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To share news from across the Academy, the Fellows Newsletter introduction will now be given by different Fellows. This month's introduction is from the co-chair of the Industry and Innovation Forum Dr Dimity Dornan AO FTSE.

Dear <<First Name>>

It was a wondrous experience to hear four young children aged 7-12 years capturing the total attention of a roomful of politicians with a speech to the Queensland Parliament last week. Never were the wonders of science so evident ... not an adult moved or spoke! The children each presented their life stories and future ambitions in a five-minute speech at Hear and Say's Power of Speech Awards!

I started [Hear and Say](#) 30 years ago to work with profoundly deaf children receiving Australian Professor Graeme Clark's ground breaking invention of the multichannel bionic ear (cochlear implant).

Interfacing with politicians to convince them of the potential for STEM-empowered innovations is a hard road, but setting the living, breathing, speaking evidence of how these four lives have been transformed was sensational!

Each child embodied the need for the Australian Government's escalated focus on STEM skills, technology, research collaboration, and translation for the goal of improving lives.

Cochlear Ltd developed the bionic ear as the first successfully commercialised neuromodulation device back in the 70's, bringing sound where there had been none. Australia still leads the world in the bionic ear, and it is hoped that many more such devices for other human needs would by now have eventuated in this country. Despite outstanding examples, progress has been slow.

For this very reason, in late 2019, I founded [Bionics Queensland](#), a not-for-profit medical bionics leader and connector of people, ideas and resources that now has a national reach with our Bionics Innovation Challenge. Imagine the impact of new devices or treatments as tomorrow's medical bionics innovators work across bionic mobility, bionic senses, brain-computer interfaces and customised implants!

I firmly believe the road to exciting the hearts and minds of young people in STEM and also politicians, funders and potential end-users in the Power of Science lies in solving the major human health challenges of our world.

Dr Dimity Dornan AO FTSE
Co-Chair, Industry and Innovation Forum

NEWS

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MEMORIAL — Else Shepherd AM FTSE Wednesday 1 March at 12:00pm AEDT

Else was elected as a Fellow of our Academy in 2000, and during her time she was a very active member of ATSE through our Membership committee and Queensland Division. Else attended many events and we are sincerely grateful for her involvement. The memorial will be live streamed and the following pin number is required to view: 1562

>> [WATCH](#) today at midday

ATSE supports the establishment of a constitutionally recognised Aboriginal and Torres Strait Islander Voice to Parliament.

ATSE acknowledges the significance of Aboriginal and Torres Strait Islander innovations, technologies, and knowledge systems, which have been a living and evolving tradition over more than 60,000 years in the world's oldest living culture.

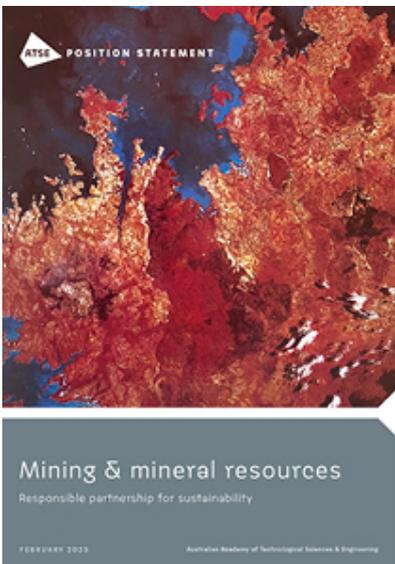
Ahead of the referendum on the Voice, ATSE encourages all Australians to commit to a respectful and appropriate approach to the preceding national discussion.

ATSE statement supporting the Voice to Parliament

ATSE strongly supports the establishment of a constitutionally recognised Aboriginal and Torres Strait Islander Voice to Parliament and the Executive Government (“the Voice”), and encourages our Fellows to champion this critical step in reconciliation, accepting the Uluru Statement’s invitation to “walk with us in a movement of the Australian people for a better future”.

