

ANZMAG NEWS: OCTOBER-DECEMBER 2021

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Dear all,

Welcome to the last edition of ANZMAG News for 2021. Thank you for being patient with me in what has been another very strange year – especially here in Victoria. My new year’s resolution is to be a little more organised next year. In the meantime, here is the latest magnetic resonance news and views for the end of 2021

GRANTS AND AWARDS

NMRS india has instituted an annual award to honour late Prof. Atreya, who made cutting edge research in the field of magnetic resonance. The details are contained in a flyer on the last page of this newsletter. Thanks to prof Ray Norton for the info.

The **Bruker MRI award** is accepting submissions for 2022. They invite you to submit your newest research results, which will be judged based on scientific relevance. Full details at <https://www.bruker.com/en/landingpages/bbio/bruker-mri-award-2022.html>

Ian Potter Medical Research Grants fund equipment and capital infrastructure to advance the understanding and treatment of major diseases. Applications for the latest round are due 25th January 2022. See <https://www.ianpotter.org.au/what-we-support/medical-research/> for more.

There are some open and upcoming opportunities in the **medical research** future fund and NHMRC on the NHMRC website at <https://www.nhmrc.gov.au/funding/find-funding>

There is some information on grants in the **biotechnology** area at <https://biomelbourne.org/grants-funding/>

The **BioMelbourne Network Women in Leadership Awards** were launched in 2015 to recognise and champion women, at different stages of their careers. Nominations for the 2022 Awards are now open! See <https://biomelbourne.org/women-in-leadership-awards/2022-awards/> for details and please consider nominating worthy candidates.

NEW BOOK

Distinguished Professor Emeritus of Chemistry Frances Separovic kindly told me about this new book. Entitled “**Career Advice for Young Scientists in Biomedical Research: How to Think Like a Principal Investigator**” by Béla Zoltán Schmidt. This

book includes case study-based evidence to help shape an academic career, and offers young principal investigators guidance on how to succeed in their role. The author also interviewed several Women In Science. See <https://link.springer.com/book/10.1007/978-3-030-85571-0> for more information.

MEETINGS

The University of Southampton and the Gruppo Italiano Discussione Risonanze Magnetiche (GIDRM) re hosting a symposium on **Simulation Software in Magnetic Resonance** on Friday, 21st January 2022. In this workshop, the main developers of major simulation software packages used in magnetic resonance summarise the structure and functionality of their code. See <http://www.gidrm.org/index.php/activities/workshops/2021-workshops/gidrm-day-simulation-software-in-magnetic-resonance>

The **2022 Gordon Research Conference on In Vivo Magnetic Resonance** will be held in Andover, NH. See <https://www.grc.org/in-vivo-magnetic-resonance-conference/2022/> for more

ISMAR sponsors a series of on-line meetings about current topics in magnetic resonance, called "**Conversations on Magnetic Resonance**". The goal of this series is to provide a simple and useful tool for exchanging information, accelerating progress, and developing new relationships across the international magnetic resonance community. Videos of past Conversations are available at <https://tube.switch.ch/channels/fb103798>

PAPER OF THE MONTH

This month's paper of the month is entitled "**NP-MRD: the Natural Products Magnetic Resonance Database**". This is another fantastically useful database from the Wishart Lab. The Natural Products Magnetic Resonance Database (NP-MRD) is a comprehensive, freely available electronic resource for the deposition, distribution, searching and retrieval of NMR data on natural products, metabolites and other biologically derived chemicals. It addresses a need for dedicated, open access natural product NMR resources and was funded by the National Institute of Health (NIH). Since its launch in 2020, the NP-MRD has grown quickly to become the world's largest repository for NMR data on natural products and other biological substances. It currently contains both structural and NMR data for nearly 41,000 natural product compounds from >7400 different living species. All structural, spectroscopic and descriptive data in the NP-MRD is interactively viewable, searchable and fully downloadable in multiple formats. Extensive hyperlinks to other databases of relevance are also provided. The NP-MRD also supports community deposition of NMR assignments and NMR spectra (1D and 2D) of natural products and related meta-data. The deposition system performs extensive data enrichment, automated data format conversion and spectral/assignment evaluation. Details of these database

features, how they are implemented and plans for future upgrades are also provided. You can read the paper at <https://academic.oup.com/nar/advance-article/doi/10.1093/nar/gkab1052/6430498> and the NP-MRD itself is available at <https://np-mrd.org> and I am sure many of us will find it useful.

VALE

Sadly we lost a few valued members of the science community recently

- Prof Ken Packer (who often came to Australian NMR meetings) passed away earlier in the year. See <https://royalsociety.org/people/kenneth-packer-12032/>
- Robert Grubbs, a giant of Chemistry, passed away on December 19, See <https://www.caltech.edu/about/news/caltech-mourns-the-loss-of-nobel-laureate-robert-h-grubbs>

CHRISTMAS PRESENTS

If you are still looking for Christmas presents for scientists/chemists can I suggest <https://luciteria.com/> or some of the items on the list at <https://giftlab.co/chemistry-gifts/> (I am tempted by some of these myself).

STORIES FROM THE WEB

- <https://www.eurekalert.org/news-releases/572092>

This is an interesting article about obtained a single-spin paramagnetic resonance spectrum with kilohertz (kHz) spectral resolution via Electron paramagnetic resonance.

