#### **AUSTRALIAN CONFERENCE ON SCIENCE AND MATHEMATICS EDUCATION 2023**

### **KEYNOTE SPEAKERS**



**Professor Angela Carbone** RMIT University

Angela Carbone is a Professor and Associate Deputy Vice Chancellor of Learning, Teaching, and Quality, within the STEM College at RMIT University in Australia. She is recognised as globally recognised expert in higher education, successfully driving curriculum reform, implementing pedagogical practice changes, and building the techno-pedagogical capacity of academics.

Angela has held leadership positions for the past 13 years, as Dean Learning Innovation in the Faculty of Science Engineering and Technology (FSET) at Swinburne University of Technology, and Director of Education Excellence at Monash University, contributing to the development of the university's

education strategy, policies, procedure and implementation.

Professor Carbone's teaching achievements have been recognized nationally, she was the first female academic to receive the nation's highest teaching award, the Prime Minister's Award for University Teacher of the Year (1998). She was also the first female academic in the STEM discipline from Monash University to secure two National Teaching Fellowships (2010, 2012). For the past five years, Angela has held the position of Director of the Australian Awards for University Teaching, appointed by Universities Australia.

Angela is committed to promoting a culture of excellence and innovation in education, and has directed her focus this year on embedding RMIT's Active, Authentic, and Applied (AAA) Signature pedagogy and Digital Spine into the STEM curriculum. She has led various multi-institutional scholarly projects funded by research and development grants from several funding sources, such as the Australia Government's Office for Learning and Teaching, Netspot, the Council of Australian Directors of Academic Development, and the Council of Deans of ICT (Learning and Teaching) Academy. Her research has gained international recognition in the fields of digital transformation, developing graduate employability skills, models of educator capability development, and educational leadership.

At the core of Angela's professional work is her unwavering dedication to pedagogy, driving innovation and excellence in educational practice, and leading continuous improvement.

**Keynote Address**: Adapting to the Educational Climate: Unleashing the Potential of Active Learning in Science Education

Convener: Professor Tina Acuña (University of Tasmania)



Mr George Pantazis
Mount Margaret Remote Community School, WA

George Pantazis was formerly the Marble Bar Primary School's STEM Coordinator and recently started in a similar role at the Mount Margaret Community School in Western Australia. He received the 2022 Prime Minister's Prize for Excellence in Science Teaching in Primary Schools, based on his innovative use of two-way learning that empowered students to become teachers and showcases First Nations science and art to the world.

He worked with local Elders, organisations and industry leaders to combine local First Nations knowledge of the East Pilbara region with virtual and augmented reality technologies. George integrated the local Nyamal language (a critically endangered language) into the school's STEM program and has worked with students to create the only copyrighted digital First Nations seasonal calendar in Western Australia.

Keynote Address: Culturally Responsive STEAM

Convener: Professor Emerita Susan Jones (University of Tasmania)

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# Dr Beth Fulton CSIRO Environment

Dr Beth Fulton is a Senior Principal Research Scientist with CSIRO Environment, where she leads the Integrated Ocean Stewardship Research Domain. She has spent over 20 years developing various system modelling tools for looking at marine ecosystems and sustainability. The common theme to Beth's work has been on developing system-scale decision support tools in support of sustainable management of potentially competing uses of marine

environments and adaptation to global change.

With a background in ecology, marine biology and mathematics Beth has developed system models that have provided insights to a range of national and international bodies (including government agencies in Australia, the US, Chile, EU along with international bodies like the CBD, FAO and other parts of the UN) – providing decision support and understanding for regional marine planning, managing the impacts of fishing, supporting sustainable aquaculture and alternative livelihoods, as well as understanding and managing climate change. In 2022 she became a Fellow in both the Australian Academy of Science and the Australian Academy of Technological Sciences & Engineering.

Keynote Address: Highlighting the Value of Maths in a Climate-Changed World

Convener: Professor Tina Acuña (University of Tasmania)

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