

ANZMAG NEWS - May 2025

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Dear all, Welcome to the May 2025 edition of ANZMAG News. Almost halfway through the year now. I hope everyone is doing well.

CONFERENCES

- The Alpine Conference on Magnetic Resonance in Solids will be held in Chamonix (France) 14th to 18th September - <https://alpine-conference.org>
- The Biological Solid-State NMR School 2025 will be held in Munich (Germany) 19th - 24th October - <https://www.bio.nat.tum.de/ocb/upcoming-events/european-solid-state-nmr-school/>
- The 46th FGMR Annual Discussion Meeting will be held in Bonn (Germany) 15th to 18th September - <https://www.fgmr2025.uni-bonn.de>
- And of course the 14th Biennial conference of the Australia and New Zealand Society for Magnetic Resonance to be held 30th November 4th of December at Tangalooma Resort, Moreton Island, Queensland, Australia - <https://anzmag.com.au/conferences-and-events/conferences/>

JOBS AND FELLOWSHIPS

- The University of Melbourne is looking for a Chief Nuclear Medicine Technologist for their Brain Centre Imaging Unit, <https://jobs.unimelb.edu.au/en/job/920259/chief-nuclear-medicine-technologist>. Closing date is **5th June**.
- The University of Auckland looking for a Lecturer/Senior Lecturer in Physics, <https://tinyurl.com/Auckphys> The closing date is **6th June**.
- As noted in a separate e-mail QUT are looking for a Senior Technologist in NMR. Details at <https://tinyurl.com/QUTQL> The closing date is **8th June**.
- The University of Sydney is looking for a Head of School, School of Life and Environmental Sciences, <https://www.nature.com/naturecareers/job/12839894/head-of-school-school-of-life-and-environmental-sciences/> Closing date is **23rd June**.

GRANTS AND AWARDS

- Last call out for the **Royal Australian Chemical Institute National Awards** which close on **30th June**. See <https://www.raci.org.au/events-and-awards/awards/national-awards> for details.
- The **Royal Society of Victoria (RSV)** currently has several awards open for applications. These include the Young Scientist Research Prizes (HDRs), The Phillip Law Postdoctoral Award (EMCRs) and The RSV Research Medal (open). See <https://www.rsv.org.au/awards> for details.
- Nominations are being sought for the **2025 BRSG-NMRDG annual Prize**, awarded to an individual for excellence in magnetic resonance and is to honour a work representing one or more substantial contributions to the field. See <https://www.iop.org/physics-community/special-interest-groups/brsg-magnetic-resonance-group/brsg-nmr-dg-annual-prize#gref>
- The Academy of Science extended it's deadline for some awards to 1st June so if you have any submissions in progress now is the time to finish them off - <https://www.science.org.au/supporting-science/awards-and-opportunities-2/2026-award-and-funding-opportunities>

FREE NMR BOOK

You can download a free copy of the textbook NMR Spectroscopy for Chemists by Martin Dračinský from <https://nmr-challenge.uochb.cas.cz/tutorial> This is a comprehensive resource for deepening your knowledge of NMR spectroscopy techniques and applications in organic chemistry.

GRAPHING IN BIORENDER

If you use Biorender for creating figures and charts you might be interested to know you can now use create graphs and run analyses with your data within BioRender. Now, it does seem to use AI to read your raw spreadsheet, detect variables, and format your data so you have to be comfortable with that, and the free version is limited, but it does let you generate some very nice visuals quickly. See <https://app.biorender.com/#graph> for details.

PAPER OF THE MONTH

The May 2025 paper of the month is entitled “COLMAR1d: A Web Server for Automated, Quantitative One-Dimensional Nuclear Magnetic Resonance-Based Metabolomics at Arbitrary Magnetic Fields” Although metabolomics (the detection, identification, and quantification of small-molecule metabolites in a wide range of biological samples) in general has moved a bit more to mass spectrometry in recent years NMR is still very useful. This paper by Dr Da-Wei Li et al. attempts to address one hurdle, which is the automated, accurate analysis of NMR spectra. They have created the COLMAR1d platform, consisting of a public web server and an optimised database, for one-dimensional NMR-based metabolomics data. The database comprises more than 480 metabolites from enabling a database query of spectra measured at various magnetic field strengths and there is a intuitive visualisation tool built into the web server to check the data. The idea is to offer a user-friendly, automated platform for quantitative 1D NMR-based metabolomics analysis allowing a wide range of applications, including biomarker discovery, metabolic pathway elucidation, and integration with multiomics strategies. The authors have tested it out on ^1H data of mouse serum, DMEM cell growth medium, and wine. You can find the paper at <https://pubs.acs.org/doi/10.1021/acs.analchem.4c02688> while COLMAR1d is freely accessible for academic users at <https://spin.ccic.osu.edu/index.php/colmar1d>.

STORIES FROM THE WEB

- [https://chem.libretexts.org/Bookshelves/Physical_and_Theoretical_Chemistry_Textbook_Maps/Supplemental_Modules_\(Physical_and_Theoretical_Chemistry\)/Spectroscopy/Magnetic Resonance Spectroscopies/Electron Paramagnetic Resonance/EPR - Interpretation](https://chem.libretexts.org/Bookshelves/Physical_and_Theoretical_Chemistry_Textbook_Maps/Supplemental_Modules_(Physical_and_Theoretical_Chemistry)/Spectroscopy/Magnetic_Resonance_Spectroscopies/Electron_Paramagnetic_Resonance/EPR_-_Interpretation) - A nice summary of electron spin resonance and how it works
- <https://www.independent.co.uk/health-and-wellbeing/mri-scan-chemical-injection-oxalic-acid-gadolinium-b2737760.html> - This story reports that gadolinium used in MRI scans – could mix with oxalic acid found in many foods to precipitate tiny nanoparticles of the metal in human tissues.
- <https://phys.org/news/2025-04-scientists-vitamin-b1-hypothesis.html> can NMR has been used to finally confirm a vitamin B1 hypothesis from 1958.

Have a great month everyone. Don't forget to send in anything you would like to see in ANZMAG news.

