



# THE BULLETIN 459

THE ROYAL SOCIETY OF NEW SOUTH WALES

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FEBRUARY 2022

## For Your Diary

- 09 JAN–30 JUN

[RSNSW Exhibition:](#)

[NEXUS 2022](#)

- 16 FEB

[Annual Meeting of the](#)

[Four Societies 2022](#)

- 17 FEB

[Australia's Secure Energy](#)

[and Climate Solution](#)

- 02 MAR

[1301<sup>st</sup> Ordinary General](#)

[Meeting, Jak Kelly Award,](#)

[Scholarship presentations](#)



## Patron of The Royal Society of NSW

Her Excellency The Honourable  
Margaret Beazley AC QC  
Governor of New South Wales

1300<sup>TH</sup> OGM AND OPEN LECTURE

## Where next for higher education after COVID-19?

Wednesday, 2 February 2022, 6:30 PM



Professor Mark Scott AO FRSN

Vice-Chancellor and Principal

The University of Sydney

Date/time: Wednesday, 2 February 2022, 6:30 PM AEDT

Venue: [Zoom Webinar](#)

Entry: No charge

Enquiries: [via email](#)

All are welcome.

See [page 4](#) for more information

## From the President

As I wrote the President's column for the Society's December 2021 Bulletin, a new variant of SARS-CoV-2 was beginning to seep into Australia and into our own immediate circle of family and friends. We now know that the Omicron variant, first reported in South Africa on 24 November 2021 and designated a variant of concern by the World Health Organisation two days later, has spread rapidly throughout our community. I trust that you and your family are preserving your mental and physical health during this recent crisis phase in what is now a long-running pandemic.

It is possible that the Omicron variant wave has reached its peak in NSW and Victoria but there may be a bump in cases when children return to school at the end of January. For that reason, reluctantly, Council will not hold the first Ordinary General Meeting of the Society for 2022 face-to-face. Now being presented online, this meeting on 02 February at 6:30 PM is important for two reasons. I will be announcing the winners of the Society's 2021 Awards and introducing Professor Mark Scott AO FRSN, Vice-Chancellor and Principal, The University of Sydney, as our lecturer. Appropriately under current circumstances, Professor Scott will be addressing [‘What next for higher education after COVID-19?’](#).

The Society did host the official launch of NEXUS on 10 December in the State Library of NSW attended by eight past Presidents of the Society, several Distinguished Fellows, Fellows, Members, and representatives of kindred organisations. This was a successful, convivial occasion and special because it is the first time since the 1920s conversaciones that the Society has been able to display some of its unique collection. I encourage all members to make time to visit NEXUS before it closes on 30 June 2022. We are grateful to the State Librarian John Vallance for agreeing to extend the exhibition until then given the disruptions by the pandemic. Opening hours are updated regularly on our [website](#).

The Society was most grateful to receive notification on 20 December 2021 that the Late Roger Alexander Layton AM FRSN generously left the Society a

\$20,000 gift in his will. [Professor Layton](#), who died on 05 June 2021, was the father of modern marketing in our region, starting in 1967 with his appointment as the first Chair of Marketing at UNSW. He was Head of the School of Marketing at UNSW from 1967 to 1992 and Dean of the Faculty from 1992 to 2002. Over the years he played a major role in the development of marketing research, education and practice in our region and in establishing its place on the world stage. Former Council Member, Honorary Professor Ian Wilkinson FRSN, was his first PhD student and Emeritus Professor Louise Young FRSN was a close colleague.

Members of the Layton family will be attending the Royal Society of NSW Vice-Regal Garden Party at Government House on 12 March 2022. This occasion provides another important celebration of the Society's Bicentennial year. I look forward to seeing many of you there.

I urge you to note in your calendar and keep an eye out for your invitation to the final celebration on 24 June 2022 when we will gather in the Great Hall of The University of Sydney for our 200<sup>th</sup> anniversary dinner. These Great Hall dinners are glittering occasions. We are hoping to accommodate 300 guests including the Governor-General of Australia and the Governor of NSW.

We continue to work for the Society and for NSW because we understand the need to enhance public discourse on a wide range of topics that are crucial to our future. The Society's program of lectures for this year on challenging topics is already well advanced, thanks to our Events Committee chaired by Emeritus Professor Christina Slade FRSN. I refer you to the website for information about all events, including those planned by our Hunter, Southern Highlands and Western NSW Branches.

