



Royal Society of New South Wales 2022

Awards Winners 2022

The Awards for 2022 were announced at the 1309th Ordinary General Meeting of the Society, held on Wednesday, 7 December 2022. These included the Cook Medal, which is the Society's highest honour, and awards for research and scholarly excellence.

James Cook Medal

Emeritus Professor John Church AO FAA FTSE FAMS FAGU

Seven Awards for Research Excellence

Clarke Medal and Lecture (Geology)

Professor Andrew (Andy) Baker FAGU

Edgeworth David Medal

Dr Tim Doherty

History and Philosophy of Science Medal

Emeritus Professor Stephen Gaukroger FRSN FAHA FRHistS FRSA

Burfitt Prize

Distinguished Professor Susan Scott FAA FEurASc

Liversidge Memorial Lecture

Professor Timothy Schmidt FRSN FRACI CChem

Warren Prize

Professor Anita Wing Yi Ho-Baillie FRSN FAIP

Jak Kelly Award

Mr Shankar Dutt

Three Royal Society of NSW Scholarships

Ms Clara Liu Chung Ming, Mr Thomas Mesaglio, and Ms Anyang (Anya) Zhao

James Cook Medal

Emeritus Professor John Alexander Church AO FAA FTS FAMS FAGU

The James Cook Medal is awarded periodically by the Royal Society of New South Wales for outstanding contributions to science and human welfare in and for the Southern Hemisphere. **John Church**, an Emeritus Professor in the Climate Change Research Centre, UNSW Sydney is the world's pre-eminent authority on the rate of 20th century sea-level rise, with his work on quantifying historical changes having been pivotal in revolutionising our modern view of sea level rise, including the first detection of the acceleration in the rate of rise. His ground-breaking papers, published with both national and international colleagues, explain a long-standing conundrum about the causes for the observed 20th century sea-level rise. He has provided substantial improvements in estimates of ocean heat uptake, resolving discrepancies between observations and models as well as the causes. In addition, he has been an international leader in sea level assessments and projections and his work has established that anthropogenic climate forcing is responsible for the majority of observed sea level rise since 1970.

Seven Awards for Research Excellence

Clarke Medal and Lecture (Geology)

Professor Andrew (Andy) Baker FAGU

The Clarke Medal is awarded each year for distinguished research in the natural sciences, conducted in Australia and its territories, in the fields of botany, zoology, and geology (considered in rotation). For 2022, the medal has been awarded in geology. **Professor Andy Baker**, of the School of Biological, Earth & Environmental Sciences at UNSW Sydney, is an international authority in cave science, hydrology and geochemistry, especially as it pertains to our understanding of karst — complex underground systems formed from dissolution of soluble rocks, characterised by sinkholes, caves and speleothems (e.g., stalagmites). Having led over AU\$10M in external projects in NSW since 2010, he has also published more than 260 internationally refereed papers, including highly-cited publications in *Nature*, *Nature Communications*, and *Science*.

Edgeworth David Medal

Dr Tim S. Doherty

The Edgeworth David Medal is awarded annually for distinguished research by a young scientist under the age of 35 years for work undertaken mainly in Australia or contributing to the advancement of Australian science. **Dr Tim Doherty**, an ARC DECRA Fellow in the School of Life and Environmental Sciences at the University of Sydney, has made extraordinary contributions in the fields of predator-prey dynamics, movement ecology and fire ecology, emerging as a pre-eminent scientist of his generation in developing these fields and in exploring how each is influenced by human modification of the environment. Dr Doherty's transformative insights have been achieved by combining field experiments with novel theoretical frameworks and global syntheses. Key contributions include revealing

that invasive predators have contributed to more than 50% of bird, mammal, and reptile extinctions globally, and conducting vital applied field research on fire and invasive species that informs conservation policy and management.

History and Philosophy of Science Medal

Emeritus Professor Stephen Gaukroger FRSN FAHA FRHistS FRSA

The Society's History and Philosophy of Science Medal is awarded annually to recognise outstanding achievements in the History and Philosophy of Science, especially the study of ideas, institutions, and individuals of significance to the practice of the natural sciences in Australia. **Emeritus Professor Stephen Gaukroger** is one of the world's leading historians of science and philosophy. Educated at the University of London and the University of Cambridge, he has held positions at Cambridge, Melbourne, and Sydney, as well as visiting professorships at Oxford, London, Aberdeen, and the *École normale supérieure — Paris Sciences et Lettres*. Now Emeritus Professor of History of Philosophy and History of Science at the University of Sydney, he is the author of sixteen books, including an internationally renowned intellectual biography of Descartes (1995). His work has been translated in Arabic, Chinese, French, German, Italian, Portuguese, and Russian. His major work is the 4-volume study of science and the shaping of modernity: *The Emergence of a Scientific Culture, 1210–1685* (2006); *The Collapse of Mechanism and the Rise of Sensibility: 1680–1760* (2010); *The Natural and the Human, 1739–1841* (2016); *Civilization and the Culture of Science, 1795–1935* (2020).

