ANZMAG NEWS - AUGUST 2015

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Dear all,

Welcome to the ANZMAG e-newsletter for August 2015. I hope you enjoy the news this month. As per usual, I'm happy to accept feedback and additions so please feel free to send suggestions, comments etc.

FELLOWSHIPS AND AWARDS

The month the University of Wollongong is offering Vice Chancellor's Postdoctoral Research Fellowships in all disciplines to those under five years out from their PhD. VC Fellows are appointed for three years, commencing at Academic Salary B1 (currently $88,755 pa), plus 17% superannuation and relocation assistance. You can find out more at http://uow.employment.com.au/jobs/Vice-Chancellor-s-Postdoctoral-Research-Fellowships--All-disciplines-/1935 and the closing date is 2nd September 2015.

Last month we had the VESKI Inspiring Women Fellowships and now VESKI is now calling for applications for the VESKI 2015 Innovation Fellowships. Successful individuals may receive up to AUD $50,000 per annum for a maximum of three years to undertake their research in Victoria. Full details at http://www.veski.org.au/fellowships?q=vif - good luck if you apply.

The Analytical and Environmental Division of the RACI is inviting nominations for the following division medals and awards; the Peter W. Alexander Medal for Early Career Excellence in Analytical Chemistry the Doreen Clarke Medal for Excellence in Analytical Chemistry the Environmental Chemistry Medal and the Student Original Publication Award. Details of all can be seen at https://www.raci.org.au/events-awards/analytical-environmental-chemistry if you are keen.

The analytical scientist magazine is still asking for nominations for their Analytical Power list 2015. It is only a short form but I think it would be good to get some magnetic resonance people on there if we can. Just go to https://theanalyticalscientist.com/surveys/The-Analytical-Scientist-Power-List-2015/ to vote. I hope we can show the panel that analytical science is not just about chromatography.

CHENOMX HMDB DATABASE SOFTWARE UPDATE

Chenomx have announced that their software is now supporting data contained within the HMDB library from the University of Alberta. Chenomx has downloaded the spectra and compound meta-data describing many of the compounds contained within the HMDB. The result is over 600 signatures that can be used within the latest Chenomx software (see http://chenomx.com/downloads/Chenomx_HMDB_Compounds.pdf). Many of these are for the same compounds that already exist within Chenomx proprietary libraries (but about half of them are not already in the Chenomx library). They have also reduced their prices to update to version 8.1 (http://chenomx.com/software/software.php?pageID=72). Doing so also gives effective access to the new HMDB library described above. It is a really nice addition and kudos to both sides for getting it working.

PUBLICATIONS CORNER

This month I thought I would cover some introductory MRI textbooks, I'll cover EPR next time (for NMR please see last month's newsletter).

'MRI From Picture to Proton' by McRobbie, Moore, Graves and Prince can be seen on amazon at http://www.amazon.co.uk/o/ASIN/052168384X/ref=nosim/revisemricom-21 Now in it's 2nd edition this is one of the best first texts for learning the basics of MRI.

'Questions and Answers in MRI' by Allen Elster and Jonathan Burdette (http://www.amazon.co.uk/o/ASIN/0323011845/ref=nosim/revisemricom-21) is also in its 2nd edition. It has an easygoing style and the answers to questions neatly tie together often-disparate aspects of MRI theory. Well worth a read.

'MRI The Basics' by Ray Hashemi, William Bradley and Christopher Lisanti is now into its 3rd edition and even though it is 400 pages it gives the reader a fairly fast introduction to MRI physics. The 2nd edition was described by American Journal of Radiology as 'an excellent text for introducing the basic concepts to individuals interested in clinical MRI'. (http://www.amazon.com/MRI-Ray-Hashman-Hashemi-PhD/dp/1608311155/ref=sr_1_1?s=books&ie=UTF8&qid=1439164779&sr=1-1)

STORIES FROM THE WEB

- This is a nice story showing how EPR has been used to study the superoxide anion that allows oxygen to interact with the chemical luciferin inside a firefly to create bioluminescence). The web story with link to full paper is at http://phys.org/news/2015-08-firefly.html is at.

- The use of NMR in food science continues to grow, and in some areas it seems to be doing better than more traditional techniques such as near IR spectroscopy. The story at http://www.news-medical.net/whitepaper/20150803/NMR-Spectroscopy-and-the-Lactose-Content-of-Milk.aspx shows now NMR can be used to quickly check the lactose content of a range of milk types.

- Also in NMR this month is coverage of a recent NMR install at the University of Melbourne please see - http://www.bio21.unimelb.edu.au/everyday-quantum-mechanics-and-study-cell-membranes for the details.

- This MRI story is not so serious but there is a serious message behind it. The picture at http://www.medpagetoday.com/Radiology/DiagnosticRadiology/52981 shows what happens when you forget the MRI is a giant magnet.

- Finally, you may or may not have sent his one doing the rounds on social media but it is actually quite handy, especially if you are an 'omics or big data person. Basically you can read and download a whole host of data mining books on a wide range of topics all for free if you head to http://www.datasciencecentral.com/profiles/blogs/27-free-data-mining-books - happy reading.
