



A tech powered human driven future

STEM symposium
25-27 October 2022
Sydney Masonic Centre
Sydney Australia
+ Live-streamed



ATSE AWARDS 2022
Gala Dinner
26 October 2022
Doltone House
Jones Bay Wharf
Sydney Australia
+ Live-streamed



Australian Academy of
Technological Sciences
& Engineering

About ATSE

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

We are an independent, non-government organisation and registered charity led by a diverse Fellowship of over 900 future shapers who strive for a sustainable and prosperous Australia.

Our Academy celebrates excellence in STEM, by appointing prestigious Fellows, awarding emerging innovators and equipping the next generation with skills to build a better Australia and world.

We are an authoritative and independent voice to government and our world-class STEM Career programs demonstrate how to tackle our most urgent challenges.

Over the past 46 years, the Academy has surged from 65 to over 900 Fellows who are responding to Australia's most urgent and complex challenges - from climate change, pandemics, food and water security to stewarding a waste free future and addressing the STEM skills shortage.

Why now?

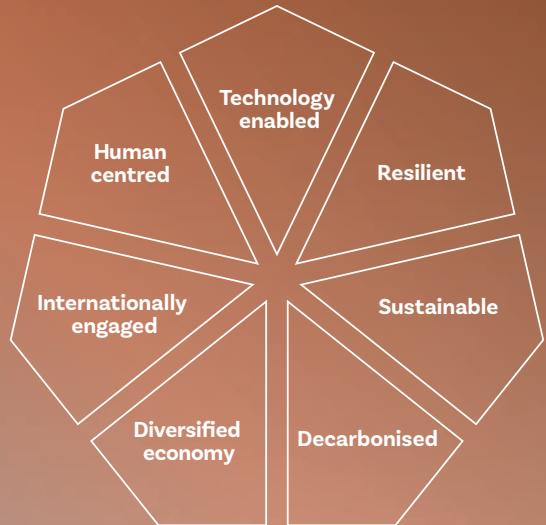
The coming decade will see the culmination of a unique set of challenges: decarbonisation of our economy, managing the transition of multiple industries, and training the workforce needed for an increasingly digital future. But right now, Australia is in the midst of a STEM skills shortage which will only grow more acute as technology increasingly drives the way we work and live. The clock is ticking!

- > By 2023, digital technologies are estimated to contribute \$65 billion to Australia's economy
- > By 2024, we need 100,000 digitally skilled workers
- > By 2025, we need 40,000 more engineers
- > By 2030, 25–46 per cent of existing jobs could be automated.

Diversity in STEM remains an issue. Women, Culturally and Linguistically Diverse (CALD) and Aboriginal and Torres Strait Islander communities are inadequately recognised. Now more than ever, we need the strength of diverse perspectives to solve our urgent challenges.

We need these skills and diverse change-makers to recover from the COVID-19 pandemic, respond to international instability and confront the already devastating impacts of climate change.

We are on the precipice of an immense challenge and opportunity. Australia's future workforce needs to evolve, transform and tackle these complex problems to create a better tomorrow.



A technology powered,
human driven future





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A tech powered human driven future

What is ACTIVATE 2022?

ACTIVATE 2022 will bring together 500 high-level representatives from across government, business and academia and feature keynote conversations between global and national future shapers. Our theme is 'a tech powered human driven future'.

The event will:



- > **Unite** Australia's leading engineering and technology entrepreneurs to ensure ATSE helps build a sustainable and prosperous Australia
- > **Celebrate** local and global excellence in applied science, technology and engineering and award Australia's emerging innovators
- > **Activate** policymakers, CEOs and academics in charting a course for Australia's globally focused STEM workforce and catalyse a technology powered human driven future

ATSE AWARDS 2022



ACTIVATE 2022 will also celebrate the outstanding achievement of Australians across five prestigious award categories, who are working in applied science, technology and engineering.

ACTIVATE 2022 at a glance

ACTIVATE 2022 will span three curated days and feature our *Human Centered Activation Space* for exhibitors, hands on STEM careers engagements and networking.

DAY 1

Tuesday 25 October

Unite

Sydney Masonic Centre
ATSE Fellows – by invitation only

The day will bring together members of ATSE's 900+ Fellowship for its annual Assembly to reflect on progress, connect on national issues, and set the Academy's future direction followed by a networking reception.