- <https://www.itnonline.com/content/new-spin-mri>

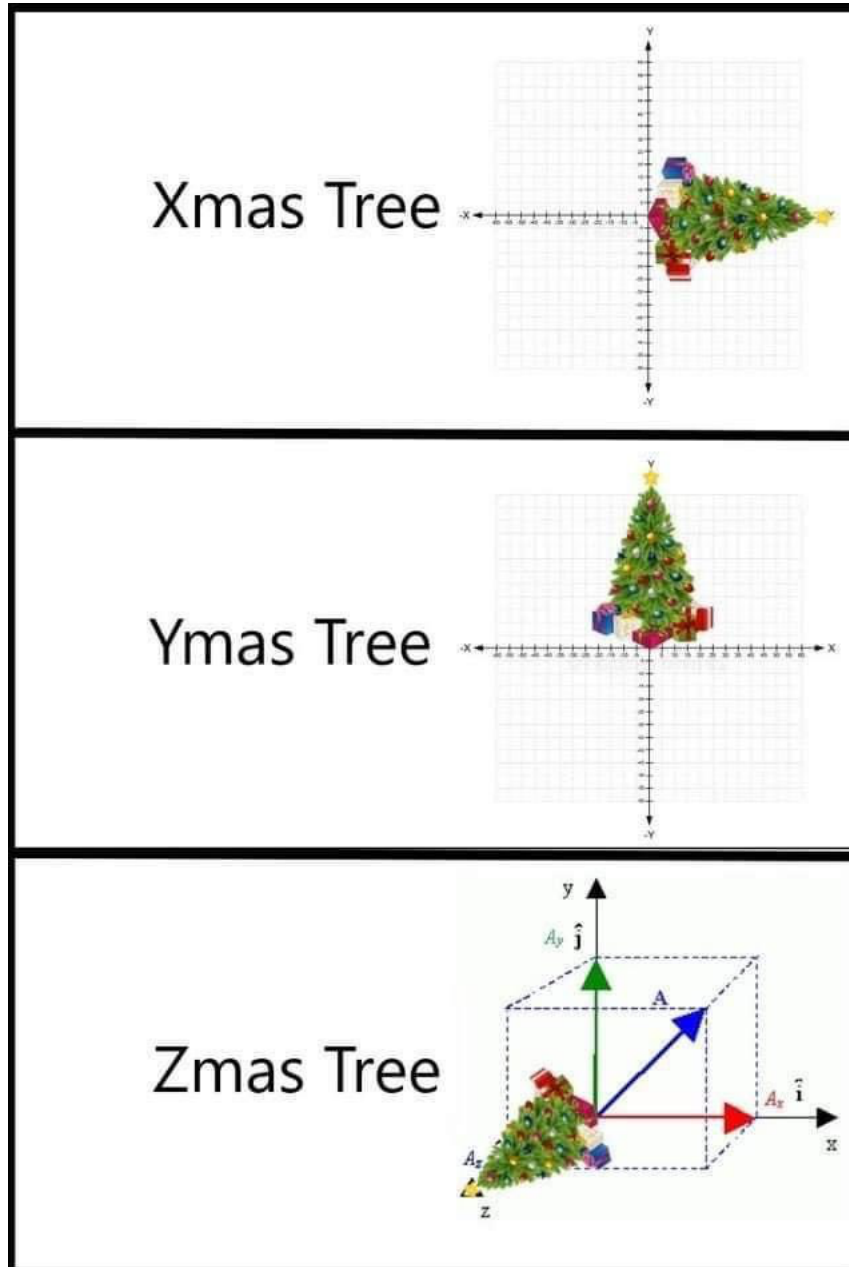
Scientists at the University of Tsukuba demonstrated how conventional magnetic resonance imaging (MRI) machines can be retrofitted to detect sodium ions using a cross band radio-frequency repeater. This work may allow for new medical diagnostics to be performed without expensive new equipment.

- <https://cen.acs.org/analytical-chemistry/spectroscopy/different-spin-NMR/99/i43>

Did you know you can turn NMR data into musical notes? Find out how at the link above

XYZCHRISTMAS RESONANCE

I rather liked this one from Twitter



MERRY CHRISTMAS EVERYONE

Finally, May I wish all of you and your families are very **Happy Christmas** and all the best for the new year. I hope 2021 will be more normal and that we can catch up face to face at some point.

President
Prof. N Suryaprakash

Vice-President
Prof. K V R Chary

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Dr. Vivek Tiwari

Prof. H S Atreya Award

NMRS India has instituted an annual award in honour of late Prof H S Atreya, a young scientist who has made cutting edge research in the field of Magnetic Resonance. The award shall be given annually to an outstanding **scientist** working in any diversified area of magnetic resonance and its applications, for his/her scientific contributions, **without any geographical restrictions**. The award carries a cash prize of Rs. 50,000/- (Rupees fifty thousand only or equivalent in foreign currency for international awardees) earned by the interest generated out of the endowment fund created by the generous donation by the colleagues of late Prof Atreya at the erstwhile NMR Research Centre, IISc, Bangalore.

The nominations are invited for the year 2021. Any magnetic resonance spectroscopist can nominate the deserving scientist. Self-nominations are also accepted. The nominee must be holding an independent academic/scientist position and should not have completed **45 years of age as on 31/12/2021**. The awardee will be chosen by a committee taking an integrated view of nominees' significant scientific contributions mainly in the area of magnetic resonance and its applications. The eligible scientists can also submit the nominations for other awards of NMRS. **However, one nominee can receive only one award in a calendar year**. The decision of the committee will be final. The winner is invited to make a presentation in the forthcoming NMRS symposium at IIT Gandhinagar, Gujarat.

The Curriculum-vitae and a brief write up of the contributions of the nominee, along with the supporting documents, may please be submitted as a single zip file to the President of NMRS: Prof. N. Suryaprakash; suryaprakash1703@gmail.com, until **17:00 Hrs of 31/01/2022**.