

# **ANZMAG NEWS – SEPTEMBER 2020**

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

Dear all,

I hope you are all well. Great news for Victorians this week. Let's hope we can all meet face to face again soon. In the meantime - Welcome to the September 2020 edition of ANZMAG News.

#### EDUCATION/MEETINGS

- A webinar on "In-Situ Electrochemical EPR for Real-Time Measurements of Radical Ions" with Dr Raanan Carmieli from the Weizmann Institute will run on Oct. 27<sup>th</sup> See <u>https://bit.ly/2Ht1xOt</u>
- The ARC Centre for Fragment-Based Design is running an online seminar on NMR-based drug discovery projects on 3<sup>rd</sup> Nov 6:00-7:00 PM. See <u>https://tinyurl.com/yxayov24</u> for all the details.
- The Platform Technology Lecture Series is running from the 6-13 November. These free lectures are designed for new platform users. <u>NMR is included</u>. See <u>https://tinyurl.com/y4xgyjt3</u>
- The 9<sup>th</sup> (biennial) Western Sydney University & Inaugural Asian Symposium on NMR, MRI & Diffusion 2020, will run 2-3 December. See <a href="https://www.westernsydney.edu.au/MRIsymposium">https://www.westernsydney.edu.au/MRIsymposium</a>
- There will be a live webinar on "In-depth MRI techniques and Analysis in Multiple Sclerosis" on Wednesday, 09 December. See <u>https://tinyurl.com/y6f8d7pu</u>

#### **MRI CASES ONLINE**

The website <u>https://radiopaedia.org/cases/</u> aims to share knowledge through interesting patient cases to make a difference in how people are imaged and diagnosed. It also has a lighter side such as this case study of a banana <u>https://radiopaedia.org/cases/banana</u> which you can even scan down though. The case notes on this one also made me smile.

#### PAPER OF THE MONTH

This month's paper of the month is entitled "NMR application in unconventional shale reservoirs – A new porous media research frontier". It is by Yi-Qiao Song and Ravinath Kausik. The paper gives a brief review of the theories of relaxation, measurement methods, and data inversion techniques and other NMR methods for understanding various aspects of using shale rock evaluation. I thought it was an interesting paper. Did you know the measurement of the T1 and T2 ratio by 2D NMR has been found to be critical for identifying the fluid composition of kerogen, bitumen, light/heavy oils, gases and brine in shale rocks for example? Well you do now. See <a href="https://tinyurl.com/y2sat3xw">https://tinyurl.com/y2sat3xw</a>

# JOBS

- Lecturer in Materials Chemistry at the University of Newcastle see https://tinyurl.com/y22zfxjg
- Alfred Deakin Postdoctoral Research Fellowships 2021 (NB: PhD must be awarded on or after 1 January 2017 and before 31 March 2021 ) See <u>https://tinyurl.com/y3qso49a</u> for more.



# **GRANTS AND AWARDS**

- The National Intelligence and Security Discovery Research (NISDRG) Program is now open (see <u>https://www.arc.gov.au/research-grants-services/arc-research-grants-services-rms-nisdrg</u>).
- Applications for the 2021 Agricultural Greater Good Initiative grants are currently being accepted. I am told grant recipients receive donations of Illumina products to support their projects. See https://tinyurl.com/y5wft8rk for details.
- The Bupa Health Foundation is now seeking nominations for its 2020 Emerging Health Researcher Award for ECRs (no more than 5 years post PhD) The national winner will receive a prize of \$25,000 to use towards furthering their research career. See <u>https://www.bupa.com.au/about-us/bupa-health-foundation for details/</u>
- Grants of up to A\$10,000 each are available for early-career and mid-career researchers to increase connectivity and engagement between Australian and Asia–Pacific economies in response to the COVID-19 pandemic See <u>https://www.science.org.au/supporting-</u> <u>science/awards-and-opportunities/regional-collaborations-programme-covid-19-digital-grants</u> for
- The Academy of Technology and Engineering (ATSE) is calling for nominations for the 2021 ATSE Awards. See <a href="https://www.atse.org.au/news-and-events/article/atse-awards-2021/">https://www.atse.org.au/news-and-events/article/atse-awards-2021/</a>
- Women in STEM and Entrepreneurship grants are now open for applications. These Grants are for between \$5,000 and \$250,000 for projects that increase women's and girls' participation in STEM and entrepreneurship. Closing date is 17 Nov. See <u>https://tinyurl.com/y6ob6rjb</u>

## **STORIES FROM THE WEB**

- <u>https://phys.org/news/2019-11-electron-paramagnetic-resonance-epr-spectroscopy.html</u> A clever study on extending EPR spectroscopy to nanoliter volume protein single crystals.
- <u>https://www.itnonline.com/article/mri-can-be-safely-performed-patients-pacemakers-and-icds</u> This article is about the news that MRI can be safely performed in patients with pacemakers.
- https://www.fujikura.co.jp/eng/newsrelease/products/2061942\_11777.html

Fujikura Ltd. and Bruker Collaboration have constructed 1.1 and 1.2 GHz NMR spectrometers using 2nd Generation High-Temperature Superconducting tape.



Have a great weekend everybody and as it is the 31<sup>st</sup> on Saturday – Happy Halloween!