

32nd MOOT NMR MiniSymposium, Ottawa *Program*



Friday October 25th, 2019

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

Saturday October 26^h, 2019; Location: Minto E217

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; Location Desmarais 1150

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!









Faculté des sciences Faculty of Science





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





Suraj Manrao Science Fund