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ATSE's May newsletter introduction is from Professor Mary-Anne Williams FTSE, Chair of the Digital Futures Forum.

Dear <<First Name>>

Recent advancements in generative artificial intelligence (AI), unprecedented adoption by business, growth in innovative business partnerships, and burgeoning startup ventures, signal that the era of responsible and equitable Business AI has arrived. Unlike traditional AI that focuses on task completion and algorithmic accuracy, Business AI focuses on the stakeholders and emphasises business, societal and environmental value and impact.

There is growing collective awareness that AI has the power to revolutionise virtually every aspect of human creativity, ingenuity and endeavour. However, it also presents new risks and challenges for humanity, necessitating that Australia reimagine and energise its innovation ecosystem to become more responsive, prepared, adaptable, and resilient in the face of current and future AI advancements.

How can Australia *thrive* in a world driven by AI prediction and decision making?

To prosper in a world dominated by AI, Australia must address a major obstacle: our well-documented poor performance in university-industry collaboration. The latest wave of AI innovation requires insights from real-world needs, data and AI algorithms. Translation is important, but collaboration is critical. University researchers excel in the realm of AI models and methods, but they lack access to crucial real-world data and insights to achieve significant impact. Conversely, businesses hold untapped data resources. Accelerating Australia's opportunities requires transforming and scaling university-industry collaboration in hot pursuit of innovation. Industry and government need a Business AI strategy.

By way of relevant evidence university researchers have been using generative AI for many years, it's not new. However, we also know that Australian industry largely "discovered" generative AI with the release of the better, faster, cheaper technologies like DALL-E and ChatGPT in 2022. This highlights a critical defect in the national innovation system on the AI front. Overcoming the well-known barriers like the misalignment of incentives in university-industry collaboration has not been a sufficiently high priority and the approaches in play are not scaling university-industry innovation fast enough for Australia to thrive.

A key responsibility of a national innovation ecosystem is to provide early detection and adapt to emerging trends and technologies, enabling stakeholders to capitalise on new opportunities for advantage. We need to do better. To ensure Australia's prosperity, our national innovation ecosystem must become more attentive, robust and resilient to the rapid changes engulfing it. The active engagement of ATSE fellows is and will continue to be crucial to achieving this goal.

Professor Mary-Anne Williams FTSE
Chair, ATSE Digital Futures Forum

ANNOUNCING 2023 NEW FELLOWS SHOWCASE & AWARDS GALA DINNER



New Fellows 2023
 Breaking barriers:
 Realising Australia's
 technological advantage
 26 October 2023
 National Portrait Gallery
 Canberra, Australia
 + live-streamed



ATSE Awards 2023
 Celebrating innovators
 in Australian STEM
 26 October 2023
 National Arboretum Canberra
 Canberra, Australia

2023 ATSE New Fellows Showcase & Awards Gala Dinner

Wednesday 25 October 2023 - Thursday 26 October 2023

Fellows Networking Reception and Showcase: National Portrait Gallery, King Edward Terrace, Parkes ACT 2600

ATSE Awards Gala Dinner: National Arboretum Canberra Forest Drive, Molonglo Valley ACT 2611

SAVE THE DATE: Join us as we welcome our 2023 Fellows elected by the Fellowship on the basis of excellence, accomplishment, and fit with a modern and future-facing Academy – ensuring they contribute to the Academy's mission of helping Australians understand and use applied science, technology and engineering to solve complex problems. In the evening of 26 October, we will celebrate innovators in Australian STEM at the ATSE Awards Gala Dinner.

>> [Register here](#)

AWARDS

	<p>The nationally prestigious ATSE Awards recognise Australian excellence across a range of STEM disciplines.</p>	<p>CLUNIES ROSS TECHNOLOGY INNOVATION AWARDS</p>	<p>BATTERHAM MEDAL FOR ENGINEERING EXCELLENCE</p>
<p>ICM AGRIFOOD AWARD</p>	<p>DAVID & VALERIE SOLOMON AWARD</p>	<p>EZIO RIZZARDO POLYMER SCHOLARSHIP</p>	<p>TRADITIONAL KNOWLEDGE INNOVATION AWARD</p>

ATSE AWARDS

Nominations close this month

Who will you nominate?

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.