Dr Susan M Pond AM FRSN  
President, Royal Society of NSW





*Past Presidents and current President of the Royal Society of NSW at the launch of NEXUS on 10 December 2021 at the State Library of NSW.*

*From L: Donald Napper; Donald Hector; George Gibbons; Brynn Hibbert; Susan Pond; Ragbir Bhathal; Karina Kelly; John Hardie; Ian Sloan.*

### Welcome to new members

The Society is pleased to welcome the following new members to the Society. They were elected on 1 December 2021 following the Fellows and Members Assessment Committee meeting held on 12 October

2021. We hope that each of you enjoys your membership and is able to participate in all that the Society has to offer.

#### Fellows

- Professor Michele Therese Ford
- Professor Simon Ho
- Professor Jennifer Louise Martin
- Professor Robert A. Minasian
- Associate Professor Alice Elizabeth Motion
- Professor Louis Michael Rendina
- Professor Charles Christopher Sorrell
- Honorary Professor Graham Edward Town
- Scientia Professor Toby Walsh

#### Members

- Mr Michael Atkinson
- Mr Benjamin Fry
- Dr Michelle Humphries
- Ms Alice O'Keefe
- Mr Nicholas Raphael

## 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, 6:30 PM

**Venue:** [Zoom Webinar](#)

**Entry:** No charge

**Enquiries:** [via email](#)

*All are welcome.*

### Summary

The COVID-19 pandemic forced dramatic changes to teaching, research and revenue sources for Australian universities. In this talk, University of Sydney Vice-Chancellor and Principal Professor Mark Scott AO FRSN will discuss how the higher education sector can build on the lessons made in the past two years to deliver transformational teaching and learning, and support research that changes the world for good.

### About the speaker

As Vice-Chancellor and Principal, **Professor Mark Scott AO FRSN** leads the University of Sydney's strategic direction, in close consultation with the Chancellor, senior leaders and the University's Senate and Academic Board.

Professor Scott is a proud alumnus of the University and holds a Bachelor of Arts, a Diploma of Education, a Master of Arts (Political Science and Government), an Honorary Doctorate (Letters) and a Professor of Practice (Education and Media) from the University of Sydney, as well as a Master of Public Administration from the John F. Kennedy School of Government at Harvard University. He has also been awarded honorary doctorates from the University of NSW and University of Technology Sydney.

In the role of Vice-Chancellor, he is committed to driving transformative change that will support students and staff from all backgrounds to excel and realise their potential, solve the world's most pressing challenges and secure a prosperous future for the University.



Professor Scott is a highly respected and successful senior leader of large and complex institutions, across public service, education and the media. Under his leadership as Secretary of the NSW Department of Education (2016 to 2021) the Department secured a record 10-year funding agreement for public schools, created School Infrastructure NSW to deliver an additional 160,000 classroom places and established the School Leadership Institute to train and develop aspiring school principals across the state.

His distinguished record of strategic leadership includes a decade as Managing Director of the ABC (2006 to 2016), where he led the organisation's transformation to be a public broadcaster in the digital era. Over that time, the ABC created new services like iView, News 24, ABC3 and digital radio; and expanded online and mobile services, such as podcasting and ABC News online.

Professor Scott has also held a number of senior editorial roles at Fairfax, including Education Editor of *The Sydney Morning Herald* and Editor-in-Chief of metropolitan, regional and community newspapers. His contribution to education reaches back to the start of his career, as a teacher in Sydney. He built on his interest in education with senior policy and leadership positions with two NSW education ministers — Terry Metherell and Virginia Chadwick — and in 2011 he was named an Officer of the Order of Australia.

## Engineering and related challenges in decarbonising the electricity system

Professor Stephen Wilson  
*University of Queensland*

**Date:** Wednesday, 16 February 2022, 6:00 PM

**Venue:** Either in person at the UTS Aerial Function Centre (Building 10, Level 7, 235 Jones Street, Ultimo) and via a Zoom webinar

**Entry:** No charge

**Registration:** required for [in-person attendance at UTS](#) or the [Zoom Webinar](#)

### Summary

Everyone, it seems, is talking about the energy transition. Electricity is pivotal, thermal power plants are highly visible, and few in number. Although far short of total greenhouse gas emissions, power generation is the single largest piece of the emissions pie in most countries, including Australia. Electricity is the obvious place to start reducing carbon dioxide emissions, and reduction strategies in other sectors — such as battery-powered vehicles — rely on more electricity. Achieving net-zero emissions economy-wide will require negative emissions somewhere, most likely including in the electricity sector.

Some assume that 100% renewable energy is a simple, complete, ‘plug-and-play’ solution. This would be appealing, if not for the fine print. Electricity is the largest and seems the easiest sector. But that doesn’t mean decarbonising electricity will be easy, cheap, and sustainably popular. Engineering complete decarbonisation of electricity systems within the next three decades is likely to become progressively harder. Hence it will be increasingly expensive, and risks becoming politically unpopular.

In this talk, Stephen Wilson will share some insights from recent studies and current research, explore with Australian examples some of the engineering-related challenges that will need to be solved, and note opportunities for Australian engineering to contribute at home and abroad.



### About the speaker



Stephen Wilson is an Adjunct Professor at the University of Queensland who has worked at the intersection of engineering, economics and policy, energy security and the geopolitics of energy and resources across three decades and in over 30 countries. Stephen has worked on projects in energy efficiency and demand-side management, electricity regulation, tariffs and pricing, climate change and energy policy, natural gas, pipeline and storage infrastructure master plans, security of supply and bankability studies, coal and uranium mining, renewable energy and system modelling. Originally trained as a mechanical engineer, Stephen has spent his career in energy economics, as a consultant based in Melbourne, Hong Kong and later London, as general manager of market and industry analysis in the energy product group of a global mining company, and as a full-time teaching and research Professor at UQ. Stephen is Managing Director of Cape Otway Associates.

