

## ANZMAG NEWS – MARCH 2021

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Dear all,

Welcome to the March 2021 edition of ANZMAG.

### MEETINGS and WEBINARS

Professor Ray Norton has asked me to let you know that the ISMAR-APNMR-NMRSJ-SEST 2021 conference is now open for abstract submission and will close on 30th April. APNMR awards will be selected from the Poster presentation submitted from AP NMR countries. Please see <https://www.ismar-apnmr2021.org/> for details.

A reminder that Elena Harjes, Conan Wang and Marc Sani are organising the ANZMAG virtual seminar series. They have Prof Dorothee Kern (Brandeis Uni) and Dr Ashish Sethi (Uni Melb) on 28<sup>th</sup> April. See <https://tinyurl.com/w7n2w2nf> Please send suggestions to Elena ([e.harjes@massey.ac.nz](mailto:e.harjes@massey.ac.nz)) if you have speaker suggestions.

Emerging MR Webinars. Organized by seven NMR group leaders in Germany, Spain, and the U.S., this weekly series provides webinars of new and established researchers showcasing their latest breakthroughs. See <https://www.mpibpc.mpg.de/emergingmr/>

ICMRBS Early Career Researcher Series: Organized by five early career researchers in MR, this series combines research talks by other ECRs and discussions of career paths and other professional topics by established researchers. See <https://nifowler.com/icmrbs> NB: Additional videos from other sources, including ICMRBS award lectures, will be added to the YouTube channel (<https://tinyurl.com/zbxabfdx>) going forward.

Of course, don't forget the ANZMAG youtube channel at <https://tinyurl.com/crnwkpx4> for lots of great content. See <https://tinyurl.com/ANZNMR> for info on this project.

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### PAPER OF THE MONTH

This month's paper of the month is a very neat piece of work that was ~ six years in the making. It is by Stuart Elliott and Philip Kuchel. The research is based around stretched hydrogels. These make uniformly anisotropic environments for quadrupolar nuclei such as  $^2\text{H}$ ,  $^{23}\text{Na}$ , and  $^{133}\text{Cs}$ . The aim the paper is to undertake a step-by-step evolution of the formal mathematics that define the quantum mechanical description of the nuclear magnetic resonance (NMR) spectra of nuclei that have a quadrupole moment, when they are embedded within a molecularly anisotropic environment. The title is "*What Are the Relative Intensities of the Components of NMR Spectral Multiplets from Quadrupolar Nuclei in Uniformly Anisotropic Media?*" You can find out more at <https://www.hindawi.com/journals/cmra/2021/8890478/> it is well worth a read.

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### JOBS

- There is a Lectureship in Chemistry (Education focussed) at the University of Sydney. See <https://tinyurl.com/37tm7vbk> for details.

- There are various research appointments at UQ available University wide, see <https://tinyurl.com/zvbw2sn4> for more details
- Matthew E Call from the WEHI and UniMelb notes that James Chou (Harvard Medical School) is looking for postdocs. The lab's focus is on receptor structure/function and both NMR skills and broader protein chemistry and structural biology expertise are highly sought. Lab link is <https://chou.hms.harvard.edu> for more.
- Dr Ivanhoe Leung recently relocated from Auckland to Melbourne and is looking for 2x PhD students in biochemistry using recombinant protein technology. Deadline: 30th April 2021. Informal enquiries can be made to Dr Leung, [ivanhoe.leung@unimelb.edu.au](mailto:ivanhoe.leung@unimelb.edu.au). In your email please include a CV, cover letter and your current/predicted grades.

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## AWARDS

The RACI National awards are open <https://tinyurl.com/zrkst7en>

David Syme Research Prize recognises the best original research in Biology, Physics, Chemistry or Geology during the past two years. See <https://tinyurl.com/v4n4n3xp>

The Australian Museum Eureka Prizes are the country's most comprehensive national science awards— see <https://australian.museum/get-involved/eureka-prizes/>

The Prime Minister's Prizes for Science are Australia's most prestigious awards for outstanding achievements in scientific research, innovation and teaching – see <https://www.industry.gov.au/funding-and-incentives/prime-ministers-prizes-for-science>

The International Council of Academies of Engineering and Technological Sciences is launching two annual Communication Prizes. More at <https://www.atse.org.au/programs-and-awards/caets-communication-prizes/>

Royal Society of Victoria Young Scientist Research Prizes are open. See <https://rsv.org.au/awards-and-prizes/young-scientist-research-prizes/> Close 31<sup>st</sup> May

The ATA Scientific Encouragement Award is open for applications. See <https://www.atascientific.com.au/awards-events-training/current-award/>

The RACI Graduate Student Travel Bursary assists Post Graduate Student members of the Institute to travel. See <https://tinyurl.com/3h9rrena> for details.

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## STORIES FROM THE WEB

- <https://www.azom.com/article.aspx?ArticleID=20201>  
Did you know that crude oil quality can be determined by electron spin resonance spectroscopy? This article describes how.
- <https://www.healthimaging.com/topics/diagnostic-screening/5-minute-knee-mri-exams>  
Can a new technique make a five minute MRI the new normal for knee imaging?  
<https://phys.org/news/2021-03-nuclear-magnetic-resonance-spectroscopy-reveals.html>  
This article discusses how NMR has been used to map the dynamics of a catalyst's active site in three dimensions.