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- >> [Batterham Medal for Engineering Excellence](#)
- >> [David & Valerie Solomon Award](#)
- >> [Ezio Rizzardo Polymer Scholarship](#)
- >> [ICM Agrifood Award](#)
- >> [Traditional Knowledge Innovation Award](#) **NEW AWARD**

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

We encourage you 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 the [Communications and Outreach team](#).

Nominations close 5:00pm AEST 29 May 2023.

APPLICATIONS CLOSING SOON

CAETS Communication Prize

CAETS – Council of Academies of Engineering and Technological Sciences

The [CAETS Communication Prize](#) recognises effective audiovisual communication to a general audience of how applied technology and engineering has been or can be used to address a real-world problem, and the resulting benefits to the economy or society. The prize is judged in a two-step process. Firstly, each CAETS member academy selects a national winner. This national winner is then submitted to the international CAETS Prize, and assessed by an international judging panel drawn from CAETS member academies. One international winner will be selected.

The winner will receive up to USD \$5,000 for reimbursement of travel expenses to attend the 2023 CAETS meeting in Zagreb, Croatia.

APPLICATIONS CLOSE — 11:59pm AEST Friday 12 May 2023.

>> [CAETS Communication Prize — 2023 Applications open](#)

NEWS



A welcome charge to our future Electric Vehicle industry

ATSE welcomed the National Electric Vehicle (EV) Strategy as a critical step in making Australia a significant

National Science Priorities should focus on rapid decarbonisation and bolstering Australian innovation

In a submission on Australia's National Science and Research Priorities, ATSE has called for a laser focus on decarbonising high-emitting sectors and building Australia into a nation of technology innovators, not just users.

>> READ THE MEDIA RELEASE: [National Science Priorities should focus on rapid decarbonisation and bolstering Australian innovation | ATSE](#)

Increased university system funding, leadership and flexibility crucial for a strong Australia

ATSE has outlined new ways to reform Australia's universities and transform the research sector for stronger national outcomes. ATSE President, Dr Katherine Woodthorpe AO FTSE said the [Universities Accord](#) is a once-in-a-lifetime opportunity to ensure the university system genuinely equips students for a future, increasingly driven by technology.

>> READ THE MEDIA RELEASE: [Increased university system funding, leadership and flexibility crucial for a strong Australia | ATSE](#)

ARC Review a crucial step to revitalise Australian research

ATSE welcomed the release of the final report reviewing the Australian Research Council (ARC) Act 2001. ATSE believes the review's recommendations will help strengthen Australian research, reduce administrative burdens, and minimise the potential for political interference in Australian research.

>> READ THE MEDIA RELEASE: [Australian Research Council Review a crucial step to revitalise Australian research | ATSE](#)

Board Experience for Leadership Scholars

ATSE Elevate Leadership Scholar Yang-Ming Goh has received the inaugural DMTC Ltd Guest of the Chair Fellowship, which provides board-level experience in Australia's innovation ecosystem. Elevate partner organisation DMTC has kindly established this competitive Fellowship as an additional capacity-building opportunity for Elevate Leadership scholars.

ATSE is seeking similar opportunities for other Leadership scholars and invites Fellows and your networks to host a scholar and provide board experience. To discuss possible opportunities, please email Elevate Program Manager Dr Alison Every, alison.every@atse.org.au.

>> READ THE MEDIA RELEASE: [Boosting Board experience through Elevate as DMTC Guest of the Chair | ATSE](#)

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L to R: Georgina Ovin (Elevate Program Administrator), Yang-Ming Goh (Elevate Leadership Scholar), Alison Every (Elevate Program Manager), Harry Baxter (Head of Government Relations, DMTC), Lily Attwood (Elevate Postgraduate Research Scholar) and Scarlet Kong (Elevate Advisory Group, DMTC). Photo: Steve Keough

INTERNATIONAL

ATSE gears up for e²-Mobility at CAETS 2023

ATSE will be sending a delegation to the [2023 CAETS annual meeting in Zagreb, Croatia \(9-11 October\)](#). This year's symposium theme is *e²-Mobility*, covering a range of topics related to decarbonisation of transport. Conference hosts the Croatian Academy of Engineering are leading an international project on the topic supported by the CAETS Energy Community, inviting contributions from Fellows across 31 CAETS member academies. Thank you to ATSE's Fellows who have already offered their expertise for this CAETS project.