Establishing the Voice will provide a forum for Aboriginal and Torres Strait Islander people to make representations to Federal Parliament and Executive Government on matters that affect them. A “yes” result in the referendum will permanently enshrine the Voice in the Australian political system due to its inclusion in the constitution.

>> Read the [ATSE statement](#)



Mining and mineral resources

The mining sector continues to be an essential part of the Australian economy, but practices must adapt to reduce impact on the environmental and cultural landscape across the nation. Shifting approaches is essential both domestically and internationally as Australia cements our place as an ethical producer of critical minerals.

> Read the Position Statement: [Mining & Mineral Resources](#)



POSITION 1

Australian research, development and deployment of technology can lead a sustainable transformation for our mining and mineral resources industry.



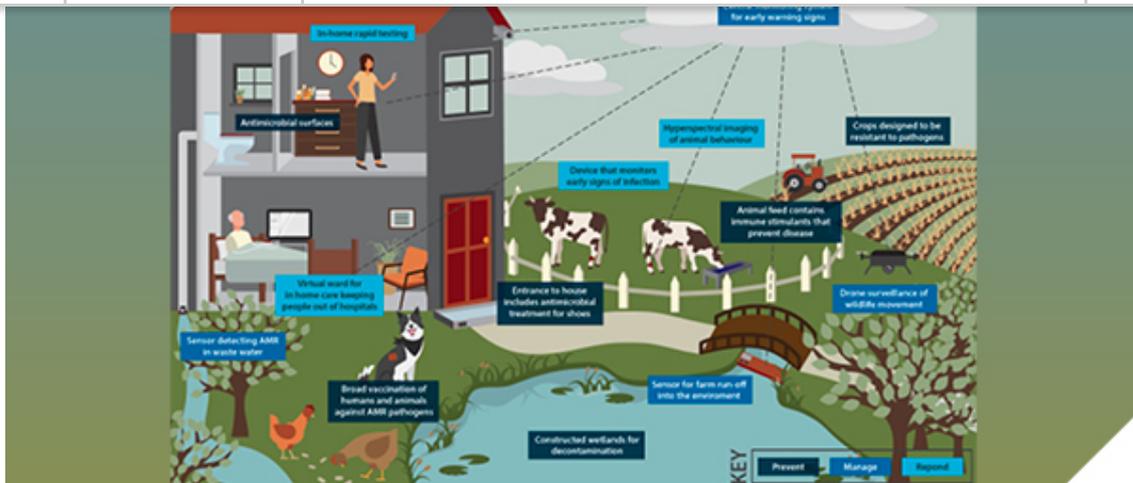
POSITION 2

The United Nations Sustainable Development Goals (SDGs) offer a framework for sustainable development of the mining and mineral resources industry.



POSITION 3

Cooperation is critical to realising the benefits of sustainability in the mining and mineral resources industry and in Australia.



Antimicrobial Resistance Report

ATSE, in partnership with CSIRO, has launched a report examining the technologies we need now, and in the future, to combat the rise of antimicrobial resistance (AMR). Estimates suggest AMR could kill 10 million people each year by 2050 and cost the world economy US\$100 trillion.

The report was launched on the 28th of February 2023. The launch commenced with a media briefing on the 27th of February 2023 hosted by the Australian Science Media Centre. Experts at the media briefing included Dr Branwen Morgan, Lead of the Minimising Antimicrobial Resistance Mission, CSIRO and Sue MacLeman FTSE. The media release has attracted widespread media attention with over 300 news stories and reaching an audience of approximately 4 million.