## From the Archives: The Prime Minister, the property developer and the sculptor

by Bruce Ramage (Secretary)

*This is the seventh in a series of articles that highlights items from the Society's extensive archives, some of which are held in the State Library of NSW, the NSW State Archives and within the Society itself.*

### The beginnings

In January 1943 Henry F Halloran provided the Society with £100 for the establishment of a new award. After consultation with Halloran over many months, it was agreed that the gift be for the purpose of providing two medals, one of which was to be awarded for distinguished services to science and human welfare in the Southern Hemisphere. The names of the medals took even longer to be determined. Halloran wanted one of them to be called 'The Southern Cross Medal' but the Council at its meeting on 30 June 1943 determined its preference: 'the Southern Cross Medal to be named the "James Cook Medal" rather than "Southern Cross Medal" as the words



Henry F Halloran

"Southern Cross" had been cheapened by being largely used for a trade name, and as a name for garages, theatres and so on'.

In the annual report of Council 1943–44 it was reported that the James Cook Medal would be awarded not more than once annually. For the purpose of this award, there shall be no limitations of the field of science or its applications; and Southern Hemisphere shall include South Africa, South America, Australia, New Zealand, all the Dutch East Indies and the Islands of the Southern Seas.

The second medal to be called the Edgeworth David Medal would be 'to encourage the younger research worker and would be presented annually for distinguished contributions in one of the following

fields, namely, Biological Science, Physical Science, or Social Science, such fields of research to be considered in turn in successive years. Recipients should be under thirty-five years of age, and the work done shall be in or on Australia and New Zealand'.

Unsurprisingly a committee was formed to make recommendations on the design in January 1944. As early as March 1944 Council had decided in principle that 'the design in which there is a human figure rising out of a map should be accepted for the James Cook Medal'. Halloran had expressed his preference for the Edgeworth David Medal to have a portrait of David and Council did not demur.

The renowned sculptor Lyndon Dadswell had been engaged to design both medals and Council examined plaster casts in January 1944 when 'suggestions were made'. Two years later at a Council meeting on 30 October 1946, it was agreed that the opinion of the Society's members should be obtained on the designs before proceeding.

In February 1947 a relief sculpture of the head of the late Professor Edgeworth David was submitted by Dadswell, who had agreed to submit a further plaque for the Council's consideration.

In April 1947 Council agreed on the final designs for both medals.

The next issue was the striking of the medals.

Although the design of the James Cook Medal had been accepted in principle by Council on 5 April 1944, the striking of the medal was still awaited in February 1947. Two quotations were obtained but when the preferred one from Messrs C McNeil & Co was withdrawn, the one from Angus & Coote, of £165 (plus Sales Tax of £12.6 per medal), was accepted.

### The donor

Henry Ferdinand Halloran (1869–1953) was a realtor. He was educated at Petersham Public School, Newington College and Sydney Boys' High School. His mother's family background influenced his career in land development.

(continued)

Articled to Arthur Stephen at Blue Gum Flat, near Ourimbah, Halloran became a licensed surveyor (1890), valuer (1895) and conveyancer (1896). By 1897 he had set up in Sydney as Henry F. Halloran & Co., specialising in land and property dealings. His *Property Owners Guide* (1900) epitomized the entrepreneurial verve that made his firm prominent.

His 1906–08 subdivisions at Seaforth, Cronulla Highlands, Warriewood, Stanwell Park, Avoca and Yow Yow (near Gosford) emphasized Halloran's predilection for coastal waterways. One of the earliest practitioners of the American manner of real estate development, he used colourful brochures and high-pressure salesmanship. Halloran's preliminary artistic layout of estates was praised by the Town Planning Association of New South Wales (of which he was a fellow and later a vice-president). In his paper at the second Australian Town Planning Conference and Exhibition in Brisbane in 1918, he stressed the necessity of zoning cities and towns 'in the interest of property values'. Halloran represented New South Wales at the 1923 international conference on town planning at Gothenburg, Sweden, and, with Sir John Sulman, the Commonwealth at the 1924 Amsterdam conference. He was a member of the Royal Institution of Chartered Surveyors, London, and of the American Institute of Planners, and a fellow of the Royal Society of Arts, London, and the Institution of Surveyors, New South Wales.

Halloran embarked on a number of long-range plans, focusing on Canberra, Port Stephens and Jervis Bay. However, they were thwarted by the Depression. He had established Canberra Freehold Estates after the proclamation of the Jervis Bay Act (1915) and laid out various subdivisions on Canberra approaches. Envisaged, the most ambitious, was sited on the Quean-



*Lyndon Dadswell*

beyan-Cooma railway and included clear views of the capital. Its circular and radiating features recalled Walter Burley Griffin's 1912 plan, and with Tanilba Bay and Stanwell Tops, reflected his interest in rustic stone for pillars, archways and rotundas. He also subdivided numerous estates at Lake Macquarie, the Blue Mountains and the central coast. Realty Realisations Ltd was incorporated on 5 June 1930 to take over real estate agency activities, leaving Henry F. Halloran & Co. to act as advisers, conveyancers, surveyors and town planners.

