

ANZMAG NEWS – OCTOBER/NOVEMBER 2017

By Oliver A.H. Jones (RMIT University - oliver.jones@rmit.edu.au)

Dear all,

Welcome to another joint (October/November) ANZMAG e-newsletter. Apologies for this. I am afraid time got away from me last month. In this edition, we have the usual mix of magnetic resonance and science related items for you and something new on page 4. As it is a double edition we have slightly more than usual but I hope that you enjoy it. Normal service will be resumed next month.

ANZMAG AGM

The 2017 Annual General Meeting of the Australian and New Zealand Society for Magnetic Resonance (ANZMAG) on Tuesday Dec 5th 2017 at 5pm in the Plantation Room, Mantra on Salt Beach, Gunnamatta Avenue, Kingscliff NSW 2487 Australia. Please send any items for inclusion in the Agenda to the Company Secretary, Caroline Rae c.rae@unsw.edu.au. Minutes of the 2016 AGM have been circulated previously (Dec 1 2016). Copies of the financial statements are also available in advance (c.rae@unsw.edu.au)

ANZMAG METABOLOMICS VIDEOS

As you may know, ANZMAG hosts an ANZMAG lecturer every other year. In 2016 Metabolomics giant Professor David Wishart of the University of Alberta (http://www.wishartlab.com/members/david-wishart) was the ANZMAG lecturer and he gave a series of lectures on Metabolomics are now available for viewing online at the ANZMAG Youtube channel. The playlist is

at https://www.youtube.com/playlist?list=PLE20foNk9J6IGPVSFkfn6U7ImUzFvWPYQ for those interested. Thanks to Prof Wishart as well as Dr Ann Kwan who put the online videos together, Dr Horst Schirra, who organised the workshop, and Bill Bubb and Lorna Wilkinson-White who proof-watched the series. Other magnetic resonance lectures can be seen at https://www.youtube.com/user/ANZMAG

ANZMAG(ers) NEWS

- Prof Frances Separovic was recently elected as an Ordinary Member (Physical Sciences) of the Council of the Australian Academy of Science (one of two).
- Dr Horst Schirra, of the University of Queensland was recently elected a board member of the International Metabolomics Society.
- Professor Glenn 'Spider-Man' King and Professor Ray Norton were recently featured in the news for work on Australian-developed medicines showing promise treating childhood epilepsy, stroke and autoimmune diseases https://www.stuff.co.nz/world/australia/98175535/funnel-web-spiders-show-promise-for-treating-epilepsy-stroke - well done team and thank you to Andrew Coy of Magritek for sending in the story.
 - On a side note I am told that Glenn has a lab filled with 50 types of venom (one of the biggest collections of venom in the world). Did I mention how much we all like your work Glenn?

NB: if you have news and would like it mentioned in a future edition of ANZMAG news please feel free to drop me an e-mail



DNP WORKSHOP AT UNIMELB

A reminder that there will be a DNP-NMR workshop held at the University of Melbourne on the 29th November from 2-4:30 which should be a great event. It is organised by Dr Marc-Antoine Sani and a flyer for this event (with speaker details) can be seen at

https://www.dropbox.com/s/qpg6tk5tsgz1xjg/Workshop17-2.jpg?dl=0 for those that are interested. Please RSVP directly to Dr Sani on msani@unimelb.edu.au if interested in attending

AWARDS AT MDPI

MDPI journals regularly offer various awards to researchers in specific fields, for example, Young Investigator Awards, Travel Awards, Best Paper Awards, and Best Poster Awards, etc. The awardees range from PhD students to junior scientists. Currently, there are 39 awards given by MDPI journals accepting applications. Please see http://www.mdpi.com/about/announcements/1080 for details. Then click on the award title to check whether you are eligible for it and start the application process. This could be a good way to get funding for conferences and so forth.

PREDATORY PUBLISHERS AND CONFERENCES WARNING

You may have seen the rather sad news that 'Predatory conferences 'now outnumber official scholarly events' (https://www.timeshighereducation.com/news/predatory-conferences-now-outnumber-official-scholarly-events). Predatory journals are also a big problem. Apparently There are now approximately 8,000 suspected predatory journals that publish more than 400,000 articles each year (http://www.ctvnews.ca/health/predatory-publishing-a-growing-problem-warn-scientists-1.3623844). Please, please be alert to this issue and make sure younger researchers are too.

JOB RESOURCES

We often feature jobs in ANZMAG news. It you are looking for a job, in Australia or New Zealand the following job sites may be of help.

