

# **ANZMAG NEWS: APRIL 2022**

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

Dear all,

Welcome to the April 2022 edition of ANZMAG News

## **BARRY SHAPIRO'S NMR NEWSLETTERS**

ISMAR have announced that a significant part of the archive of Dr. Barry Shapiro's NMR Newsletters is now available online at the ISMAR website (<a href="https://ismar-society.net/barry-shapiros-nmr-newsletters/">https://ismar-society.net/barry-shapiros-nmr-newsletters/</a>) These letters are an important part of the history of magnetic resonance. Many new developments in the field were announced there first but they often also reflect a lighter side of NMR spectroscopy. Thanks to ISMAR and the Shapiro family these letters are now available to browse and read.

-----

#### **JOBS**

A/Prof Horst Joachim Schirra, Director of the NMR Facility at the Griffith Institute for Drug Discovery Griffith University is recruiting a postdoc preferably with solid-state NMR experience in environmental applications to help support the operations of the NMR facility and the research in his group. This is a balanced research:service position with some small amount of teaching. See

https://www.nature.com/naturecareers/job/research-fellow-in-nmr-spectroscopy-griffith-university-756950 for the job advert. Deadline is May 9<sup>th</sup>.

-----

#### **GRANTS AND AWARDS**

The Biophysical Society recognizes excellence in biophysics through an award program (with eleven different categories). See <a href="https://www.biophysics.org/awards-funding/society-awards">https://www.biophysics.org/awards-funding/society-awards</a> for details.

The Barry Inglis Medal and NMI Prize are annual awards presented by the National Measurement Institute (NMI). The awards recognise outstanding measurement-related achievements in Australia or by Australians. Each recipient receives \$2,000 in prize money and a trophy. See <a href="https://www.industry.gov.au/news/applications-open-for-the-2022-national-measurement-institute-awards">https://www.industry.gov.au/news/applications-open-for-the-2022-national-measurement-institute-awards</a>

The National RACI awards are open. See <a href="https://lnkd.in/gf\_bgVDs">https://lnkd.in/gf\_bgVDs</a> for details. There are several categories, just check under the different category tabs for more info.

There is a separate list of awards from the RACI Analytical and Environmental Division (inc for students and ECRs) which you can see details of at <a href="https://lnkd.in/gHSQh5sE">https://lnkd.in/gHSQh5sE</a>



#### **SPARE PARTS**

Prof Bill Price at Western Sydney University is in the process of upgrading a spectrometer (Bruker 11.7 T) and consequently has most of the old console with workable parts. If you could use any of these please contact Prof Price directly via w.price@westernsydney.edu.au

-----

#### PAPER OF THE MONTH

I have to admit that I liked the title of April's Paper of the month (but it is also a good paper of course). "You cannot fight the pressure: Structural rearrangements of active pharmaceutical ingredients under magic angle spinning" is by Scheidel et al. The authors show the structural changes of different amorphous and crystalline active pharmaceutical ingredients under magic angle spinning conditions due to the increased pressure. They also demonstrate the possibility of detecting such changes by a variety of methods including several NMR based approaches. The authors note that these transformations show that solid-state NMR is not always non-invasive. Read more on this work at https://tinyurl.com/2p82fbtv

-----

## **BRUKER SOFTWARE NEWS**

Bruker are offering free and/or trail access to two pieces of software. Bruker Arxspan BioDrive is a sort of electronic cloud/desktop based notebook for academics working in molecular biology and sequencing topics. You can get a free academic license for one year to try it out More details at https://tinyurl.com/45967bhz

Bruker SmartDriveNMR allows users to input basic experimental parameters and then turn the controls over to the software to determine and carry out the ideal combination of NMR experiments in a predetermined amount of time. You can get a free evaluation license where you can try all features in SmartDriveNMR for 3 months free of charge. Via the link at <a href="https://tinyurl.com/38ne6skk">https://tinyurl.com/38ne6skk</a>

-----

## STORIES FROM THE WEB

# • <a href="https://tinyurl.com/EPRlink">https://tinyurl.com/EPRlink</a>

This story describes the role of electron paramagnetic resonance (EPR) helped reveal key steps in the reaction process in a study of Nickel as a 'Greener' Photocatalyst.

## https://tinyurl.com/MRIonweb

This article describes a new MRI mapping technique for evaluating bone bruising patterns associated with noncontact ACL ruptures.

## https://tinyurl.com/NMRonweb

This story is about the possible use of a passive shimming method for Halbach magnets in benchtop NMR Spectrometers.