As well as a member of the Royal Society of NSW, Halloran was a member of several clubs and groups. A liking for local history led him to join the Royal Australian Historical Society and enjoy the Australasian Pioneers' Club. A portrait by Joseph Wolinski is held by the family and he is commemorated by the Halloran fund of the New South Wales branch of the Institution of Surveyors, Australia and the University of Sydney's Henry Halloran Trust which fosters research and innovation in urban development.

## The designer

Lyndon Raymond Dadswell (1908–1986) was a sculptor and technical college teacher. Educated at Sydney Church of England Grammar School (Shore), Lyndon attended Julian Ashton's Sydney Art School (1924–25) and East Sydney Technical College (1926–29). Trained under Rayner Hoff, Dadswell moved away from an early interest in commercial art to specialise in sculpture and modelling.

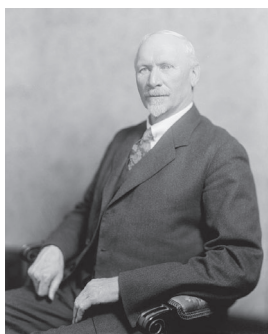
In 1929 Dadswell left the technical college to work as an assistant to Paul Montford in Melbourne on the sculptural project for Victoria's memorial to World War I, the Shrine of Remembrance. Dadswell produced twelve huge relief panels in Hawkesbury freestone illustrating all sections of the Australian armed services.

Returning to Sydney in 1932, Dadswell completed a number of commissions, such as a plaque of Bertha McNamara (1931, Sydney Trades Hall) and a bust of Edward William Knox (1933, Colonial Sugar Refining Co. Ltd). When he won the Wynne prize

*(continued)*

Dadswell remained at the Royal Academy until 1937, when he returned to Australia to take up a teaching position at East Sydney Technical College. He participated in academic causes such as the inaugural Australian Academy of Art exhibition (1938) and joined the Society of Artists' executive and hanging committees.

In 1943 Dadswell returned to East Sydney Technical College (later the National Art School), where he became head of the division of fine arts in 1966. Due to his commitment to sculptural experimentation, his skills as a modeller and his belief in fostering the artistic growth of each student, the school became a nationally respected institution for sculpture training. His work was exhibited in Sydney and Melbourne. Dadswell's contribution to Australian sculpture was three-fold: through his own substantial and varied



body of studio work; through his activities and innovations as a teacher of two generations; and through his public role as a sculptor, and promoter, of major civic commissions. He created sculptures for the Maritime Services Board building, Sydney (1952); Commonwealth banks in Hobart and Sydney (1954) and Perth (1960); the Newcastle War Memorial Cultural Centre (1957); the R. G. Menzies Library, Australian National University (1964); the Jewish War Memorial, Macca-bean Hall, Sydney (1965); and the Campbell Park defence establishment, Canberra (1977).



Dadswell was a foundation member (1951) and later president of the Society of Sculptors and Associates, a group that lobbied for the greater presence of sculpture in the Australian public environment. He served as an adviser to the National Capital Development Commission, Canberra.

In 1967 Dadswell had been awarded the International Co-operation Art Award and the Britannica Australia award for art, and in 1973 an Australian Council for the Arts award. He was appointed CMG in 1978. That year the Art Gallery of New South Wales devoted a major retrospective exhibition to his work. Dadswell was committed to the concept of ceaseless experiment and change in the develop-

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ment of individual creativity. He died on 7 November 1986 at Elizabeth Bay. His work is represented in the Australian War Memorial, the National Gallery of Australia and most State galleries.

### The first recipients

The first James Cook Medal was awarded in 1947 to Field-Marshal the Rt. Hon. **J.C. Smuts**, PC, CH, KC, DTD, LL D, FRS, Chancellor of the University of Cape Town, and Prime Minister of the Union of South Africa.

The first Edgeworth David Medal was awarded jointly in 1948 to Ronald Giovanelli (astrophysics) and Ernest Ritchie (organic chemistry).

**Ronald Gordon Giovanelli**, DSc, FAA (1915–1984) was an Australian solar researcher, astronomer and physicist, who contributed to the fields of astrophysics, solar physics, radiative transfer, and astronomical optics. His career spanned more than 40 years, commencing prior to World War II. He was elected a Fellow of the Australian Academy of Science in 1962 for his contributions in the field of physics.

Giovanelli served as Chief of the Physics Division of CSIRO from 1958–1976, during which he also became Chairman of the Australian National Committee from 1962–1965, President of the Astronomical Society of Australia from 1968–1971, and

President of Commission 12 (Solar Radiation) of the International Astronomical Union from 1973–1976. He served as Chairman of the Australian National Committee for Solar-Terrestrial Physics in 1973, and from 1979–81.

**Ernest Ritchie** (1917–1976) was an organic chemist. In 1933 he entered the University of Sydney (BSc, 1937; MSc, 1939; DSc, 1954) where he graduated with first-class honours in general and inorganic chemistry. He belonged to a group that included John Cornforth, Arthur Birch, Rita Harradence and (Sir) Ronald Nyholm, all of whom were to make outstanding contributions to chemical research.

