario

3:10 PM 10 - Characterization of nucleotide binding and dimerization in the bacterial cell division regulator

MinD

Adam Cloutier, University of Ottawa

3:35 PM 11 - Investigating apelin receptor C-terminal tail interactions with membrane-mimetic micelles

Tam Pham, Dalhousie University

4:00 PM 12 - Using NMR to investigate the dynamics and calcium-binding mechanisms of dysferlin C2A

domain

Yuning Wang, University of Western Ontario

4:25 PM Poster session

7:00 PM Conference banquet (Metropolitain Brasserie, 700 Sussex Dr)

Sunday October 27th, 2019; Room 1150, Demarais Building (55 Laurier Ave)

8:45 AM Coffee

Session E: More Methods

Session Chair: David Bryce, University of Ottawa

9:00 AM Keynote speaker: Glenn Facey, University of Ottawa

13 - NMR Tips, Tricks and Techniques

9:40 AM 14 - Structural basis of alpha synuclein assembly toxicity inhibition by human serum albumin

Rashik Ahmed, McMaster University

10:05 AM 15 - NMR study of molecular hydrogel system based on bile acids

Puzhen Li, Université de Montréal

10:30 AM Coffee break

Session F: Solid-State NMR Methods

(Session Chair: Bob Berno, McMaster University)

10:55 AM 16 - Tetrel bonds: Evidence and insights obtained from solid state NMR crystallographic

investigations of theophylline- and caffeine-based cocrystals

Scott Southern, University of Ottawa

11:20 AM 17 - In situ magnetic resonance spectroscopy and imaging of Li-plating onto and diffusion within

anodes of Li-ion batteries

Kevin Sanders, McMaster University

11:45 AM 18 - Probing carboxylate flipping dynamics in hydrogen-bonded systems by solid-state

Yizhe (Sherry) Dai, Queen's University

12:10 PM Awards presentation and closing remarks

Thanks to Sponsors of the 32nd MOOT NMR MiniSymposium!









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Département de chimie et sciences biomoléculaires Department of Chemistry and Biomolecular Sciences





Suraj Manrao Science Fund