Burfitt Prize

Distinguished Professor Susan M. Scott FAA FEurASc

The Walter Burfitt Prize, established as a result of a generous gift to the Society by Dr W.F. Burfitt BA MB ChM BSc, is awarded at intervals of three years for research in pure or applied science. The winner must be resident in Australia or New Zealand, and whose papers and other contributions published during the past six years are deemed of the highest scientific merit. **Distinguished Professor Susan Scott**, from the Australian National University College of Science, is an internationally recognised mathematical physicist who has made fundamental advances in our understanding of the fabric of space-time in general relativity, and in gravitational wave science. She has pioneered breakthrough results probing the existence and nature of space-time singularities, the global structure of space-time, and possible initial and final endstates for cosmological models representing our Universe. Professor Scott has also been a pioneer in the analysis of astrophysical signatures in gravitational wave experiments, including the searches for gravitational waves from asymmetric neutron stars and from inspiralling binary systems of black holes and neutron stars. She has played an important role in the development and promotion of gravitational research worldwide, and a leading role in Australia's participation in the first direct detection of gravitational waves in 2015.

Liversidge Lectureship

Professor Timothy W. Schmidt FRSN FRACI CChem

The Liversidge Lecture, established under the terms of a bequest to the Society by Professor Archibald Liversidge MA LLD FRS, who was Professor of Chemistry in the University of Sydney from 1874 to 1907 and was one of the Council members who sponsored the Society's Act of Incorporation in 1881, is awarded at intervals of two years for the purpose of encouragement of research in Chemistry. **Professor Timothy Schmidt**, of the School of Chemistry at UNSW Sydney, is internationally recognised as a molecular spectroscopist working on diverse problems from astrophysics to renewable energy. In the gas phase, he has recorded spectra of many hydrocarbon radicals for the first time and discovered new electronic excitations of the dicarbon molecule. In the condensed phase, his work concentrates on triplet-triplet annihilation and singlet fission for solar energy applications. His work has been recognised by a number of prizes including the Broida Prize (International Symposium on Free Radicals 2015), the Coblenz Award (2010), the RACI Physical Chemistry Lectureship and the RACI Physical Chemistry Medal (2021).

Warren Prize

Professor Anita Wing Yi Ho-Baillie FRSN FAIP

The Warren Prize consists of a medal and lectureship in recognition of research by engineers and technologists in their early to mid-career. Early-career researchers will have established a publication record in top-tier journals and wish to reach a broader audience, while mid-career researchers will have completed a larger body of work relevant to society. **Professor Anita Ho-Baillie** is a pioneer in the development of next-generation solar cells that are key to transitioning to a carbon-free-economy. Focussing on multi-junction solar cells, the aim of her research is to increase their power conversion efficiency towards 40% and 50% when the efficiencies of commercially available silicon solar cells are around 25%. In addition, her recent breakthroughs in improving the durability of perovskite solar cells are critical steps towards commercial viability. Despite the early stage of her career, her outstanding contributions to the important field of energy research are recognised around the world. Four times a Clarivate Analytics Highly Cited Researcher, in 2021 she was named Top Australian Researcher in Sustainable Energy by *The Australian* and by leading journal *ACS Energy Letters*, one of 30 leaders in advancing perovskite solar cells and one of 40 Women Scientists at the Forefront of Energy Research in the World.

Jak Kelly Award

Mr Shankar Dutt

The Jak Kelly Award was created in honour of Professor Jak Kelly (1928–2012), who was Head of Physics at the University of NSW from 1985 to 1989, was made an Honorary Professor of the University of Sydney in 2004, and was President of the Royal Society of NSW in 2005 and 2006. Its purpose is to encourage excellence in postgraduate research in physics. The award is supported by the Royal Society of NSW and the Australian Institute of Physics, NSW branch. The winner is selected from a shortlist of candidates who made presentations

at the most recent Australian Institute of Physics (NSW Branch) postgraduate awards meeting. **Shankar Dutt** is a PhD Candidate in the Research School of Physics at the Australian National University. He investigates a nanopore-based sensing platform for the detection of different biomolecules in complex solutions including DNA, proteins and antibodies. This allows tailoring of the biomolecules' translocation kinetics and, combined with artificial intelligence, aims at early diagnosis of neurodegenerative disorders such as Alzheimer's Disease and Multiple Sclerosis.