On graduation Ritchie joined the staff of the University of Sydney as a demonstrator and pursued research in synthetic organic chemistry with Francis Lions. Promoted lecturer (1941) and senior lecturer (1946), he was a stimulating and methodical teacher, ‘often speaking without notes’. He became professor of organic chemistry in 1967 and Head of the School of Chemistry in 1971–72.



*Ernest Ritchie*



### Location

Jean Garling Room  
Mitchell Building, State Library of NSW  
1 Shakespeare Place, Sydney

### Opening Hours (9 January–30 June 2022)

Monday: 2:00–5:00 PM  
Thursday: 2:00–5:00 PM  
Sunday: 2:00–5:00 PM

### About the exhibition

This Exhibition begins a year of celebrations to mark the Society's contributions to the intellectual life of NSW over 200 years. It is the perfect moment to reinforce our commitment to enriching lives through knowledge and inquiry. As we think about our future, we are informed by our history.

NEXUS has two meanings: a central or focal point; and a connection or series of connections linking two or more things. From the beginning, the Society has

epitomised both meanings, as a forum for ideas and discovery, exposing us to the latest research and promoting awareness of some of the major issues confronting humanity. With 200 years of history, the exhibition can only showcase a fraction of the Society's archives and achievements in telling the story of its Origins, Ideas, Advances, and Impacts.

Highlights of the exhibition include:

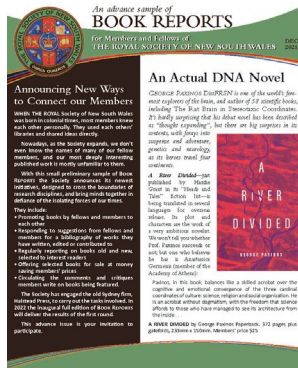
- Letters from Professor Sir T W Edgeworth David, Antarctic explorer, on sun thaw line observations and arranging a presentation on the British Antarctic Expedition (1907–1909) led by Sir Ernest Shackleton
- Two original letters, including one with box-kite illustrations, of Lawrence Hargrave, a noted aviation pioneer and the first in Australia to fly (attached to four box kites of his own design), who published 23 papers on aeronautics in the Society's *Journal & Proceedings*.

# Royal Society of NSW online book catalogue

## Announcing a new service for Society members

As a means of creating greater collegiality among members of the Society, the Publishing Committee, in conjunction with Halstead Press, has created a mechanism for all members to be made aware of the major published work of your Society colleagues on a regular basis. Conversely, this is also an opportunity for members to make their work known to other members they may not know, and to create an additional targeted market for their works.

Having briefly explored some of what members have written it is wonderful to see the range and extent of the subject matter covered. And it's not all non-fiction — some of our members have been quite creative! The Community



Engagement Committee is planning to set up a Royal Society of NSW Book Club which will take titles from this catalogue as the basis for its selection of books for discussion.

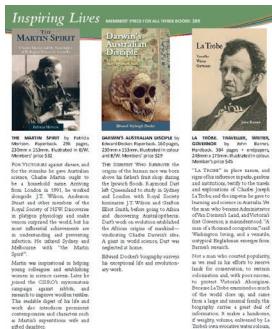
We will trial this initiative for 12 months to see the extent of the tangible and intangible benefits members might obtain. As part of the project the Society will compile a bibliography of members' books which will be available on its website.

Here's how it works:

- Members supply Halstead Press with information about their books using a standard form to be supplied with the email announcement of the scheme. This information is entered in the bibliography and each book is considered for the catalogue after availability and discounting options are considered. Note that we reserve the right not to include all books offered by members
- The Society will supply members on a regular basis with a descriptive catalogue of selected books available to buy at members' prices, below recommended retail prices
- Members can select books they wish to purchase from the catalogue and order them direct from Halstead Press
- The scheme operates on an OPT-OUT basis.

Works in the catalogue are offered at prices which are discounted from the recommended retail price. The Society receives a small percentage of the sale price of each book, so this is also an opportunity for you to add to the financial resources of the Society while you also benefit.

Watch out for the introductory email!



## Report: Southern Highlands Branch

by Anne Wood (Branch Secretary)

Our **February lecture** is to be delivered by Robert James Parker, founder of *Nuclear for Climate Australia*. In this presentation, he will express his view that for a dry climate, nuclear fission is the only proven means of achieving economical ultra low carbon energy. Rob has recently conducted a poll through Essential Polling asking the question 'To what extent do you support or oppose Australia developing nuclear power plants for the generation of electricity?' The results of this 28 September 2021 poll were as follows: Support 50%, Oppose 32%, Unsure 18%.

The committee expects that this will be a very popular and controversial lecture for our first face-to-face in 2022 at the Mittagong RSL Carrington Room. We have just been advised that functions at the RSL are still being organised on the basis of 1 person per 2 square metres. This means that our lecture schedule should not be affected as the Carrington Room can still hold 216 people safely. Restrictions which will

apply to our lectures still involve signing in with an RSL membership card with photo ID, QR coding and the wearing of masks, along with hand sanitation. We will keep Council informed as the year progresses as to our ability to progress with face-to-face meetings, but at this stage are reasonably confident that all of our lectures will follow this format.