>> Read the Report: [Curbing antimicrobial resistance](#)

>> More information: AcademyPolicyTeam@atse.org.au

INTERNATIONAL

Fellows from the Engineering Academy of Japan to visit ATSE in March

Four senior Fellows from ATSE's sister academy, the Engineering Academy of Japan (EAJ) will visit ATSE in Canberra on Friday 10 March to discuss shared priorities, and the future of the Australia-Japan Emerging Research Leader Exchange Program (AJ-ERLEP), a joint program run by ATSE and EAJ for more than a decade. The Fellowship will be represented by Dr Carrie Hillyard AM FTSE, Professor Murray Scott FTSE and Professor Elanor Huntington FTSE during the visit, with a tour of the ANU School of Cybernetics led by Fellow Professor Genevieve Bell AO FTSE FAHA. EAJ's delegation will be led by Professor Yuko Harayama, EAJ's distinguished Fellow and Board Director, who is a former executive director of RIKEN and has represented Japan to the OECD.

>> GET INVOLVED Fellows familiar with the AJ-ERLEP program are urged to reach out to Daniel Salas, ATSE's Program Coordinator – International, to offer any insights that may help inform these discussions. daniel.salas@atse.org.au

ATSE to build engagement in the Indo-Pacific region

One of ATSE's three strategic goals set out in the five-year international strategy is to promote regional STEM development and capacity building in the Indo-Pacific region. We would love to hear from Fellows who have experience or ongoing activities in Indo-Pacific, and specifically the Pacific Island nations. We thank those Fellows who have already reached out to us and provided valuable advice regarding next steps for ATSE.

>> GET INVOLVED Please get in touch with Dr Cath Latham, ATSE's Director of International Affairs cath.latham@atse.org.au



The Sustainable Development Goals (SDGs), are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity.

POLICY

ATSE submissions

ATSE lodged 9 policy submissions during January and February.

ATSE's submission to Infrastructure NSW on [Decarbonising Infrastructure Delivery](#) recommends strengthening the proposed framework by adding actions to comprehensively measure, standardise and budget for embodied emissions in infrastructure projects, support research and development on embodied emissions, and implement a circular economy approach to infrastructure.

ATSE's submission on the [National Energy Performance Strategy](#) argues that stronger building standards are needed to ensure high levels of energy efficiency in, and reduce carbon emissions from, Australian residential properties, particularly in the areas of insulation, water heating, and rooftop solar and battery deployment. For existing households, incentives are needed to increase investment in energy efficiency measures, for both owner-occupiers and landlords. The government has the greatest scope to implement direct changes to the public housing sector, which will provide energy cost saving benefits to those who need them most.

ATSE's submission to the [Guarantee of Origin](#) consultation recommends modifications to the proposed scheme to position Australia as a trusted low-carbon exporter, enable broad participation in the scheme, and future-proof the scheme by ensuring it is technology-neutral.

ATSE's submission to the [National Reconstruction Fund](#) consultation recommends that the fund prioritises regional and circular economy investments, and provides funding for the development of negative emissions technologies. The submission also discusses priority areas including agricultural research partnerships and medical manufacturing.

ATSE's submission on the [Emissions Reduction Objective](#) consultation endorses the emissions reduction objective, and recommends legislative changes to require transparency with respect to how the objectives have been applied and targets that have been considered. The submission also suggests including interim targets in the legislation.

[Submissions](#) have also been made on the consultations on Jobs and Skills Australia, foundation skills for remote Australia, migration, and animal antimicrobial resistance. These will be available on the ATSE website soon.

>> GET INVOLVED: Fellows are encouraged to contribute their expertise to policy submissions.

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>> More information: AcademyPolicyTeam@atse.org.au

Join a Forum

All Fellows are encouraged to join a Forum and contribute their applied science, technology and engineering expertise to help ATSE in its mission to provide impartial, practical and evidence-based advice on how to achieve sustainable solutions and advance prosperity. To join a Forum please contact the Policy team.

Forum Chairs, Co-Chairs and Deputy Chairs are shown on the Fellows portal.

