

## NMR Discussion Group & British Radiofrequency Spectroscopy Group Winter Meeting

12<sup>th</sup> and 13<sup>th</sup> December 2024. Burlington House, London

Day 1 – Thursday

10:30 *Refreshments*

11:00 *Welcome*

Melanie Britton, NMR DG Chair

11:10 *Investigating Disorder in New Phosphate Frameworks using NMR Crystallography*

Sharon Ashbrook, University of St Andrews

11:40 *You(r cells) want to live in that? Structural surveys of the extracellular matrix by solid-state NMR*

Wing Chow, University of Warwick

12:10 *Metabolic response of paediatric-type diffuse high grade glioma to PI3K inhibition as assessed by <sup>2</sup>H-MRS*

Declan Bolster, Institute of Cancer Research

12:30 *Lunch*

13:30 *NMR DG Business & AGM*

Andrew Gibbs & Melanie Britton

13:45 *Measuring translational diffusion in reacting systems*

Bill Price, Western Sydney University

14:30 *Need For Speed: Extracting Chemical Kinetics from a Single Scan NMR Experiment*

Annabel Flook, University of Edinburgh (PGR Prize Talk)

14:50 *Coffee Break*

15:15 *Multiple hydrogen bonding studied by deuterium isotope effects on chemical shifts*

Poul Erik Hansen, Roskilde Universitet

15:45 *NMR-based metabolomics to probe small molecule chemical pathways in the brain*

Fay Probert, University of Oxford

16:15 *Understanding catalytic processes using operando magnetic resonance*

Lynn Gladden, University of Cambridge

17:00 *Networking Session*

*Refreshments sponsored by Bruker and JEOL*

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Day 2 – Friday

09:30 *Refreshments*

09:45 *Tutorial: Machine Learning: the algebra behind the hype*  
Ilya Kuprov, Weizmann Institute of Science

10:30 *Coffee Break*

11:00 *Welcome*  
John Griffin, BRSB Chair

11:10 *Film-electrochemical EPR: tracking paramagnets during electron-transfer reactions*  
Maxie Roessler, Imperial College London

11:55 *Gradients, imaging and more NMR: from pH measurements to synthesis and modelling of the gut*  
Matthew Wallace, University of East Anglia

12:25 *Advances in Understanding and Optimizing Li Metal DNP*  
Marie Juramy, University of Cambridge

12:45 *Lunch*

13:55 *Update on UK High-Field Solid-State NMR National Research Facility*  
Dinu Iuga, Solid State NMR NRF

14:10 *Practical aspects of ab initio assisted analysis of paramagnetic NMR in solution*  
Elizaveta Suturina, University of Bath

14:40 *Coffee Break*

15:10 *Metal Ions Dynamic Nuclear Polarization in Mn(II) Doped CdS Nanocrystals: Atomic Scale Investigation of the Dopant and its Host*  
Ran Eitan Abutbul, University of Manchester

15:30 *Symmetry-Based Pulse Sequences: from Solids to Liquids*  
Malcolm Levitt, University of Southampton

16:15 *Closing Remarks*