We will bring you more on CAETS2023 as we approach the event, and we would also love to hear from ATSE Fellows who are planning to be in Zagreb in October.

>> GET INVOLVED: To hear more about CAETS2023 or to contribute, please contact [Dr Cath Latham](#) ATSE's Director, International Affairs.

Australia and the Indo-Pacific: engaging with impact in our region

ATSE is developing an Indo-Pacific engagement strategy to guide the Academy's strategic goal to promote STEM development and capacity building in the region.

The approach is based on partnership between Australia and key Indo-Pacific nations for long-term capacity building, needs-driven and co-design strategies to build meaningful relationships and work together with a likely focus on advancing sustainable development and addressing urgent challenges such as climate change and workforce needs.

ATSE is seeking input from Fellows and organisations with experience in applied sciences, technology, and engineering in the region, specifically South-East Asia, India, and the Pacific Island nations. We thank those of you who have already provided such valuable insights in this process.

>> GET INVOLVED: For more information on the Indo-Pacific strategy or ATSE's international relations work underway, please contact [Daniel Salas](#), Program Coordinator – International Affairs.

Indonesia grant program

ATSE, with the other four learned academies, is assisting the Australian Council of Learned Academies (ACOLA), who are seeking Fellows and experts to assess [grant applications in a current round of funding](#) as part of the five-year knowledge partnership program, KONESKI, between the Australian and Indonesian governments.

>> GET INVOLVED: If you or one of your colleagues would like to get involved and are available Monday 22 May – Friday 2 June, please reach out directly to [Ella Relf](#) at ACOLA.

POLICY

PROJECT

Australia's research translation and commercialisation priorities

The Department of Education has partnered with ATSE to develop a series of future-focused reports across the next two years, highlighting research with translation and commercialisation potential among Australian universities and businesses. These reports are developed under the expert guidance of Dr Carrie Hillyard AM FTSE and Professor Iven Mareels FTSE, and will inform the development and implementation of policies and programs, including:

- Australia's Economic Accelerator (AEA)
- CSIRO's Main Sequence Ventures
- Start-up Year loan program (SY-HELP)
- Industry-focused PhDs and fellowship programs
- Trailblazers Universities Program

ATSE will keep the fellowship informed on opportunities to feed into this project. Current engagement opportunities are listed below.

Research commercialisation

The research commercialisation priorities survey project focuses on current and emerging areas of research that display strong translation and commercialisation potential in Australian industry. The identified areas must be critical for the Australian economy today, or could become critical within the next 10 years, and should leverage Australia's research or industry strengths in the global economy.

Thank you to all Fellows for contributing to the recent survey and for sharing it with your networks. The 173 responses received will form the basis for this report, which will be reviewed by all ATSE Forum Chairs.

Three future topics for research translation and commercialisation reports have been selected in consultation with ATSE's fellowship. These include:

1. Sustainable fuels
2. Quantum technologies
3. Artificial intelligence

The scope of the reports will be developed and refined via a series of short workshops across May and June 2023.

>> GET INVOLVED: If these areas align with your expertise and you would like to contribute, please contact AcademyPolicyTeam@atse.org.au to receive further information and to express your interest in participating.

ATSE submissions

Recent ATSE submissions were made to the consultations on [Australia's Science and Research Priorities](#), [Universities Accord](#), and [Startup Year](#). ATSE also published media releases on the submissions to the [Universities Accord](#), [Science and Research Priorities](#) and [Diversity in STEM review](#).

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>> GET INVOLVED: Fellows are encouraged to contribute their expertise to policy submissions. Upcoming opportunities for submissions include the consultations on the Infrastructure Victoria strategy, Nature Repair Market bill, Greenwashing, and the National Hydrogen Strategy. For more information, contact 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

FELLOWSHIP UPDATE

Website rebuild

Public facing website and Fellows portal

We have completed the first stage (Discovery) with our digital agency Aceik. We ran both in person and online workshops with the Secretariat. Following an extended call for expressions of interest from Fellows to provide Discovery input, we ran an online workshop in early March. There will be another opportunity for Fellows to provide feedback before the site is launched.

