



Mechanical College Board

October 2022 Newsletter

The latest from the MCB



Dear Member,

Welcome to the October 2022 Edition of the Mechanical College Board (MCB) newsletter.

We recently attended the Engineers Australia Excellence Awards, where we celebrated the achievements of the talented technical professionals and fascinating engineering projects across Australia. The Mechanical College was well represented with the AGM Michell Medal 2022 being presented to Professor Dong Ruan, and Dr Hooman Mehdizadeh-Rad taking out the Young Mechanical Engineer of the Year, and the Sir George Julius Medal.

The Mechanical Board would also like to congratulate all the finalists and thank them for their continuing hard work in the field of engineering.

In this edition of the MCB newsletter we have included some great news for the *Australian Journal Mechanical Engineering*, an introduction to Colin Sheldon, board member and Deputy Chair, an update on the what the MCB has been working on and upcoming events to schedule in your calendars.

If you would like to contribute to the next edition of the MCB newsletter or would like to get involved with any projects the Mechanical Board are working on, we welcome you to contact us at MechCollege@engineersaustralia.org.au

Yours sincerely,

Rod McDonald

Mechanical College Board Chair.

Engineers Australia Excellence Awards

Professor Dong Ruan



Our heartfelt congratulations to [Professor Dong Ruan](#) for being awarded the prestigious AGM Michell Medal 2022. Professor Dong Ruan is the chair for the Department of Mechanical and Product Design Engineering at Swinburne University of Technology, where she is a highly recognised researcher.

Professor Ruan has published over 240 academic papers and has secured over \$20 million in research grants. Her research interests cover multiple disciplines including 3D printing, additive manufacturing, and composite materials.

Professor Dong Ruan is an associate editor of *Engineering Structures*, an editorial advisory board member of *International Journal of Impact Engineering*, and vice secretary of International Society of Impact Engineering, and Fellow of the Institution of Engineers Australia (FIEAust).

Mechanical engineer, AGM Michell is a central figure in the history of Australia's engineers, and the AGM Michell Medal is created by Engineers Australia to recognise his significant contributions to the profession. This is the most prestigious award for Mechanical College.

[Find out more](#) about how Anthony Michell became an icon of Australian engineering.

Dr Hooman Mehdizadeh-Rad



A big congratulations to Dr [Hooman Mehdizadeh-Rad](#) PhD CPEng NER for being the recipient of two noteworthy Mechanical College accolades, being awarded the Young Mechanical Engineer of the Year and the Sir George Julius Medal.

A well-known figure in the Northern Territory engineering community, Dr Mehdizadeh-Rad is a lecturer in Mechanical Engineering and course coordinator of Master of Engineering at Charles Darwin University.

Dr Mehdizadeh-Rad is Chartered in both mechanical engineering and project management (CPEng, NER, MIEAust). His research is multidisciplinary focusing on zero energy buildings, heat mitigation in tropical cities and solar energy. Dr Mehdizadeh-Rad received his B.Sc. and M.Sc. in mechanical engineering and his PhD in the field of designing thin film solar cells. He has set up the Charles Darwin University solar cell lab and has fabricated the first Northern Territory organic solar cell in 2018 at Charles Darwin University.

Dr Mehdizadeh-Rad has been also teaching different Mechanical Engineering and Project Management units at the College of Engineering, IT and Environment of Charles Darwin University.

[Read more](#) about Dr Mehdizadeh-Rad's achievements.

Historical first for *Australian Journal of Mechanical Engineering*

Clarivate Plc (Analytics Company) has recently announced that *The Australian Journal of Mechanical Engineering* will be joining a very selective group of internationally recognised technical publications to receive an Impact Factor (JIF) for the first time. This will come into effect early 2023.

Receiving grants or winning a tender process can directly depend on which journal you choose. By getting JIFs, our journals would not only attract high quality publications by renown authors, but also showcase Australian engineering to wider community around the world to advance local science, engineering and innovation.

