



RSC NMR Discussion Group Postgraduate Meeting 2024

Date of meeting: Monday 24th June and 25th June 2024

Meeting venue: Haworth Building
University of Birmingham
Birmingham, B15 2TT

Dear *NMR DG Member*,

The NMR Discussion Group would like to invite you to the 16th Postgraduate Meeting, to be held at the School of Chemistry, University of Birmingham. This two-day meeting is designed to showcase the work of early career researchers, including postgraduates, postdoctoral workers and industrialists, whose work has a strong NMR content. There will be four “overview” lectures by established NMR spectroscopists, and a careers talk from an leading industrialist:

Dr. Markus Weingarth *Associate Professor of Biomedical NMR, University of Utrecht*

Dr. Marina Carravetta *Associate Professor of Physical Chemistry, University of Southampton*

Prof. Craig Butts *Professor of Structural and Mechanistic Chemistry, University of Bristol*

Dr. Robin Stein *NMR Applications Scientist, Bruker Biospin*

This event provides an ideal opportunity for early career researchers to gain experience in presenting their work, either in poster format or *via* oral presentation. Presenters at previous meetings have found the experience to be of real benefit prior to presenting work in an international setting. Whilst making either an oral or a poster presentation is not mandatory, we hope that most younger scientists attending will present their work. Established scientists and group leaders are encouraged to attend and provide a

supportive environment for those presenting, in addition to learning about cutting edge NMR-related research in the UK.

This event will be held in parallel with the UK Magnetic Resonance Managers' Meeting (UKMRM), which will take place on Monday 24th June 2024. Details of the UKMRM meeting are available at <https://www.rsc.org/events/detail/78588/ukmrm-2024>.

Costs

Attendance at the meeting is heavily subsidised by the RSC. *There is an expectation that students and early career workers will submit an abstract of the work they would like to present at the meeting before the closing deadline of the 24th June 2024.* Early career researchers are defined as current postgraduates, postdoctoral workers in their first post or early career (within first 2 years) researchers in industry.

A total of 13 speakers will be selected to present their work from amongst those submitting abstracts.

A subsidised registration fee is payable via the RSC events website (£25 for student RSC members, £35 for student non-members, £55 for RSC members, and £65 for non-RSC members).

A buffet lunch and teas/coffees and a 'Pizza & Beer' poster and networking session will be provided for all registered delegates.