Three Royal Society of New South Wales Scholarships

The Royal Society Scholarships are awarded annually in order to acknowledge outstanding achievements by young researchers in any field of science. Applicants must be enrolled as research students in a university in either NSW or the ACT on 1 January in their year of nomination.

For 2022, three RSNSW Scholarships have been awarded:

- Miss **Clara Liu Chung Ming** — PhD Candidate, School of Biomedical Engineering, University of Technology Sydney
- Mr **Thomas Mesaglio** — PhD Candidate, School of Biological, Earth, and Environmental Sciences, UNSW Sydney
- Ms **Anyang (Anya) Zhao** — PhD Candidate, John Curtin School of Medical Research, Australian National University

Miss Clara Liu Chung Ming is a PhD candidate in the School of Biomedical Engineering at the University of Technology Sydney under the supervision of Dr Carmine Gentile. Her research focusses on the bioengineering of advanced 3D *in vitro* models of the human heart pathophysiology, including “the-heart attack-in-a-Petri-dish” and heart failure using patient derived-stem cells. In particular, Clara has demonstrated that acetylcholine (a natural compound produced by our body) plays a protective role against myocardial infarction (heart attack) and drug-induced heart failure using her cells. Clara's multidisciplinary project is carried in collaboration with the University of Sydney/Charles Perkins Centre/Sydney Heart Bank, Royal Prince Alfred Hospital and Baker Heart and Diabetes Institute/Monash University. Clara's research has focussed also on the effects of SARS-CoV-2 on human heart pathophysiology, as well as the bioengineering of pre-eclampsia-induced heart failure using patient-derived stem cells. Her research has received several awards, including Australian Government Research Training Program Stipend (2021), FEIT HDR Women in Engineering and IT awards (2021), ASBTE Rapid Fire Presentation Award (2022) and NSW Education Waratah Scholarship (2022).

Mr Thomas Mesaglio works on quantifying our knowledge of Australian plant biodiversity, developing identification tools, survey and species description protocols and general data frameworks for improving this knowledge. Although much of his research focuses on analyses of ‘citizen science’ data, he has published scientific papers in disciplines including marine forensics, bushfire recovery and invertebrate ecology and taxonomy. As part of the Environment Recovery Project team, he received the Department of Industry, Science and Resources' 2022 Eureka Prize for Innovation in Citizen Science. He has published two

books: a guide to scientific etymology and a seashell field guide and is a curator and forum moderator on the citizen science platform iNaturalist, with 39,000 observations and 227,000 identifications made for other users.

Ms Anyang Zhao's research is focused on the clinically important foodborne pathogen called *Listeria*, which causes 20–30% of death in humans. She has identified that *Listeria* infection triggers inflammation and cell death, which are biological processes crucial for overcoming *Listeria* infection. Excessive inflammation caused by the immune system while fighting off *Listeria* infection can lead to sepsis and death. Ms Zhao's research aims to inhibit such excessive inflammation and could lead to the development of therapies against sepsis. During her first year of PhD study, Anyang published a preview article in *Cell Host & Microbe* (2022) as co-first author, and further co-authored two primary research articles in *Science Immunology* (2022) and *Nature Communications*. Her research achievements have been recognised by multiple prizes, scholarships and grants.



Events in 2022

Meetings held by the Society in four places: Sydney; Newcastle by the Hunter Branch; Mittagong by the Southern Highlands Branch; and western NSW by the Western NSW Branch.

1300th OGM and Open Lecture

“Where next for higher education after COVID-19?” *Professor Mark Scott* AO FRSN Vice-Chancellor and Principal, The University of Sydney; Date: Wednesday, 2 February 2022; Venue: Zoom webinar.

Annual Meeting of the Four Societies 2022

“Engineering and related Challenges in Decarbonising the Electricity System” *Professor Stephen Wilson*, University of Queensland. A joint meeting of the Australian Institute of Energy, the Australian Nuclear Association, the Sydney Division of Engineers Australia, and the Royal Society of NSW — this year organised by the Australian Nuclear Association. Date: Wednesday, 16 February 2022; Venue: The UTS Aerial Function Centre (Building 10, Level 7, 235 Jones Street, Ultimo) and via a Zoom webinar.