[Agriculture](#)

[Digital Futures](#)

[Education](#)

[Energy](#)

[Health](#)

[Industry & Innovation](#)

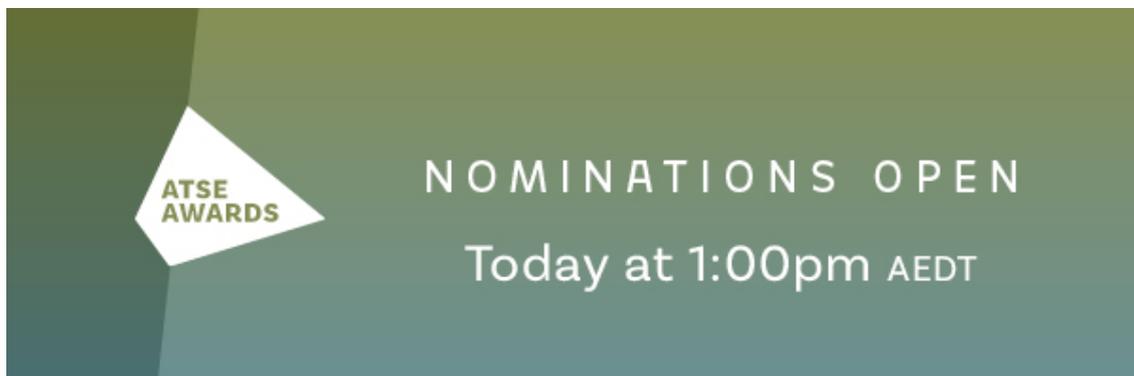
[Infrastructure](#)

[Mineral resources](#)

[Water](#)

>> More information: AcademyPolicyTeam@atse.org.au

AWARDS



ATSE AWARDS nominations open today

Each year the Australian Academy of Technological Sciences & Engineering (ATSE) recognises outstanding senior and emerging innovators with through our national awards. The ATSE Awards celebrate our leading engineers, entrepreneurs, researchers and inventors who are building a better Australia through technological innovation.

The ATSE Awards honour the outstanding achievement of Australians across five award categories:

>> [ATSE Awards guidelines and nominations](#)

>> [Clunies Ross Technology Innovation Awards](#)

>> [Batterham Medal for Engineering Excellence](#)

>> [David & Valerie Solomon Award](#)

>> [Ezio Rizzardo Polymer Scholarship](#)

>> [ICM Agrifood Award](#)

WHO WILL YOU NOMINATE?

We encourage all Fellows to consider the emerging leaders or experienced innovators in your sector who you could nominate. If you would like to discuss your nomination or the process of preparing a nomination please contact Elvira Copur, Nominations and Awards Specialist membership@atse.org.au

FELLOWSHIP UPDATE



Nominations for ATSE Fellowship closing soon

ATSE strives to be a leader in diversity and inclusion. We are committed to supporting excellence in applied science, technology and engineering and we recognise that to achieve this we must celebrate and embrace diversity and inclusion in all its forms. Only ATSE Fellows can nominate candidates for election to the Academy, and we encourage all our Fellows to nominate diverse candidates. All existing Fellows are eligible to participate in the nomination process.

>> [Read more about Election to ATSE](#)

>> [Read Fellowship Election FAQs](#)

Nominations close 9.00am AEDT Thursday 16 March 2023

For nomination help please contact Elvira Copur, Nominations and Awards Specialist
membership@atse.org.au

ALL FELLOWS — we need your opinions

We are rebuilding ATSE's public website and the private Fellows' portal from the ground up.

We want your feedback, good and bad, and your wishlist, as we need to ensure these sites are useful assets that meet your needs and expectations, and position ATSE as a future-focused Academy.