In our experience to date at this wonderful venue, which we are allowed to access on a *community scholarship basis*, we have found the surveillance of the attendees by the RSL staff has been excellent, and so too the implementation of all safety procedures. This branch owes much gratitude to the management of this excellent local venue.

Work is now in progress in constructing our lecture calendar for 2022. We have some outstanding presenters expressing interest in speaking to our branch attendees. There is still some work to be done on finalising the dates suitable for everyone. A work in progress!

## The Society's Patron visits its NEXUS exhibition

The Society was pleased to host its Patron, Her Excellency the Honourable Margaret Beazley AC QC, Governor of NSW, and her husband Mr Dennis Wilson, at a private viewing of its bicentennial Exhibition NEXUS at the State Library of NSW on 30 November 2021. The State Librarian, Dr John Vallance, welcomed Her Excellency to the State Library while our President introduced her to the exhibition. Commentary on the exhibition was provided by our Executive Officer, Wendy Enevoldsen, and our Librarian John Hardie gave detailed background to significant parts of the exhibition. Our Secretary Bruce Ramage was also in attendance.



*The Society's Patron and Mr Dennis Wilson with Society figures at the NEXUS exhibition*

## Vale Geoffrey Colin Harcourt AC FRSN FASSA (1931–2021)

The Royal Society of NSW records with great sadness the passing of one of its valued and eminent Fellows, Professor Emeritus Geoffrey Harcourt AC FRSN FASSA, on 7 December 2021 at the age of 90.



Geoff Harcourt was a graduate of Melbourne and Cambridge universities. He taught at Adelaide and Cambridge, which has remembered him as an economist of world renown.

He authored or edited 29 books and published over 380 articles, chapters in books, and reviews. A Fellow of the Academy of the Social Sciences in both Australia and the UK, he was made an Officer in the General Division of the Order of Australia (AO) in 1994 ‘for services to economic theory and to the history of economic thought’ and, subsequently in 2018, a Companion in the General Division of

the Order of Australia (AC) ‘for eminent service to higher education as an academic economist and author, particularly in the fields of Post-Keynesian economics, capital theory and economic thought’.

He leaves behind an outstanding professional legacy. His most influential book, *Some Cambridge Controversies in the Theory of Capital* (1972), outlined a dispute between economists at Cambridge, England, and MIT in Cambridge, Massachusetts. (England won.) He spent his final years at UNSW.

But he contributed beyond his prolific activities as an economist. Having a burning dislike of injustice and intolerance, he sought to build a more just and equitable society. From being active in the anti-Vietnam War movement in Adelaide in the 1960s through to mentoring Indigenous students doing undergraduate and graduate courses at UNSW in his later years, Geoff Harcourt followed his convictions with his actions. For all his achievements and passions, Geoff was always down to earth, always interested in people, especially young people, and always quick with witty and insightful comments.

## Australia Day Honours 2022

The Society is pleased to note the awards in the 2022 Australia Day Honours that have gone to Society Fellows: Members in the Order of Australia to **Associate Professor Kristine Barlow-Stewart AM FRSN** and **Ms Elizabeth Ann Macgregor AM OBE FRSN**.

Professor Barlow-Stewart, who is the Director of the Master of Genetic Counselling at the University of Sydney Medical School, received her honour for significant service to medicine in the field of human genetics, and to education.

Ms Elizabeth Ann Macgregor, who served as the Director of the Museum of Contemporary Art from 1999 to 2021, received her honour for significant service to museums and galleries through leadership roles with arts institutions.

The Council of the Society extends its warmest congratulations to each of those so honoured on Australia Day 2022.

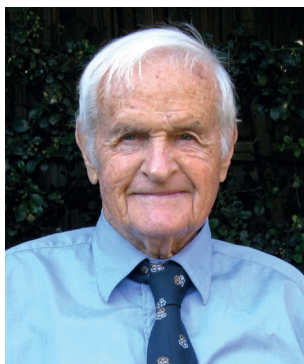
**Australia  
Day 2022  
Honours**



## Vale Dr David Branagan AM FRSN (1930–2022)

The Royal Society of NSW records with great regret the passing of one of its Past Presidents, Dr David F. Branagan AM FRSN, on 9 January 2022 at the age of 91.

David Branagan was born in Broken Hill in 1930 and combined his love of geology with his equally strong love of singing and choral music, in which he was heavily involved. He was amongst Australia's foremost geologists with an international reputation in the history of geology and geologists in Australasia, a field in which he made outstanding and original contributions for over fifty years. He wrote the authoritative biography of Professor T W Edgeworth David, the famous Antarctic explorer and Professor of Geology at the University of Sydney, and also a former President of the Society. This outstanding work was shortlisted for the NSW Premier's Literary Awards.



A long-standing geological educator and academic at the University of Sydney, he is perhaps best known in geological circles for his co-authorship of the standard definitive and comprehensive handbook on the *Field Geology of NSW*, in conjunction with his colleague Gordon Packham.

Dr Branagan was a steadfast supporter of the Society, exemplified by his commitment to the work conducted by the Society to document and report on its extensive library collection. He was appointed by the Society to work on the National Library of Australia's Community Heritage Grant project which the Society was awarded in 2006/7. This has formed the basis for much of the work currently being undertaken on the Society's collection. David very kindly donated a portion of his archives and his comprehensive scientific library to the Society.

