

ANZMAG NEWS - July 2023


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

Dear all, Welcome to July 2023 edition of **ANZMAG News**. I hope you have all had a great month.

ANZMAG UPDATES

- The live program for **ISMAR 2023** is now available See <https://www.ismar2023.org/program-2> (NB: registration for ISMAR is still open at <https://www.ismar2023.org/registration>)
- You will hopefully have seen the separate e-mail on this sent by Prof Paul Gooley and Dr Roger Mulder on the 20th Sept but there is the intention of holding an ANZMAG Extraordinary General Meeting (EGM) on Wednesday 23 August, 2023 at 13:30 (AEST) during ISMAR 2023. Please contact the Company Secretary (jennifer.wilson@griffith.edu.au) if you have items to include on the agenda.
- For more **ANZMAG news** please check out the ANZMAG news page at <https://anzmag.com.au/anzmag/news/> If anyone has anything they want to advertise, please send key info (such as links) and a picture to Assoc. Prof. Ann Kwan at ann.kwan@sydney.edu.au
- The next **ANZMAG virtual seminar series** will be held on 1st August at 12 pm AEDT (9 am Perth, 12 pm Brisbane, and Sydney, 2 pm New Zealand). You can join via this link <https://massey.zoom.us/j/89076503681?pwd=aHB3N0R6YXZOTikzL253U3VoUThNZz09> and password: 187963 Details are below.

ANZMAG | Virtual Seminar Series 2023
A bi-monthly event organized by the Australian and New Zealand Magnetic Resonance Society

	Professor Michael Summers <i>University of Maryland</i> NMR Studies of HIV-1 Genome Selection and Packaging		Kazem Asadollahi <i>The University of Melbourne</i> The mechanisms governing neurotensin binding to neurotensin receptor 1
---	--	--	---

Tue 1 August | 10 am Perth | 12 pm Brisbane | 12 pm Sydney
2 pm New Zealand
Chairs: Elena Harjes e.harjes@massey.ac.nz and Ashish Sethi ashish.sethi@unimelb.edu.au

PAPER OF THE MONTH

This month's **Paper of the Month** is entitled "Elongated Bacterial Pili as a Versatile Alignment Medium for NMR Spectroscopy" and is by Nour *et al.* I am sure we are all familiar with residual dipolar couplings (RDCs) for determining biological structure and dynamics. The measurement of RDCs relies on the partial alignment of the molecule of interest, for example by using a liquid crystal as a solvent. In this paper the authors use bacterial type 1 pili as an alternative liquid-crystalline alignment medium to measure RDCs. Since type 1 pili are stable against spontaneous dissociation and unfolding, they seem to work well in challenging experimental conditions such as high temperature, the presence of detergents, organic solvents or very acidic pH and so allow the measurement of residual dipolar couplings for proteins, nucleic acids and small molecules by NMR in range of conditions. You can read more on this novel approach at <https://pubmed.ncbi.nlm.nih.gov/37248171/>

MEETINGS

- The 19th NMR users meeting of the Associação de Usuários de Ressonância Magnética Nuclear (AUREMN) will be held at the Riale Brisa Barra Hotel, beach of Barra da Tijuca, Rio de Janeiro, Brazil, from 25 to 29 Sept 2023. See <https://eventos.galoa.com.br/19nmrmeeting-2023/page/2394-program>
- SMASH 2023 will take place in at Grand Hotel Dino, Baveno Italy, 17-20 Sept – See <https://smashnmr.org>
- And, of course, ISMAR 2023 conference will be held on August 20-25, in Brisbane <https://www.ismar2023.org>

JOBS

- Griffith University are looking for a Lecturer / Senior Lecturer in Materials Chemistry - <https://jobs.smartrecruiters.com/GriffithUniversity/743999919794053-lecturer-senior-lecturer-in-materials-chemistry> Deadline = 27th August.
- Griffith are also looking for a Lecturer in Medicinal Chemistry <https://jobs.smartrecruiters.com/GriffithUniversity/743999919361065-lecturer-in-medicinal-chemistry> Deadline = 20th August.
- The University of Melbourne is looking for a computational biologist/bioinformatician <https://careers.pageuppeople.com/422/ci/en/job/913571/bioinformatician> Deadline = 2nd August.
- UNSW is looking for a head of Chemistry - <https://external-careers.jobs.unsw.edu.au/cw/en/job/517798?|ApplicationSubSourceID=11198> Deadline = 6th Sept.

Check out <https://www.nature.com/naturecareers/> for a range of other job opportunities.

VALE PROF. JEAN LOUIS CHARLES JEENER

ISMAR reported the sad news of the passing of Prof. Jean Louis Charles Jeener on June 10, 2023 at the age of 91 after a short illness. Jean introduced two-dimensional NMR spectroscopy and proposed the COSY technique in a lecture at the AMPERE Summer School in Basko Polje, Yugoslavia, September 1971, which was then experimentally demonstrated by Richard R. Ernst. Later, Jean also introduced the NOESY experiment. His research interest in NMR started with spin thermodynamics and dynamics in solids, progressively extending towards two-dimensional spectroscopy in liquids, superoperators, peak shapes in the presence of molecular rearrangements, the formulation of pulse spectroscopy with full quantization of the field, radiation damping and dipolar field effects in liquids. Jean was professor of Physics at the Université Libre de Bruxelles from 1960 until he retired in 1996. Among many distinctions, Jean received the ISMAR Prize in 2001, the Prix Quinquennal of the Fonds National de la Recherche Scientifique, the Ampère Prize, the Russell Varian Prize, the Otto Stern Prize, and was an ISMAR fellow.

STORIES FROM THE WEB

- <https://www.chemistryworld.com/news/new-setup-enables-epr-studies-on-tiny-protein-crystals/4010466.article> – EPR of nanolitre volume crystals could give new information about enzymes.
- <https://www.globaltimes.cn/page/202307/1294881.shtml> - This month China reported achieving mass production of a domestic MRI instrument.
- <https://www.nmr-fingerprinting.de> - The NMR fingerprinting tool allows the automatic identification and quantification of structural groups in unknown samples based on ¹H, ¹³C, and ¹³C DEPT NMR spectra. See also <https://analyticalsciencejournals.onlinelibrary.wiley.com/doi/10.1002/mrc.5381>