>> MORE INFORMATION: Please contact the [Communications and Outreach team](#)

EVENTS



Managing land through old and new science

Thursday 4 May 2023

Networking drinks: 6:00pm-6:30pm AEST — Cash bar
Presentation (in-person & online): 6:30pm-7:30pm AEST — Free
Optional dinner: 7:30pm-9:00pm AEST — \$34

SPEAKERS

Professor Richard Eckard FTSE, University of Melbourne

Rebecca Spindler, Bush Heritage Australia

Oliver Costello, Bush Heritage Australia and Jagun Alliance Aboriginal Corporation

>> [Register here](#)

Queensland Division presents

Research commercialisation: challenges and solutions

Thursday 25 May 2023

IN-PERSON ONLY

2:00pm-4:30pm AEST — Free

The Precinct, Level 2/315 Brunswick St, Fortitude Valley QLD 4006

SPEAKERS

Professor Bronwyn Harch FTSE, Queensland Chief Scientist

Dr Dean Moss, UniQuest

Professor Rowena Barrett, Queensland University of Technology

Dr Peter Binks, Griffith University

>> [Register here](#)



[More ATSE events](#)

STEM CAREERS



IMNIS: Industry Engagement

Engage

ATSE's flagship industry mentoring program IMNIS Engage is preparing for the upcoming 2023-2024 mentoring program in July. If you are a Fellow with industry expertise and a background in the private sector, we would like you to consider participating in the program as a mentor. IMNIS Engage connects motivated PhD students and postdoctoral fellows in STEM with outstanding high-level industry leaders in a one-year mentoring and professional development program.

>> GET INVOLVED: Contact IMNIS Program Manager [Scott Cummins](#) for more information and to express interest in becoming a mentor.

Catalyst

The group of 20 IMNIS Catalysts to join in 2023 were announced in late April. IMNIS Catalyst is an ambassador program where IMNIS alumni represent the program and ATSE in the broader STEM ecosystem as they engage with schools, industry, and academia. The program will run until December 2023 and will offer opportunities in-person and online. The 2023 Catalysts are from a wide variety of STEM fields, as well as being representatives from across most states and territories in Australia.

>> READ MORE: [Twenty young science and tech innovators appointed as industry ambassadors](#)

ELEVATE: Boosting Women in STEM

Would you like to select the next cohort of Elevate scholars?

The Elevate Program team is seeking Fellows who would be interested in being assessors to select the Elevate Program cohort commencing in 2024.

Our ideal committees will bring a range of perspectives, coming from different career-stages, lived experiences and diversity criteria. For the undergraduate committee, there will be at least one early career researcher. The committees will include representatives from industry, academia, and the public sector, and have a 40:40:20 gender balance in accordance with ATSE's diversity and inclusion policy. Committees will be required to honour ATSE's values, code of conduct and reconciliation action plan.

We anticipate that the commitment will take approximately 10 hours, which includes:

- Attending an assessor briefing
- Reviewing a selection of the applicants for either the Undergraduate, Postgraduate Research or Leadership program cohorts
- Attending a scholar selecting meeting

>> GET INVOLVED: If you are interested in being an assessor for the Elevate Program, please email elevate@atse.org.au.

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ATSE's STEM education initiative

ATSE's Shape Your Future sessions are interactive discussions that explore STEM career journeys of Australia's leaders and rising stars in industry and academia. We aim to connect educators and students with influential professionals and decision-makers at the forefront of applied STEM research and innovation.

Our most recent session was moderated by ATSE Fellow, academic and industry leader Professor Katrina Falkner FTSE. The panel included Suzy Urbanaik (Founder and CoRe Lead, CoRe Learning Foundation) and Associate Professor Johnson George (Monash University).

There is one session remaining for [Term 1: Sustaining Earth's precious resources](#).

>> GET INVOLVED: ATSE Fellows interested in engaging remotely with students please contact STELR.admin@atse.org.au.

SUPPORT ATSE'S WORK

ATSE is Australia's foremost impact network for leading applied scientists, technologists and engineers.

Your tax deductible donation will help us continue to be an authoritative and independent voice to government, support our world-class [STEM Careers programs](#) equipping the next generation with skills to build a better Australia and world, and award upcoming innovators.

>> [DONATE TO ATSE TODAY](#).

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.

[Twitter](#)[LinkedIn](#)[Instagram](#)[YouTube](#)

Australian Academy of Technological Sciences & Engineering

Level 2, 28 National Circuit Forrest ACT 2603

Phone +61 2 6185 3240

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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.