Southern Highlands Branch Meeting 2022-1

“Uranium: Australia's secure energy and climate solution” *Mr Robert Parker*, Former President, Australian Nuclear Association; Date: Thursday, 17 February 2022; Venue: RSL Mittagong, Carrington Room.

1301st OGM and Open Lecture

Royal Society of NSW 2021 Student Award Presentations: *Zain Mehdi*, ANU, *Sajad Abolpour Moshizi*, Macquarie University, *Harry Marquis*, University of Sydney, *Kevin Chau*, Macquarie University; Date: Wednesday, 2 March 2022; Venue: Zoom webinar.

RSNSW Bicentennial Garden Party, Government House, Sydney

On 12 March, Her Excellency, the Honourable Margaret Beazley AC QC, Governor of New South Wales, addressed the gathering and congratulated the Society on its 200th birthday.

Western NSW Branch Meeting 2022-1

“Public Trust and Science in Times of Coronavirus” *Robert Clancy* AM FRSN, *Michelle Grattan* AO FASSA and *Jane Quinn*, facilitated by Mark Evans; Date: Tuesday, 15 March 2022; Venue: Council Room 104, The Grange, Building 1205, Charles Sturt University (Bathurst) and Zoom live streaming.

Southern Highlands Branch Meeting 2022-2

“Transgenerational Epigenetics” *Dr Alyson Ashe*, Senior Lecturer, School of Life and Environmental Science, University of Sydney; Date: Thursday, 17 March 2022; Venue: RSL Mittagong, Carrington Room.

RSNSW Clarke Lecture 2020

“From bulldozers, pests, and pathogens to climate change and urban futures: the tough life of plants” *Professor Michelle Leishman*, Distinguished Professor of Biology, Director, Centre for Smart Green Cities, Macquarie University. Date: Thursday, 17 March 2022; Venue: Live Streaming only.

Frontiers of Science Forum 2022

“Exploring major discoveries and theories in physics, mathematics, biology, and chemistry” *The Hon. Alister Henskins* SC MP, *Prof Johannes Le Coutre* FRSN, UNSW Sydney, *Prof Benjamin Eggleton* FRSN FAA FTSE, University of Sydney, *Prof Chris Tisdell* FRSN, UNSW Sydney, *Prof. Martina Stenzel* FRSN FAA, UNSW Sydney. A joint meeting of the Australian Institute of Physics (AIP), the Teachers’ Guild of NSW (TGNSW), the Royal Australian Chemical Institute (RACI), and the Royal Society of NSW; Date: Friday, 25 March 2022; Venue: Concord Golf Club, 190 Majors Bay Road, Concord.

The 2022 Annual General Meeting and The 1302nd Ordinary General Meeting

“New frontiers in smart sensor technology for a healthier, safer and sustainable future” *Professor Benjamin Eggleton* FRSN FAA FTSE, Director, University of Sydney Nano Institute and Co-Director, NSW Smart Sensing Network; Date: Wednesday, 6 April 2022; Venue: Gallery Room, State Library of NSW.

ANA 2022 Conference: Progress in Nuclear

Australian Nuclear Association Conference. The 14th Australian Nuclear Association Conference on Nuclear Science, Technology, and Engineering. Theme: Progress in Nuclear — Progress in Nuclear Power around the World; Applications of Nuclear Techniques; Advanced Reactors and Small Modular Reactors (SMRs); The role of Nuclear in addressing Climate Change. Date: 8 April 2022; Venue: UTS Aerial Function Centre, Level 7.

Ideas@theHouse: April 2022

Presented by Her Excellency the Honourable Margaret Beazley AC QC, Governor of NSW: “Nothing” *Richard Tognetti*, the Artistic Director of the Australian Chamber Orchestra; Date: Wednesday, 20 April 2022; Venue: Government House Sydney.

Southern Highlands Branch Meeting 2022-3

“Space Race 2.0” *Dr Bradley Tucker*, Astrophysicist and Cosmologist, Australian National University; Date: Thursday, 21 April 2022; Venue: RSL Mittagong, Carrington Room.

Hunter Branch Annual General Meeting 2022 and Hunter Branch Meeting 2022-1

“COVID-19: past performance, present practice, and future prospects” *Nick Talley* AC Distinguished Laureate Professor, University of Newcastle and Hunter Institute of Medical Research; Date: Wednesday, 27 April 2022; Venue: Newcastle Club, 40 Newcomen Street, Newcastle.

