

ANZMAG NEWS: JUNE 2022

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Hi all, Welcome to the June 2022 edition of ANZMAG News

CONFERENCES/TALKS

The big news this month is that the 13th ANZMAG Conference is being held in Marysville from 4-8th December 2022. Registration open: 18th July and the abstract submission deadline is 2nd September. See www.anzmagconference.org.au for more.



The 13th Conference of the Australia & New Zealand Society for Magnetic Resonance, Marysville 2022

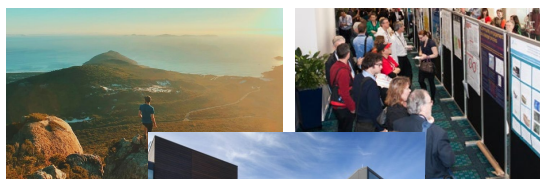
SAVE THE DATE
4th – 8th DECEMBER 2022

We look forward to welcoming you to the pristine Yarra Valley in the Murrindindi Shire of Victoria.



The 13th ANZMAG conference will highlight all aspects of magnetic resonance and will provide opportunities for early career researchers and students to present their latest MR research.

Registration open: 18th July
Student stipend deadline: 2nd September
Abstract submission deadline: 2nd September



More information: www.anzmagconference.org.au

Conference Chairs: Prof Martin Scanlon, Monash University
Prof Paul Gooley, The University of Melbourne

GRANTS AND AWARDS

The RACI Analytical & Environmental Division Awards deadline for nominations has been extended until 11:59pm Sunday 17 July 2022. These award include The Paul Haddad medal for early career excellence in analytical chemistry and The Graeme Batley medal for excellence in analytical chemistry. Details are at <https://www.raci.org.au/Web/Awards/Division-Awards/Analytical.aspx> (note the extended deadline is not yet listed on the website)

PAPER OF THE MONTH

June's Paper of the month is on MRI and is from Nature Biomedical Engineering. It is entitled "A portable scanner for magnetic resonance imaging of the brain" by Cooley et al. The paper describes the design and testing of a portable prototype scanner for brain MRI that uses a compact and lightweight permanent rare-earth magnet with a

built-in readout field gradient. The 122-kg low-field (80 mT) magnet has a Halbach cylinder design that results in a minimal stray field and requires neither cryogenics nor external power. It can generate brain images with a spatial resolution of $2.2 \times 1.3 \times 6.8 \text{ mm}^3$. There are clear advantages to portable MRI instrument and the engineering here is impressive. If you want to read more about this please see the paper at <https://www.nature.com/articles/s41551-020-00641-5>.

ODDS AND ENDS

There was a debate on Twitter recently about if Powerpoint should be used to make Posters for conferences or not. One alternative that was suggested that looks pretty good is BioRender's Poster Builder. It has a lot of templates built in and it automatically resizes images and icons to fit the poster size and maintain consistent margins. You have to sign up but that is free and you can make a lab team so people can collaborate online. See <https://biorender.com/poster-builder> for more. Biorender is also helpful for graphical abstracts (<https://learn.biorender.com/tutorial/designing-graphical-abstracts>).

This time of year many are writing promotion applications and these often require evidence of impact. If you are looking for such evidence have a look at <https://profiles.impactstory.org> This uses ORCID data to track impact like where your work is cited in Wikipedia articles or when someone has Tweeted it. You can see an example profile (mine) here at <https://profiles.impactstory.org/u/0000-0002-4541-662X>

Bruker recently interviewed well-known scientists and asked them how they got to know about Magnetic Resonance. Their responses are quite similar. Learn more about the fascination of the Magnetic Resonance community at <https://www.bruker.com/en/products-and-solutions/mr/make-mr-more-relevant/falling-in-love-with-mr.html>

STORIES FROM THE WEB

- <https://phys.org/news/2022-06-defects-quartz-crystal-reveal.html>
An interesting story on use of EPR to study defects in quartz crystal structure to reveal the origin of dust.
- <https://www.sciencefocus.com/comment/why-do-we-find-art-beautiful-it-all-comes-down-to-fireworks-in-the-brain/>
This story is on the use of fMRI to see which brain areas light up when we view paintings that we consider beautiful. Part of the science of Neuroaesthetics
- <https://www.bio-itworld.com/news/2022/06/23/designer-magnetic-molecular-probes-show-diagnostic-promise-as-chemical-thermometers>
This story is about the use of NMR as a 'Chemical Thermometer' by looking at factors in local environment of a cobalt molecule.