

## NMR Discussion Group December Meeting 2023

Thursday the 14<sup>th</sup> of December 2023

*The Royal Society of Chemistry, Burlington House, London, W1J 0BD*

10:00 – 10:25 Registration and refreshments

### Morning session

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**Chair: D. Flemming Hansen, University College London**

10:25 – 10:30 **D. Flemming Hansen, NMRDG local organiser**  
*Introduction and welcome*

10:30 – 11:10 **G. Marius Clore, NIDDK, National Institutes of Health, USA**  
*“Using NMR to Quantitatively Probe Mechanisms of Fibril Formation: Huntingtin, Amyloid  $\beta$ 42 and Hsp104.”*

11:10 – 11:35 **Callum Gater, University of York**  
*“Overcoming the Insensitivity of  $^{15}\text{N}$  NMR via SABRE for Use in Mixture Analysis and Diffusion Spectroscopy”*

11:35 – 12:05 **Frédéric Blanc, University of Liverpool**  
*“Ionic Diffusion in Solids: An NMR ViewPoint”*

12:05 – 12:35 **Ilya Kuprov, University of Southampton**  
*“The Wild and Wonderful World of  $^{19}\text{F}$  NMR: A Computational Perspective”*

12:40 – 14:00 Lunch

### Afternoon session

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**Chair: Thomas Robertson, NMRDG ECR**

14:00 – 14:15 **Andrew Gibbs, Treasurer of NMRDG**  
*“NMRDG Business”*

14:15 – 14:45 **John Griffin, Lancaster University**  
*“Investigating Structure and Dynamics in Confined Photoswitches by Solid-State NMR”*

14:45 – 15:15 **Galina Pavlovskaya, University of Nottingham**  
*“Exploring Diabetes, Osteoarthritis, and Long COVID: Novel Insights from  $^{23}\text{Na}$  MRS/MRI and Hyperpolarized Xenon-129 Lung Imaging”*

15:15 – 15:40 **Emma Gates, University of Manchester**  
*“New NMR Methods for Complex Mixture Analysis”*

15:40 – 16:20 **Pramodh Vallurupalli, Tata Institute of Fundamental Research, India**  
*“Exploring the Free Energy Surface of Proteins using CEST NMR Experiments”*

16:20 – 16:30 **Closing remarks: Melanie Britton, Chair of NMRDG**

16:30 – Refreshments and departure