RSNSW Liversidge Lecture 2020 (delayed by COVID)

“Drug Discovery Inspired by Natural Products” *Professor Richard J Payne* FRSN FRSC FRAC, Professor of Organic Chemistry and Chemical Biology, The University of Sydney; Date: Wednesday, 4 May 2022; Charles Perkins Centre Auditorium (D17), University of Sydney.

RSNSW Poggendorff Lecture 2020 (delayed by COVID)

“Are our weeds becoming new native species?” *Professor Angela Moles* of the UNSW School of Biological, Earth, and Environmental Sciences; Date: Wednesday, 11 May 2022; Venue: Royal Botanic Garden Sydney, Palm House.

Western NSW Branch Meeting 2022-2

“Making a living on the plains — Stone tools and archaeology of Aboriginal societies” *Dr Colin Pardoe* FRSN MAI ATSI Biological Anthropologist and Archaeologist; Date: Wednesday, 18 May 2022; Venue: Wal Fife Lecture Theatre (Building 14, Room 212), Charles Sturt University (Wagga Wagga Campus) and live-streaming by Zoom.

Southern Highlands Branch Meeting 2022-4

“Longer life and fertility: the promise of ageing research” *Dr Lindsay Wu* NH & MRC Senior Research Fellow UNSW Sydney; Date: Thursday, 19 May 2022; Venue: RSL Mittagong, Carrington Room.

1303rd OGM and Open Lecture

“Federalism, borders, and National Cabinet — What has the pandemic taught us?” *Professor Anne Twomey* AO Professor of Constitutional Law, Sydney Law School, University of Sydney; Date: Wednesday, 1 June 2022; Venue: Gallery Room, State Library of NSW, Video presentation: YouTube video.

RSNSW Clarke Memorial Lecture 2021

“The changing tide of human populations: an infertility trap” *John Aitken* FRSE FRSN FAA FAHMS Distinguished Emeritus Laureate Professor School of Environmental and Life Sci-

ences, University of Newcastle; Date: Friday 10 June 2022; Venue: The University Conservatorium, Laman Street, Cooks Hill, Newcastle.

Southern Highlands Branch Meeting 2022-5

“From the RNA world to building an RNA ecosystem” *Professor Pall Thordarson*, Director, UNSW RNA Institute, UNSW Sydney; Date: Thursday, 16 June; Venue: RSL Mittagong, Carrington Room.

Joint AIP, RACI, RSNSW, and ANSTO Presentation

“Big Science of Gen IV Power Reactors” *Dr Mark Ho*, Reactor Heat Transfer Specialist, ANSTO, Vice-President, Australian Nuclear Association. A joint presentation by the Australian Institute of Physics (AIP), the Royal Australian Chemical Institute (RACI), the Royal Society of NSW (RSNSW), and the Australian Nuclear Science and Technology Organisation (ANSTO); Date: Tuesday, 21 June 2022; Venue: Hybrid — ANSTO Discovery Centre, Lucas Heights NSW and live streaming.

RSNSW 200th Anniversary Dinner

Date: Friday 24 June 2022; Venue and times: Chau Chak Wing Museum (pre-dinner drinks) 6–7 pm followed by dinner (7–10 pm) in the Great Hall, The University of Sydney.

RSNSW Exhibition: NEXUS

Jean Garling Room, Mitchell Building, State Library of NSW.

Pamela Griffith Exhibition — “Art and Nature”

Pamela Griffith FRSN, Sydney Artist and Printmaker; Date: 24 June–5 July 2022 — Opening Sunday, 26 June 2–4 pm (Speaker: *Dr Saul Griffith* FRSN); Venue: Broadhurst Gallery, Hazelhurst Arts Centre, 782 Kingsway, Gymea.

Display of Society-related objects in the Chau Chak Wing Museum, University of Sydney

On weekends 12.00 pm–4.00 pm from Saturday 1 July 2022, until Sunday 25 September 2022.

1304th OGM and Open Lecture

“This is going to be different: Learning to live with Chinese Power” *Professor Hugh White* AO FASSA Emeritus Professor of Strategic Studies, Australian National University; Date: Wednesday, 6 July 2022; Venue: Gallery Room, State Library of NSW.

Southern Highlands Branch Meeting 2022-6

“The Rise of Fragility and Poor Mental Health in our Youth: Where are we going wrong?” *Clare Rowe*, Educational and Developmental Psychologist, Rowe and Associates Child and Family Psychology; Date: Thursday, 21 July; Venue: RSL Mittagong, Alexander Room.