Sydney Masonic Centre
66 Goulbourn Street



DAY 2

Wednesday 26 October

Celebrate

Sydney Masonic Centre
All event ticketholders, excluding separate ticketed breakfast event

The day will launch the ATSE *To Skills for a technology powered, human driven future* report, celebrate new Fellows nominated to the Academy, feature interactive panel conversations with Australia's STEM leaders and conclude with the ATSE Awards 2022 dinner.

- > LAUNCH: *Skills for a technology powered, human driven future* report at ATSE President's Breakfast*

*Limited to 150 ticketed guests
- > Human Centred Activation Space
- > Welcome and keynote
- > ATSE New Fellows 2022 announcement and welcome
- > Interactive panel sessions: Shaping a technology powered, human driven future
 - Climate change mitigation and adaptation
 - Enhancing research collaboration, translation and commercialisation
 - Exciting and educating young people in STEM

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DAY 3

Thursday 27 October

Activate

Sydney Masonic Centre
All event ticketholders

The day will feature interactive keynote conversations between national and global figures in STEM and feature concurrent sessions designed to create a plan across government, industry and academia for a technology powered, human driven future.

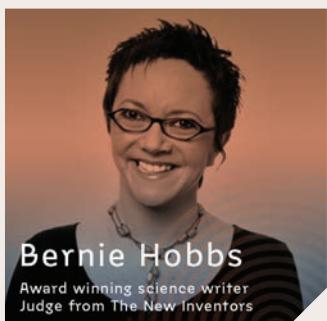
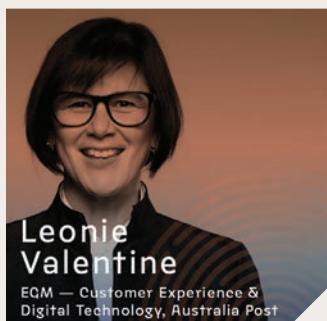
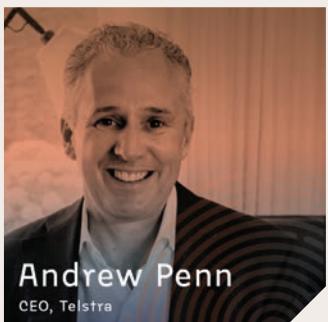
- > Human Centred Activation Space
- > International and Australian Keynote Conversations
- > Concurrent sessions:
 - A Technology Enabled Future
 - A Resilient Future
 - A Sustainable Future
 - A Decarbonised Future
 - An Economically Diversified Future
 - An Internationally Engaged Future



Banquet Hall
Sydney Masonic Centre

Confirmed speakers

As of July 2022



ATSE AWARDS 2022

Celebrating innovation and excellence in STEM

Each year the Australian Academy of Technological Sciences and Engineering (ATSE) recognises outstanding senior and emerging innovators with national awards.

The ATSE Awards are a flagship moment for ATSE and the Australian STEM community for celebrating our applied scientists, technologists, engineers and entrepreneurs from a diverse fields.

The 2021 Awards celebrated world-class research putting cancer cells to sleep, preventing catastrophic bushfires and improving the flavour of plant-based food options. The work of past winners from a range of fields, including fintech, biotech, engineering and agriculture has improved countless lives and built major new Australian businesses.



During the pandemic, ATSE held simultaneous cocktail parties around Australia with drinks, canapes, networking and celebration. Virtual celebrations were facilitated by Nominee for NSW Australian of the Year and recycling science superstar and the Australian Queen of Waste Professor Veena Sahajwalla FAA FTSE.

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Wednesday 26 October

ACTI
VATE

The ATSE Awards 2022 will continue a legacy of bringing together up to 600 of Australia's brightest minds across STEM who are collaborating for a better Australia and world.



Bernie Hobbs, award winning science writer and presenter and judge from ABC TV's *The New Inventors* will MC the three course dinner.

The evening will celebrate the ATSE Awards 2022 winners in the following categories:

- > Clunies Ross Award for Innovation
- > Clunies Ross Award for Knowledge Commercialisation
- > Clunies Ross Award for Entrepreneur of the Year
- > Batterham Medal for Engineering Excellence
- > ICM Agrifood Award
- > Ezio Rizzato Polymer Scholarship
- > David & Valerie Solomon Award



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atse.org.au/activate