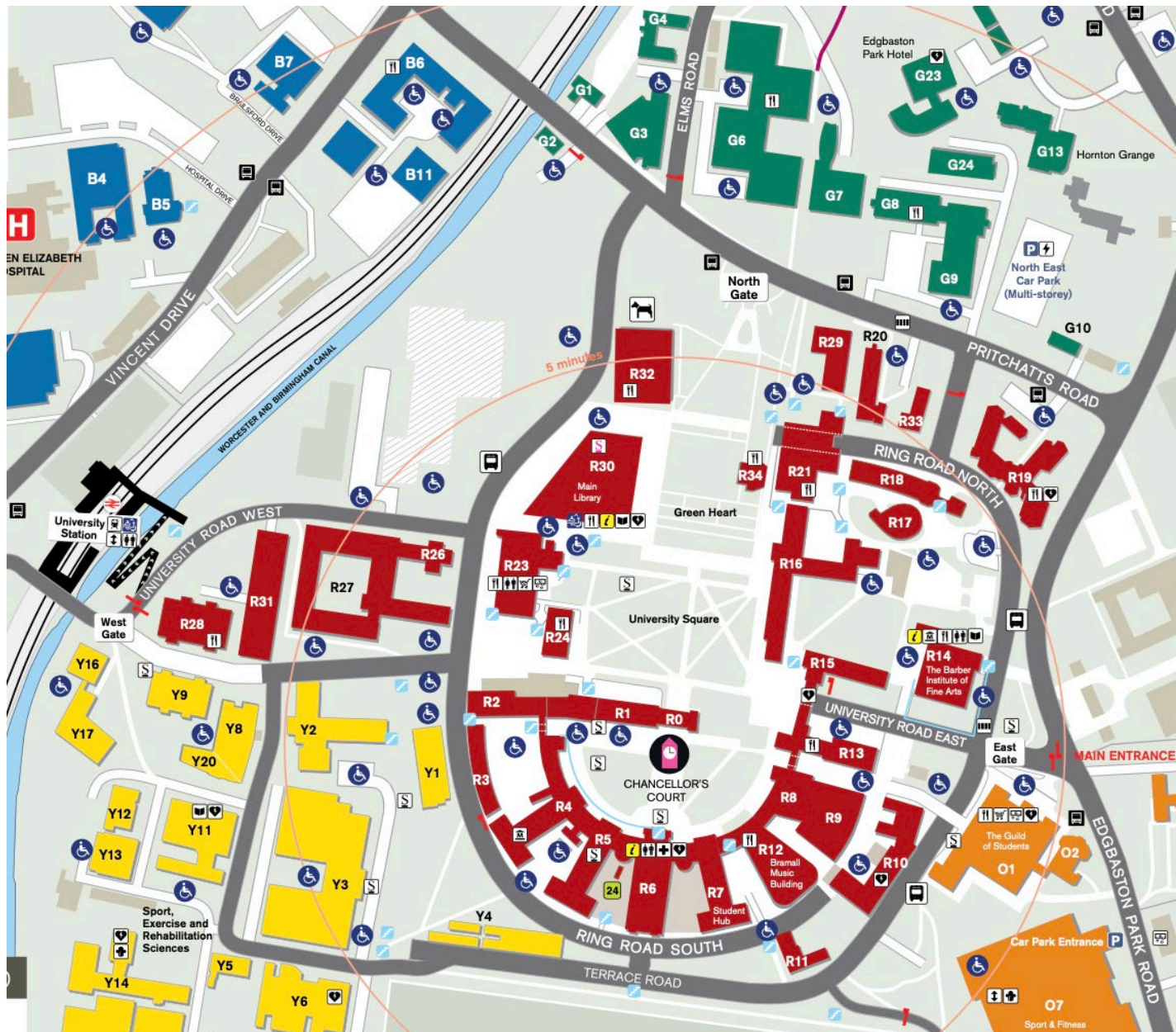
Location of the Haworth Building, University of Birmingham

A campus map of the University of Birmingham is shown below, with an arrow indicating the location of the Haworth Building (School of Chemistry, Y2 on the map). Alternatively, a full campus map showing the location of the venue is available on the University of Birmingham website using the web link below.

<https://www.birmingham.ac.uk/contact/directions>

The meeting auditorium will be clearly signposted at strategic locations on campus and on entering the Haworth Building.

Full details of how to get to the University of Birmingham, including links by air, rail and coach, can be obtained using this link: <https://www.birmingham.ac.uk/contact/directions/getting-here-edgbaston>. Train is the most convenient option. Most cross-country services to Birmingham arrive at New Street Station. Up to six trains an hour depart for the University on the cross-city line (ten minutes to University station, final destination Longbridge or Redditch). The Haworth building is a five-minute walk from University Station.



Accommodation

Accommodation is the responsibility of the attendee. Reasonably priced accommodation is available close to the venue if required. Further information can be obtained by contacting the Meeting Organiser.

Registration and payment

All attendees should register and pay via the RSC (<https://www.rsc.org/events/detail/78589>), and via the NMR DG website <http://www.nmrdg.org.uk>.

Abstract submission for presenting participants should be made electronically, using the template on the abstract submission portal: https://www.qualtrics.manchester.ac.uk/jfe/form/SV_dg847ICzU17Tswu. If you do not receive confirmation of receipt for your abstract within five working days, please re-send your abstract to **Dr Ralph Adams** and **Dr Dominik J. Kubicki**.

All participants must register via the RSC registration system: <https://events.rsc.org/rsc/3015/register>.

Posters

A0 portrait poster boards (84 cm wide by 119 cm tall) will be provided for poster mounting, which should be performed during the registration period or the start of the first coffee break. Posters should be removed at the end of the meeting.

