

## ANZMAG NEWS - OCTOBER 2024

By Prof. Oliver A.H. Jones (RMIT University - [oliver.jones@rmit.edu.au](mailto:oliver.jones@rmit.edu.au))

Dear all, Welcome to the October 2024 edition of **ANZMAG News**. I hope you have all had a great month. Don't forget I am always happy to get content for the newsletter. Just send me an e-mail ☺

### MAGNETIC RESONANCE SMALL ADDS

- Deakin University is selling a retrofitted **Oxford 400MHz magnet with a JEOL ECZ400R console with solid and liquid state capabilities**. Specifications include: JNM-ECZ400R/S1 400 MHz Spectrometer Basic Unit - 400MHz 5mm FG/RO Digital Auto-Tune Royal Probe - P31 to Ag109; Auto Tuning Unit Z; Stac Man Sample Changer (64 sample holder) and ECZ Probe / Solid Attachments - ECZ400R Probe/Solid 400MHz 8mm HXMAS Probe; MAS Controller; MAS Air Adapter; 8mm Solid Sampling Set; Air Compressor and Dryer. For any queries, please get in touch with Dr Elizabeth Ankers at [elizabeth.ankers@deakin.edu.au](mailto:elizabeth.ankers@deakin.edu.au)
- The ANU is looking to sell their **Bruker 600 NMR spectrometer**. The magnet is about ten years old (Ascend, never failed). Bruker suggests that a realistic value may be up to \$500k. The console (AVII) is about 20 years old and has a problem with frequency generation (noisy wobble curve and lots of  $t_1$ -noise in 2D spectra, but OK for 1D NMR). There is a 10-year-old, fully functioning H&F-C/N-D cryoprobe with great sensitivity, but the associated cryoplatfrom needs to be updated, and a leak needs to be identified and fixed. Please get in touch with Professor Gottfried Otting ([gottfried.otting@anu.edu.au](mailto:gottfried.otting@anu.edu.au)) for more details.
- Oxford Instruments currently has an offer for a free autosampler when you buy their **X-Pulse benchtop NMR spectrometer**. You can enjoy major additional functionality at no extra cost. This promotion is valid on X-Pulse orders placed between now and 31st March 2025. Full details at <https://nmr.oxinst.com/campaigns/x-pulse-promotion> (thanks to Dr Cameron Chai, [cameron.chai@axt.com.au](mailto:cameron.chai@axt.com.au), for the information).

### AWARDS

- Nominations are open for the 2025 Prime Minister's Prizes for Science. Australia's Chief Scientist, Dr Cathy Foley, wants us to 'think about who inspires you and nominate them today'; I think this is good advice. See <https://www.industry.gov.au/news/nominations-open-2025-prime-ministers-prizes-science>
- Nominations are now open for the 2025 Prizes from the Royal Society of Chemistry. See <https://www.rsc.org/prizes-funding/prizes/> for details.
- ACS Publications is currently accepting nominations for researchers in the Analytical Chemistry field who have made a significant impact with their work. See <https://axial.acs.org/analytical-chemistry/analytical-chemistry-lectureships-and-awards>
- The Order of Australia recognises Australians who have demonstrated outstanding service or exceptional achievement. There are four levels of award. Anyone can nominate someone. To be eligible, a nominated person must be alive when their nomination is received, an Australian citizen or permanent resident, and have not been recognised through the Order of Australia in the last five years. Learn more about how to nominate at <https://rb.gy/c2ynh5>

## JOBS AND FELLOWSHIPS

- **Australian Catholic University** (ACU) in Melbourne is looking for a Lecturer in Science. Please see <https://candidate.aurion.cloud/acu/production/career/vacancies/2912889459613599~1/edit> Applications close 3<sup>rd</sup> November 2024.
- **UNSW** is seeking a Senior Research Associate (Level B) or Senior Research Fellow (Level C) in neuroimaging. <https://external-careers.jobs.unsw.edu.au/en/job/527423/senior-research-associatesenior-research-fellow-neuroimaging> Applications close 7 November 2024.
- **Curtin University** is looking for a Lecturer or Senior Lecturer in Chemistry. <https://staff.curtin.edu.au/job-vacancies/?ja-job=667863> Applications close 11 a.m. (AWST) on November 18<sup>th</sup>, 2024.

## BIOSCIENCE ICONS AND DRAWING TOOLS

If you like the idea of Biorender but are worried about the cost or their copywriting policy, here are some alternatives:

- **NIH BioArt Source** is a website with a range of figures, presentations, illustrations, and 2,000+ science and medical art visuals. This collection of high-quality, scientifically accurate vectors, icons, and brushes is freely available within the public domain. This is a beta release at present, but the official release is coming soon. See <https://bioart.niaid.nih.gov>
- **SciDraw** is an accessible repository of high-quality drawings of animals, scientific setups, and anything that might be useful for scientific presentations and posters. See <https://scidraw.io>
- **Biolcons** is a free library of high-quality science illustrations under a permissive license. It also has a PDB to vector function. See <https://bioicons.com>

## MEETINGS

- Abstract submission and conference registration are now OPEN for the joint **ISMAR-ENC 2025** conference, which will be held April 6-10, 2025, in Asilomar, California. This unique worldwide conference covers all aspects of Magnetic Resonance, from imaging over high-resolution liquid and solids NMR to electron MR, hyperpolarisation, and newly emerging fields. Please visit <https://www.enc-conference.org/ENC-ISMAR-2025> for abstract submission, conference registration, and more.
- The inaugural joint meeting of the **Australasian Proteomics Society**, the **Australian and New Zealand Society for Mass Spectrometry**, the **Australian and New Zealand Metabolomics Society**, and the **Australasian Glycoscience Society** will be held from Sunday, 18 to Wednesday, 21 May 2025, in Cairns. See [https://www.ausomics.com/?mc\\_cid=b1b56ff2e1&mc\\_eid=ddc7241af9](https://www.ausomics.com/?mc_cid=b1b56ff2e1&mc_eid=ddc7241af9) for details and abstract submission.

## 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) – Not quite a news story but some notes on EPR interpretation.
- <https://www.israel21c.org/researchers-develop-new-materials-to-enhance-mri-scans/> – Researchers at the Technion-Israel Institute of Technology have created new materials that could improve magnetic resonance imaging (MRI) technology.
- <https://www.anl.gov/article/novel-technique-uses-magnetic-fields-to-probe-longterm-aging-in-batteries> – A U.S. Department of Energy's Argonne National Laboratory has been using new methods in NMR to evaluate long-term aging in real-world battery cells.