- i) http://www.unijobs.com.au/ (University & Academic Jobs in Australia)
- ii) www.seek.com.au (mostly professional jobs but a lot of Uni's post here, you can search by key word e.g. NMR or metabolomics)
- iii) http://www.nature.com/naturejobs/science/ (by far the best one, just search by country and or PhD)
- iv) http://jobs.newscientist.com/ (quite similar to naturejobs but worth a look)
- v) <u>www.jobs.ac.uk</u> (UK focus but with many posts in other countries also listed, just filter by country or keyword),
- vi) http://www.findapostdoc.com (used to not be so good but have undergone a revamp and seem better and worth a look.

The first two links are Australian sites, the others all carry Australian jobs (just search by country). All the Uni's have their own jobs sites on their websites e.g. http://yourcareer.rmit.edu.au/caw/en/listing/ so if there is a particular city you wish to go to you could try looking that way.

The CSIRO have a similar site at https://www.csiro.au/en/Careers for those interested. Good luck to anyone job hunting



CHEMRXIV (CHEMISTRY ARCHIVE) AND BIORXIV (BIOLOGY ARCHIVE)

The physicists have had one for ages (https://arxiv.org/) and now both Chemistry and Biology have their own preprint servers. ChemRxiv (https://chemrxiv.org/) and BioRxiv (https://www.biorxiv.org/), are open for business. Authors can submit their research findings and have those quickly posted on the web for sharing with scientists and colleagues, prior to formal peer review. There are no subscription fees for readers or submission charges for authors. I suspect you will still have to use your institutional repository for your papers for a while yet though.

MAGNETIC RESONANCE EDUCATION

Many of us probably teach Magnetic Resonance as well as conduct research in the area. You may or may not be aware of that there are education journals that people can and do publish descriptions of practical exercises, software and so forth. For chemistry, one of the main ones is the Journal of Chemical Education (J. Chem. Ed.) I spotted this week that there are two articles in this journal that may be of interest.

The 1st paper is called "A First Laboratory Utilizing NMR for Undergraduate Education: Characterization of Edible Fats and Oils by Quantitative ¹³C NMR by Charles Fry, Heike Hofstetter and Matthew Bowmanr. This paper has an interesting practical class using ¹³C NMR to look at average chain length, degree of saturation, and average polyunsaturated fatty acid content of common edible oils. See http://pubs.acs.org/doi/abs/10.1021/acs.jchemed.7b00057 for more details.

The 2nd paper I liked is called "iSpec: A Web-Based Activity for Spectroscopy Teaching" by Thomas Vosegaard". The paper look at how students' skills in structure elucidation of organic molecules are developed by training them to understand advanced spectroscopic measurements and elucidate structures of small organic molecules. It is at http://pubs.acs.org/doi/abs/10.1021/acs.jchemed.7b00482 if you are interested.

I also like this paper on 3D printing for chemistry education but to be fair, that may be because I wrote it ;-) http://pubs.acs.org/doi/abs/10.1021/acs.jchemed.7b00533?src=recsys

STORIES FROM THE WEB

The penultimate topic this week is stories featuring different forms of magnetic resonance from the web

https://phys.org/news/2017-11-scientists-lichens-air-pollution.html

A story on the use of EPR for environmental monitoring in cities

https://www.azom.com/article.aspx?ArticleID=14328

The use of NMR as a Special Core Technique in Geology

• https://www.dailytelegraph.com.au/newslocal/inner-west/new-cancer-centre-to-revolutionise-cancer-imaging-and-targeted-radiotherapy/news-story/67d04bff9e33ed32547fdd34c8caefc3

This is a link to a recent story on a new cancer centre in Sydney that aims to revolutionise cancer imaging and targeted radiotherapy

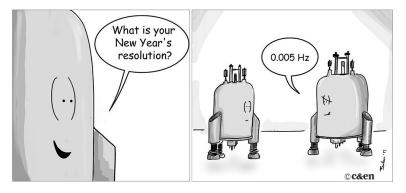


SCIENCE CARTOONS

I thought we might finish with something fun.



This one is called the plight of the NMR spinner and was sent in by Prof Frances Separovic. Thanks Frances.



I found this one on the web.



This one was GE NMR's first foray into "Far Side"-like cartoons. Apparently, GE's lawyers contacted Gary Larson, the cartoonist who drew "Far Side," about doing these; he said he was not interested in doing them himself but had no objection to them copying his style. http://kunmr-suse.msg.ku.edu/pages/stlenc-heads.html

See you all at ANZMAG 2017