A special thank you to everyone involved, in particular to our team of editors including [Guan Heng Yeoh](#), [Mohammad Rasul](#) and [Steven Goh](#).

[Find out more](#) about the *Australian Journal of Mechanical Engineering*.

Featured Board Member: Colin Sheldon



[Colin Sheldon](#) is the current Mechanical College Board Deputy Chair, who will be stepping into the Co-Chair position alongside current Chair Rod McDonald in 2023. He is passionate about advocating for the mechanical discipline and the importance of involving mechanical engineers in the decision-making process in the private and public sectors.

Colin works as a senior consulting engineer in asset management for Deloitte, with a solid background in the mining and mineral processing industry. Based out of Brisbane, he is passionate about working with multinational companies to ensure the integrity of their assets and the safety of their people.

Colin has been involved with Engineers Australia since 2008 as a student member, starting his office bearer contribution in 2014 as the Chair of the QLD Central Highlands Regional Group, moving back to Brisbane in 2017 and becoming a QLD Mechanical College Branch Committee member, before being elected to the MCB in 2019. He represents Engineers Australia on several mechanical related Standards Australia, ISO and IEC technical committees.

[Please reach out](#) to Colin on any matters you feel relevant to raise to Engineers Australia on behalf of our mechanical community.

Mechanical College expression of interest

Thank you to everyone who submitted an expression of interest (EOI) for positions on the Mechanical College Board, and the Mechanical College Branches across Australia. Across all groups we received a total of 48 EOIs. The nominations committees for each group are currently in the process of reviewing all eligible EOIs. The outcome of the 2022 process for all groups will be finalised by 30 November.

Networking event: building a pipeline of mechanical engineers

In August the Mechanical College Sydney Division hosted an in-person networking event called 'building a pipeline of mechanical engineers' and held at Engineers Australia's Market Street offices. It was a very successful event with the attendance of over 60 students and business representatives.

Presentations were held by a variety of guests including University of Technology Sydney mechanical and mechatronic engineering students, Bale Defence, Origin Energy and Ampcontrol.

Martyn Bale and Patrick Kennelly spoke on their career insights, experience working with young engineers and the benefits of hiring interns. After lunch the afternoon consisted of networking, where everyone enjoyed being back in each other's company.

UTS students presented their exemplary capstone presentations on drone swarm design, signals processing for naval mine countermeasures and an automate orthosis testing system.

Bale Defence's director of engineering and sales Martyn Jones and former intern Patrick Kennelly presented a case study on the Bale Defence six-month internship program.

A panel of Bale Defence's Martyn Jones, Origin's Ben Roxby and Thomas Steigler of Ampcontrol shared their insights and experiences of hiring interns.

Thank you to all in attendance and to the presenting guests.



Photo: Panel member (from L to R) Martyn Bale, Patrick Kennelly, Thomas Steigler and Ben Roxby.

In the news: NSW project remediate

Project Intervene, a NSW Government initiative to respond to serious defects of the key building elements in the common property, completed and occupied residential apartment buildings up to six years old, from the issuance of the occupation certificate.

Providing a way forward for owners' corporations to have serious defects remediated via NSW Fair Trading using strong compliance and enforcement powers. Instead of pursuing costly and time-consuming litigation that have low prospects of success.

Owners' corporations can lodge their complaint until 30 June 2023 to be part of the program. Visit the NSW Government [website](#) for more.

Engineers Australia Events and CPD

Engineers Australia continues to host many interesting CPDs and events throughout the year, with majority of these events being available online. Please check out the events page, and register for events that may be of interest to you:

[Conferences and events](#)

Mechanical College Branches

We continue to encourage our members to reach out to the local branches to find out more about the Mechanical College, or to take part in some of the activities being organised. We can only do great work through the valued contribution from all our members.

- [Canberra](#)
- [Newcastle](#)
- [Northern Territory](#)
- [Queensland](#)
- [South Australia](#)
- [Sydney & regional NSW](#)
- [Victoria](#)
- [Western Australia](#)