Dr Branagan served as President of the Society in 1995 and was awarded the Royal Society of NSW Medal for services to science and the Society in 1998.

The Council of the Society extends its deep condolences to his family on their sad loss. A memorial service is expected to be held at a later date.

## Recent Events now on YouTube: December 2021

All online events from the Royal Society of NSW are recorded and are made available for subsequent viewing on our YouTube channel, [youtube.com/royalsocnsw](https://youtube.com/royalsocnsw), as well as being curated on the [Presentations page](#) of the Society's website (under the Publishing menu).

In the final event for this year, held on 1 December 2021, Professor Richard Bryant AC FASSA FAA FAHMS, Scientia Professor of Psychology and Director of the Traumatic Stress Clinic at UNSW (Sydney), spoke on '[Managing psychological distress in times of stress: the stress of COVID-19 and all that](#)'. In the talk, Professor Bryant spoke of key mechanisms that

promote better mental health after adversity, and particularly of brief mental health programs that can be readily disseminated to people in times of need.

The link above is to a video on the Society's YouTube channel, which now includes more than 70 presentations in its library.

**Recorded  
Events**



[youtube.com/royalsocnsw](https://youtube.com/royalsocnsw)

## Society Fellow elected as a 2021 Fellow of the Academy of Technology and Engineering

The Royal Society of NSW is delighted to learn of the recognition of one of its Fellows as a new Fellow of the Academy of Technology and Engineering, elected in November 2021. He is **Professor Jason Sharples FRSN FTSE** of UNSW (Canberra), a Bundjalung man, who uses predictive mathematical models to prevent catastrophic bushfires.

Professor Jason Sharples is a mathematical scientist and an internationally recognised expert in dynamic bushfire behaviour and extreme bushfire development. His research has extensively influenced policy and practice in Australia and internationally. Further, some recommenda-



tions of the NSW Bushfire Inquiry into the 2019–20 bushfires were framed by his research. Using complex predictive mathematical models, Professor Sharples's research aims to prevent big fires from forming by forecasting danger periods and predicting areas where small fires could develop into big ones. He directs several national research projects and contributes to the international professional dialogue. A Bundjalung man, Jason Sharples says Indigenous Australians have been innovators and scientists for thousands of years, a heritage that can continue today, especially through fire and land management.

Professor Sharples addressed the Royal Society of NSW in June 2021 on his research in a fascinating talk titled '[Extreme bushfires and the age of violent pyroconvection](#)'. This talk is available on [YouTube](#).

The Council of the Royal Society of NSW extends its warmest congratulations to Professor Jason Sharples on this recognition by the Technology and Engineering Academy for his achievements.

## Recordings of the 2021 Forum now on YouTube

The Royal Society of NSW, together with its Learned Academy partners, is pleased to announce that the recordings from the 2021 Forum, *Power and Peril of the Digital Age*, are now available on the Society's YouTube channel. This year the Forum was held online over two mornings on 4 and 5 November 2021.



The recordings can be accessed directly from our [YouTube channel](#) or from the [Power and Peril of Digital Age page](#) on the Society's website. The latter provides links to the videos of each segment of the program and also access to the program brochure that includes summaries of each of the sessions and the biographical information about the speakers and panellists. Timing marks on each of the videos enable ready access to the individual components of each session.

## List of proposed events for 2022

Kindly note that this is a provisional list and will be subject to change, due to the prevalence of COVID-19 during early 2022. Updates will be reflected in future issues of the Bulletin and on [our website](#).

Date	Event
Wednesday, 2 February 6:30 PM AEDT	1300 <sup>th</sup> OGM and Open Lecture Where next for higher education after COVID-19? Professor Mark Scott AO FRSN, University of Sydney
Wednesday, 16 February 6:00 PM AEDT	Annual Meeting of the Four Societies 2022 Engineering and related Challenges in Decarbonising the Electricity System Professor Stephen Wilson, University of Queensland
Thursday, 17 February 6:30 PM AEDT	Southern Highlands Lecture Australia's Secure Energy and Climate Solution Robert Parker, ANU and UNSW Mittagong RSL Club, Cnr Hume Highway & Bessemer Street, Mittagong
Wednesday, 2 March 6:30 PM AEDT	1301 <sup>st</sup> OGM and Open Lecture 2021 Jak Kelly Award and RSNSW Scholarship Award Presentations Zain Mehdi (Jak Kelly Award); Sajad Abolpour Moshizi, Harry Marquis, Kevin Chau (RSNSW Scholarship Winners)
Tuesday, 15 March 1:00 PM AEDT	Western NSW Meeting 2022-1 Annual General Meeting followed by a panel discussion on Trust and Science Ponton Theatre, Charles Stuart University (Bathurst Campus)
Thursday, 17 March 6:30 PM AEDT	Clarke Memorial Lecture (2020 — delayed) of the Royal Society of NSW From bulldozers, pests, and pathogens to climate change and urban futures: the tough life of plants Distinguished Professor Michelle Leishman, Macquarie University
Wednesday, 6 April 6:30 PM AEST	1302 <sup>nd</sup> OGM and Open Lecture New frontiers in smart sensor technology for a healthier, safer and sustainable future Professor Ben Eggleton FRSN FAA FTSE, University of Sydney
Thursday, 21 April 6:30 PM AEST	Ideas@theHouse: April 2022 Topic: to be advised Richard Tognetti AO, Australian Chamber Orchestra
Wednesday, 4 May 6:30 PM AEST	Liversidge Lecture (2020 — delayed) Topic: to be advised Professor Richard Payne FRSN, University of Sydney