Hunter Branch Meeting 2022-3

“The Intersection between Science and Law” *Dr Xanthé Mallett*, Associate Professor of Criminology, University of Newcastle; Date: Thursday, 28 July 2022; Venue: Newcastle Club, 40 Newcomen Street, Newcastle.

1305th OGM and Open Lecture

“Marsupials: Their secrets are all in their genes!” *Professor Kathy Belov* AO FRSN FAA, Professor of Comparative Genomics and Pro-Vice-Chancellor (Global Engagement), University of Sydney, and *Dr Elizabeth Deane* FRSN, Education Consultant; Date: Wednesday, 3 August 2022; Venue: Zoom webinar.

Ideas@theHouse: August 2022

Presented by Her Excellency the Honourable Margaret Beazley AC QC, Governor of NSW: “Manufacturing at the Atomic Scale” *Scientia Professor Michelle Simmons* AO FRS DistFRSN FAA FTSE, UNSW Sydney, Director, ARC Centre of Excellence (CQC2T), Founder, Silicon Quantum Computing; Date: Thursday, 4 August 2022; Venue: Live-streamed from Government House Sydney.

2022 Ben Haneman Lecture

“Virus on the march? Military model and metaphor in the COVID-19 pandemic” *Professor Warwick Anderson* FRSN FAHA FASSA FAHMS, Professor of History, University of Sydney; Date: Thursday, 11 August 2022; Venue: Friends Room, Mitchell Building, State Library of NSW.

Southern Highlands Branch Meeting 2022-7

“The cycle of rainfall in Eastern NSW” *Professor Michael Asten*, retired Professor of Geophysics, and *Professor Ken McCracken* FAAS; Date: Thursday, 18 August 2022; Venue: RSL Mittagong, Carrington Room.

1306th OGM and Open Lecture

“Is Fairweather an Australian artist? And does it matter?” *Claire Roberts* FAHA, Associate Professor of Art History, University of Melbourne, in conversation with *Nicholas Jose*, Novelist and Emeritus Professor, University of Adelaide; Date: Wednesday, 7 September 2022; Venue: Zoom webinar.

Southern Highlands Branch Meeting 2022-8

“Scattering neutrons to explore the materials found on the dwarf planets of our solar system” *Dr Helen Maynard-Casely*, Senior Instrument Scientist, ANSTO; Date: Thursday, 15 September 2022; Venue: RSL Mittagong, Carrington Room.

In memory of Emeritus Professor Robin King FRSN

“Our respects to Emeritus Professor Robin King, FRSN FTSE HonFIEAust CPEng (Ret)” A hybrid memorial event organised by Engineers Australia; Date: Tuesday, 20 September 2022; Venue: Engineers Australia Sydney Office, Mezzanine Floor, 44 Market Street, Sydney or online webinar.

1307th OGM and Open Lecture

“The Global Economy and Australia’s Outlook: Geoff Harcourt’s contribution to the theory of productivity growth” Geoff Harcourt FRSN (1931–2021).¹ *Dr Don Russell*, Chair, Australian Super, *Ms Jane Drake-Brockman*, Visiting Fellow, University of Adelaide, and *Emeritus Professor Robert Marks* FRSN; Date: Wednesday, 5 October 2022; Venue: Gallery Room, Mitchell Building, State Library of NSW and YouTube video.

Southern Highlands Branch Meeting 2022-9

“Judging a Jest: Humour and Censorship” *Dr Jessica Milner Davis* FRSN, Honorary Research Associate, University of Sydney; Date: Thursday, 20 October 2022; Venue: RSL Mittagong, Carrington Room.

ATSE ACTIVATE Conference 2022

ACTIVATE: A tech-powered human-driven future; A STEM symposium presented by the Australian Academy of Technological Sciences & Engineering; Dates: 25–27 October 2022; Venue: the Sydney Masonic Centre Conference Centre, Sydney and live streaming.

RSNSW and Learned Academies Forum 2022

“Reshaping Australia: Communities In Action,” supported by Her Excellency the Honourable Margaret Beazley AC KC, Governor of New South Wales and the Office of the NSW Chief Scientist and Engineer. Dates: Thursday 3 November 2022; Venue: YouTube live streaming from Government House Sydney.²

RSNSW Bicentennial Reception, Admiralty House, Sydney

On 3 November, His Excellency, General The Honourable David Hurley hosted a Reception for the Society; he spoke, the President responded, and Mrs Hurley had written a poem to celebrate the occasion.

