

## ANZMAG NEWS - APRIL 2024

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Dear all, Welcome to April 2024 edition of ANZMAG. I hope you have all had a great month and that you enjoy the newsletter. As usual, please feel free to send feedback and/or suggestions for anything you would like to see in future editions.

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### Video Tutorials

**MNova For the Masses** was the topic of our February round-table workshop in February a video of which can be found online at <https://www.youtube.com/watch?v=ZhctZFIJRYS> Mnova is a multivendor software suite designed for combined NMR, LC/GC/MS and Electronic & Vibrational Spectroscopic techniques. This video is a general overview of how to use the software

Don't forget **ANZMAG** has its own YouTube channel with many useful videos at <https://www.youtube.com/@ANZMAG> The website tells me there are currently 4.13K subscribers and 52 videos (in 8 playlists). You can read more about how it was created at <https://pubs.acs.org/doi/10.1021/acs.jchemed.8b00523>

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### CONFERENCES

- The 63<sup>rd</sup> Annual Rocky Mountain Conference on Magnetic Resonance (RMCMR) will take place August 4-8, 2024 in Copper Mountain, Colorado - <https://rockychem.com>
- SMASH 2024 will take place in at Hotel Champlain Vermont, Burlington, VT, USA from 15<sup>th</sup>-18<sup>th</sup> Sept 2024 - <https://smashnmr.org>
- The 30<sup>th</sup> International Conference on Magnetic Resonance in Biological Systems (ICMRBS 2024) is scheduled to be held from August 18 - 23 in Seoul, Korea. Full details at <https://www.icmrbs2024.org>

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### NMR AI

The **NMR Spectra Interpreter** by Vahur Toss is an AI based on Chat GPT. It aims to identify signals in <sup>1</sup>H and <sup>13</sup>C NMR spectra, suggesting possible structures. You need a ChatGPT+ account to use it which is \$US a month. But if you have an account head to <https://chatgpt.com/g/g-DAY0Kwqnb-nmr-spectra-interpreter> to give it a whirl

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### REVIEW OF THE NATIONAL COMPETITIVE GRANTS PROGRAM - 13TH MAY DEADLINE

A reminder that submissions to a public discussion paper supporting the **Policy Review of the National Competitive Grants Program** will close at 11:59pm (AEST) on Monday 13 May. Have your say by visiting <https://www.arc.gov.au/engage-us/consultations/policy-review-national-competitive-grants-program> and scroll down to the online submission portal link. I think it would be great if researchers, not just research offices and peak bodies, made submissions. I don't know if they will listen but you can guarantee that your voice won't be heard if you don't make a submission.

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## GRANTS AND AWARDS

- **The National Measurement Institute Awards** are open for applications. These recognise achievements at all levels – from students to early career researcher to established researchers. They also promote the value of measurement science to society. In recent years chemists has won but before that physicists were the main winners. Full details at <https://www.industry.gov.au/national-measurement-institute/measurement-awards> in case anyone wants to apply.
- The **Royal Australian Chemical Institute National Awards** are open for nominations at all career levels. See [https://www.raci.org.au/RACI/Web/Awards/National\\_Awards.aspx](https://www.raci.org.au/RACI/Web/Awards/National_Awards.aspx) for full list.
- The **Australian Council of Deans of Science** is offering Teaching & Learning Grants (up to \$20,000) and Fellowships (up to \$10,000). Full details at <https://www.acds.edu.au/teaching-learning-grants-and-fellowships-applications-open/>

## JOB AND FELLOWSHIPS

- Monash University Monash has 3 (yes 3) lecturer positions in biological science going. Closing date **20th June**. Details at <https://careers.pageuppeople.com/513/cw/en/job/664762/multiple-positions-as-lecturer-senior-lecturer-in-biological-sciences>
- The University of Melbourne is looking for a Lecturer in Physical Chemistry. Closing date **22nd May** - <https://jobs.unimelb.edu.au/en/job/916680/lecturer-in-physical-chemistry>
- The University of Melbourne is looking for a Lecturer in Soil Science. Closing date 4th June <https://jobs.unimelb.edu.au/en/job/916945/lecturer-in-soil-science>
- The University of Melbourne is looking for a Lecturer in Microbial Biotechnology. Closing date is **13 May** - <https://jobs.unimelb.edu.au/en/job/916719/lecturer-in-microbial-biotechnology>

## PAPER OF THE MONTH

This month's Paper of the Month is a fun one (well I thought it was fun). The title is "NMRduino: A modular, open-source, low-field magnetic resonance platform" and it is by Michael C.D. Tayler and Sven Bodenstedt. Some of you may have heard of the Arduino, (<https://www.arduino.cc>) an Italian open-source electronic platform. The NMRduino is a compact, cost-effective, sub-MHz NMR spectrometer is built with readily available open-source hardware and software components. One of its aims is to simplify the processes of instrument setup and data acquisition control to make experimental NMR spectroscopy accessible to a broader audience. In this introductory paper, the authors present key features and potential applications of the device and highlight its versatility both for research and education. Read about it at <https://www.sciencedirect.com/science/article/pii/S1090780724000491>

## STORIES FROM THE WEB

- <https://www.edn.com/epr-spectrometer-and-its-awg-and-digitizer-building-blocks/> - A new EPR spectrometer aims to open the technology to a larger pool of scientists.
- <https://medicalxpress.com/news/2024-05-mri-paired-ai-high-quality.html> - A magnetic resonance imaging device built with off-the-shelf parts and paired with AI apparently matched the performance of high-end MRI machines.
- <https://phys.org/news/2024-05-scientists-high-pressure-nmr-spectroscopy.html> A story on the use of high-pressure NMR spectroscopy to study structure of dynamic proteins.