Prizes

A panel of judges will select the best oral presentation and the best poster presentation (with personalised certificates presented on behalf of the Royal Society of Chemistry).

We look forward to welcoming all delegates to this two-day meeting.

Yours sincerely,

Dr. Dominik J. Kubicki, Dr. Cécile Le Duff (University of Birmingham)

Prof. Frédéric Blanc (University of Liverpool)

Dr. Trey Koev (University of East Anglia)

Dr. Thomas Robertson (University of Southampton)

Meeting Organisers

NMR DG Postgraduate Meeting 2024 Schedule

Monday 24th June

12:30 Arrival, Registration and Coffee

13:00 – 13:10 Welcome

13:10 – 14:00 **Dr Markus Weingarth, *University of Utrecht***
Cracking Nature's Recipes to Design Lipid-Targeting Antibiotics

14:00 – 14:20 **Vaibhav Kumar Shukla, *University College London***
Conformational dynamics dictate Histone de-acetylase activity and inhibition

14:20 – 14:40 **Ananya Singh, *University of Warwick***
Developing solid-state NMR spectroscopy approaches to study extracellular matrices

14:40 – 15:00 Coffee

15:00 – 15:50 **Dr Marina Carravetta, *University of Southampton***
TBC

15:50 – 16:10 **Ben Rhodes, *University of Cambridge***
¹⁷O NMR spectroscopy reveals CO₂ speciation and dynamics in hydroxide-based capture materials

16:10 – 16:30 **David Bradley, *University of Warwick***
Using Solid State NMR to Elucidate Surface Bonding Arrangements in Paramagnetic Urea-absorbing Ti₃C₂T_x MXene Systems

16:30 – 16:50 **Shrestha Banerjee, *University of Birmingham***
Solid State MAS NMR of halide perovskite ferroelectrics and solar cell materials

17:10 – 19:10 Refreshments, Pizza, Poster Session

Odd-numbered Posters presented 17:30 – 18:20

Even-numbered Posters presented 18:20 – 19:10

Tuesday 25th June

09:10 – 09:20 Welcome

09:20 – 9:50 **Dr Robin Stein**, *Bruker Biospin*
Fun with NMR Outside of the Research Lab

9:50 – 10:10 **Izzy Hehir**, *University of York*
In situ hyperpolarisation in benchtop NMR spectroscopy

10:10 – 10:30 **Oksana Bondar**, *University of Southampton*
SABRE Hyperpolarisation of [2-¹³C]pyruvate in non-alcoholic solution

10:30 – 10:50 **Michele Pierigé**, *Università Di Pisa*
Exploring the Effect of Tackifying Resins on SBR Dynamics via ¹H Field-Cycling NMR Relaxometry

10:50 – 11:20 Coffee

11:20 – 11:40 **Annabel Flook**, *University of Edinburgh*
Trust the Process: A Data Processing Technique to Improve Signal-to-Noise and Temporal Resolution of NMR Reaction Monitoring Data

11:40 – 12:00 **Ben Honoré**, *University of Bristol*
The Intelligent Generation of Molecular Structures from NMR Spectra

12:00 – 12:20 **Haider Hussain**, *University of East Anglia*
Dissolving the Insoluble: Aqueous pKa Determination of insoluble Analytes from Solvent Mixtures Using ¹H Chemical Shift Imaging NMR

12:20 – 13:20 Buffet Lunch

13:20 – 13:40 **Bridget Tang**, *Aston University*
Analysis of Bio-oils Produced from Brewers' Spent Grains – New Multinuclear and Multidimensional NMR Tools

13:40 – 14:00 **Emma Gates**, *The University of Manchester*
PESTA NMR: An Efficient Tool for the Analysis of Phosphorylated Molecules

14:00 – 14:20 **Yuan Gao**, *The University of Edinburgh*
NMR-based in situ mixing device: unravelling the mechanism of phase-transfer catalysed reactions

14:20 – 15:10 **Prof. Craig Butts**, *University of Bristol*
Succeeding by failing, losing my job, turning down my dream and not being excellent at anything

15:10 – 15:30 Prize Presentations and Coffee

15:30 Close