Joint RSNSW-Law Society of NSW Public Lecture

“The US Supreme Court: A Rogue Court in a Fragile Democracy” *Linda Greenhouse*, Senior Research Scholar, Yale Law School and President, American Philosophical Society; Date: Monday, 14 November 2022; Venue: webinar.

2022 Linnean Society of NSW Natural History Field Symposium

“Natural History of the Northeastern Sydney Basin;” Dates: Wednesday/Thursday 16–17 November (oral presentations), Friday 18 November (field trip); Venue: Hornsby RSL Club, 4 High Street, Hornsby (oral presentations), Kuring-gai Chase National Park, West Head (field trip).

¹ See his obit at P. Kriesler, T. Harcourt, and R. Marks. Geoffrey Harcourt AC FRSN (1931–2021), *Journal & Proceedings of the Royal Society of New South Wales* 155: 119–121.

² The proceedings of the Forum will be published in the June 2023 issue of the *Journal & Proceedings*.

Southern Highlands Branch Meeting 2022-10

“Green Steel” *Dr Samane Maroufi*, Centre for Sustainable Materials, Research and Technology, UNSW Sydney; Date: Thursday, 17 November 2022; Venue: RSL Mittagong, Carrington Room.

1308th OGM and 2021 Pollock Memorial Lecture

“Most of our universe is missing!: Adventures in the dark side of the cosmos” *Professor Geraint Lewis* FRSN FLSW, Professor of Astrophysics, Sydney Institute of Astronomy, University of Sydney; Date: Wednesday, 23 November 2022; Venue: Gallery Room, State Library of NSW.

RSNSW Poggendorff Lecture 2021

“A plant breeder’s perspective on food security and climate change” *Professor Richard Tretowan*, Professor of Plant Breeding, Director, Plant Breeding Institute, Sydney Institute of Agriculture, University of Sydney; Date: Wednesday, 30 November 2022; Venue: Ground Floor Auditorium, Michael Spence Building, University of Sydney Camperdown Campus.

1309th OGM and Open Lecture

“Harnessing solar energy through catalysis to make chemicals and fuel” *Professor Rose Amal* AC FRSN FAA FTSE Scientia Professor of Engineering, School of Chemical Engineering, UNSW Sydney; Date: Wednesday, 7 December 2022; Venue: Gallery Room, State Library of NSW and video presentation.



Note on Gazetting

The Government Gazette of the State of New South Wales is managed by the New South Wales Parliamentary Counsel's Office and has published Government notices, regulations, forms and orders since 1832. It went on line in 2001 and since 2014 is only to be found at <https://www.legislation.nsw.gov.au/#/gazettes>.



Government Gazette

of the State of
New South Wales

Number 50—Other
Friday, 11 February 2022

On the initiative of RSNSW Fellow Robert Whittaker AM FRSN, the Society approached His Excellency the Governor to formally gazette fellows of the Society. All current fellows were included in the first gazetting in 2018, and subsequently at the beginning of each year fellows elected in the previous year will appear in the Gazette.

As the Gazette of Friday 11 February 2022 says:

“Her Excellency, The Honourable Margaret Beazley AC QC, Governor of New South Wales, as Patron of The Royal Society of New South Wales and in furtherance of the aims of the Society in encouraging and rewarding the study and practice of Science, Art, Literature and Philosophy, is pleased to advise and acknowledge the election of the following as Fellows of the Society in 2021.”

Fellows

Proven leaders and experts in their field, entitled to use the post nominal FRSN. Please note Professorial titles — including adjuncts, conjoint, and professors of practice — have been used where applicable. Details as to their field of expertise, their resident university (or universities) or institution may be ascertained from the Royal Society of New South Wales.

ADAMS, Professor David John Adams FRSN

BALLARD, Professor John William Oman Ballard FRSN

BOLTON, Professor Philip Stewart Bolton FRSN

BOWEN, Ms Carolyn Jan Bowen AM FRSN

BUCKINGHAM, Dr Jennifer Buckingham FRSN

BYARD, Professor Roger William Byard AO FRSN

CHEN, Professor Min Chen FRSN

COLEBORNE, Professor Catharine Siobhan Coleborne FRSN

JOURNAL & PROCEEDINGS OF THE ROYAL SOCIETY OF NEW SOUTH WALES
Proceedings — Awards, Meetings, Gazetted Fellows