GET INVOLVED >>> Please keep an eye out for a very short survey that will be emailed to the entire Fellowship. We would also appreciate more in-depth feedback. If you are interested please contact the Communications and Outreach team communications@atse.org.au

EVENTS

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Presented by the ATSE Victorian Division

Thursday 2 March 2023

6:30pm-7:30pm AEDT
Online only — Zoom webinar
Free

SPEAKERS

Professor Elanor Huntington FTSE
Professor Lloyd C.L. Hollenberg FAA
Dr Marcus Doherty

>> [Register here](#)**IWD 2023: Driving gender-inclusive innovation****Monday 6 March 2023**

12:30pm-1:30pm AEDT
Online only — Zoom webinar
Free

SPEAKERS

Professor Shazia Sadiq FTSE
Leanne Kemp
Dr Marlien Varnfield

MODERATOR

Dr Katherine Woodthorpe AO FTSE FAICD

Join us as we celebrate International Women's Day with a panel of inspiring women from across ATSE's programs and network.

>> [Register here](#)**Norton Jackson 2023 new Fellows forum**

Presented by the ATSE South Australia and Northern Territory Division

Wednesday 15 March 2023

4:30pm-7:30pm ACDT
Vines Room, National Wine Centre
Corner of Botanic & Hackney Roads, Adelaide SA 5000

SPEAKERS

Professor Katrina Falkner FTSE
Janine Herzig FTSE
Professor Wei Zhang FTSE

Join us in Adelaide for the opportunity to celebrate and learn from three newly elected South Australia-based ATSE Fellows who have made significant contributions to their respective fields and have been recognised by the Academy for their outstanding work.

>> [Register here](#)**STEM CAREERS**

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Engage

Throughout March, the STEM Careers team will deliver its *STEM Careers in Industry* event series as part of IMNIS Engage. Open to all ATSE Fellows and IMNIS mentors, mentees, and alumni, these events provide an opportunity for attendees to engage with senior-level STEM professionals in industry who will highlight different career journeys and key decisions they made along the way and how they applied their STEM expertise and skills for a successful industry career. The goal is to inform and inspire ATSE's emerging leaders in STEM to embrace the full range of STEM careers available in the sector.

- Brisbane — 14 March 2023
- Melbourne — 16 March 2023
- Sydney — 27 March 2023
- Adelaide — 3 April 2023
- Perth — 4 April 2023

GET INVOLVED >> Fellows can [register to attend](#)

Ignite

The IMNIS Ignite industry internship program is open to host organisations keen to engage industry-aware IMNIS alumni with advanced professional skills in their ongoing and/or new projects. IMNIS Ignite is an opportunity for organisations all around Australia to fill the skills gaps in their workforce, explore new ideas and attract highly skilled and motivated PhD students and graduates, as well as early-career researchers.

GET INVOLVED >> ATSE Fellows interested in hosting an intern at their organisation or know someone who would benefit from hosting an intern, please contact IMNIS@atse.org.au

ELEVATE

The Elevate: Boosting Women in STEM program has celebrated 34 Elevate scholars commencing their studies over the last few weeks. As they embark on their program, we know scholars will be wonderfully supported by the ATSE community and we thank ATSE Fellows for their support. Elevate postgraduate research and Leadership scholars will be matched this year with senior level mentors in applied research and industry.

GET INVOLVED >> ATSE Fellows interested to learn more about mentoring through our STEM Careers programs, please contact elevate@atse.org.au.

SOCIAL MEDIA

Please follow us on social media

ATSE aims to increase our impact in several ways. One of these is by increasing our following on our social media platforms. The Fellowship can amplify ATSE's impact by engaging with our posts, particularly liking, commenting and sharing. These actions help to increase our profile and our reach, not only within the STEM sector, but also with members of the general public. We are active on the following platforms:

Twitter — [ATSE](#) and [IMNIS](#)
LinkedIn — [ATSE](#) and [IMNIS](#)
Facebook — [ATSE](#) and [STELR](#)
Instagram — [ATSE](#) and [IMNIS](#)
YouTube — [ATSE](#) and [STELR](#)
SoundCloud — [ATSE](#)



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ATSE acknowledges the Traditional Owners of the lands on which we work, and the 60,000+ years of Australian innovation through the world's oldest living cultures. We pay respect to Elders past and present.