COPPERSMITH, Professor Susan Nan Copper-
smith FRSN

COSTER, Professor Adelle Coster FRSN

DANAIA, Associate Professor Lena Joel Danaia
FRSN

DAWES, Professor Judith Margaret Dawes FRSN

DEVITT, Dr Simon John Devitt FRSN

EBACH, Dr Malte Christian Ebach FRSN

ECCLES, Mr Jeremy Robin Eccles FRSN

FORD, Professor Michele Therese Ford FRSN

FORSTER, Professor Lesley Susan Forster FRSN

GAL, Professor Ofer Gal FRSN

GALLIOTT, Dr Jai Gallriott FRSN

GORE, Professor Jennifer Mary Gore FRSN

GRIGG, Professor Gordon Clifford Grigg FRSN

GURR, Professor Geoffrey Gurr FRSN

HERNOT, Mr Yves Pol Hernot KONM (France)
FRSN

HO, Professor Simon HO FRSN

HOGG, Dr Carolyn Jane Hogg FRSN

HULBERT, Emeritus Professor Anthony John
Hulbert FRSN

IVERS, Professor Rebecca Quentin Ivers FRSN

JACKSON PULVER, Professor Lisa Rae Jackson
Pulver AM FRSN

JAGOSE, Professor Annamarie Ruston Jagose
FRSN

KAPLAN, Emeritus Professor Gisela Kaplan FRSN

LEACH SCULLY, Dr Jackie Leach Scully FRSN

LITTLE, Professor Christopher Bond Little FRSN

LO, Professor Nathan Lo FRSN

LUCK, Associate Professor Morgan Joel Luck
FRSN

MARINO, Professor Francesco Marino FRSN

MARTIN, Professor Jennifer Louise Martin FRSN

MCKAY, Ms Kim Coral McKay AO FRSN

MCLEOD, Professor Sharynne McLeod FRSN

MEERS, Ms Samantha Doreen Meers AO FRSN

MILLER, Professor Seumas Roderick Miller FRSN

MINASIAN, Professor Robert Minasian FRSN

MORRIS, Dr John Gruffydd Morris FRSN

MORRISON, Professor Mark Daniel Morrison
FRSN

MOTION, Associate Professor Alice Elizabeth
Motion FRSN

NAPPER, Emeritus Professor Donald Harold
Napper AM FRSN

NELSON, Professor Janet Elizabeth Nelson FRSN

NETO, Professor Chiara Neto FRSN

OAKES, Professor Samantha Richelle Oakes FRSN

OPPERMANN, Dr Ian James Oppermann FRSN

PARDOE, Dr Colin Pardoe FRSN

POOLE-WARREN, Professor Laura Poole-Warren
AM FRSN

POTTS, Professor Jennifer Robyn Potts FRSN

PRENZLER, Dr Paul David Prenzler FRSN

RENDINA, Professor Louis Michael Rendina
FRSN

RINGER, Professor Simon Peter Ringer FRSN

ROGERS, Emeritus Professor Lesley Joy Rogers
FRSN

ROSS, Professor Pauline Mary Ross FRSN

RYAN, Professor Michael John Ryan FRSN

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SCHOUTEN, Mr Peter Mark Schouten AM FRSN

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Archibald Liversidge: Imperial Science under the Southern Cross

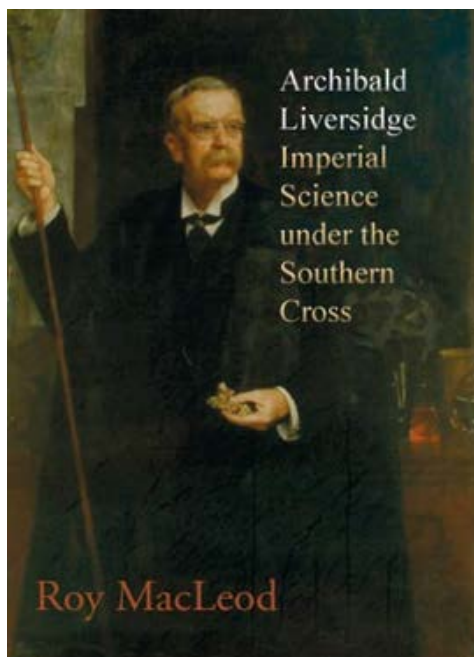
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In 1880, he visited Europe as a trustee of the Australian Museum and his report helped to establish the Industrial, Technological and Sanitary Museum which formed the basis of the present Powerhouse Museum's collection. Liversidge also played a major role in establishing the *Australasian Association for the Advancement of Science* which held its first congress in 1888.

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