Date	Event
Wednesday, 18 May 12:00 PM AEST	Western NSW Meeting 2022-2 Making a living on the Plains — Stone tools and Archaeology of Aboriginal societies Dr Colin Pardoe FRSN MAIATSI Wal Fife Theatre (Building 14, Room 212) Charles Stuart University (Wagga Wagga Campus)
Wednesday, 1 June 6:30 PM AEST	1303 <sup>rd</sup> OGM and Open Lecture Federalism, borders and National Cabinet: What has the pandemic taught us? Professor Anne Twomey AO, University of Sydney
Wednesday, 6 July 6:30 PM AEST	1304 <sup>th</sup> OGM and Open Lecture This is going to be different: Learning to live with Chinese power Emeritus Professor Hugh White AO FASSA, Australian National University
Wednesday, 27 July 6:30 PM AEST	Ideas@theHouse: July 2022 Topic: to be advised Rachel Perkins
Wednesday, 3 August 6:30 PM AEST	1305 <sup>th</sup> OGM and Open Lecture Topic: to be advised Professor Kathy Belov AO FRSN, University of Sydney
Wednesday, 7 September 6:30 PM AEST	1306 <sup>th</sup> OGM and Open Lecture Is Fairweather an Australian artist? And does it matter? Claire Roberts, University of Melbourne and Nick Jose, University of Adelaide
Wednesday, 5 October 6:30 PM AEDT	1307 <sup>th</sup> OGM and Open Lecture Topic: to be advised Presenter: to be advised
Thursday, 3 November 6:30 PM AEDT	Royal Society of NSW and Learned Societies Annual Forum Topic: to be advised Presenter: to be advised
Wednesday, 1 December 6:30 PM AEDT	1308 <sup>th</sup> OGM and Open Lecture Topic: to be advised Presenter: to be advised

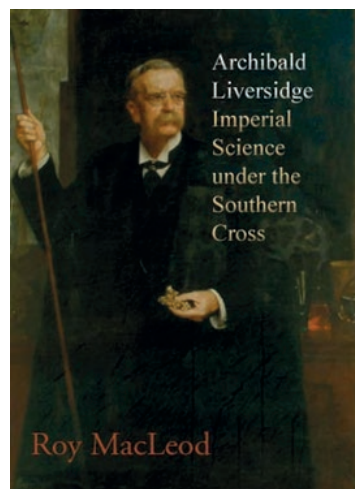
## Archibald Liversidge: Imperial Science under the Southern Cross

When Archibald Liversidge first arrived at Sydney University in 1872 as reader in geology and assistant in the laboratory, he had about ten students and two rooms in the main building. In 1874, he became professor of geology and mineralogy; by 1879, he had persuaded the senate to open a faculty of science. He became its first dean in 1882. 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 the setting up of the Australasian Association for the Advancement of Science which held its first congress in 1888.

One of his greatest contributions was to science education. He worked tirelessly to secure proper recognition of science in both secondary and tertiary education. In the preface of his book, Professor MacLeod comments: 'Liversidge remained confident that Australia's path would follow the route of the "moving metropolis", strengthened by the bonds that tied Australia to its British heritage. In that heritage lay his life, and through that heritage, flowed the genius of imperial science in New South Wales'. To order your copy, please complete the [MacLeod: Liversidge order form](#) and return it to:

The Royal Society of NSW (Liversidge book)  
PO Box 576  
Crows Nest NSW 1585  
Australia

or contact the Society:  
Phone: +61 2 9431 8691  
Email: [info@royalsoc.org.au](mailto:info@royalsoc.org.au)



## The Society and social media

The Society's presence on social media platforms is slowly but surely growing. Our [Facebook page](#), [Twitter feed](#) and [YouTube channel](#) continue to attract and engage followers and viewers, and we continue to build a repository of online events conducted recently on YouTube. The icons on the right will take the reader to the platforms' respective pages, from where they can follow and subscribe to the Society, and be notified of new content.



## Current Council and Office-Bearers

The current Council and office-bearers of the Society are:

Patron	Her Excellency The Honourable Margaret Beazley AC QC, Governor of New South Wales
President	<a href="#">Dr Susan Pond AM FRSN FTSE FAHMS</a>
Vice-President	<a href="#">Ms Judith Wheeldon AM FRSN</a>
Past President	<a href="#">Emeritus Professor Ian Sloan AO FRSN FAA</a>
Secretary	<a href="#">Mr Bruce Ramage MRSN</a>
Treasurer	<a href="#">Mr John Cameron MRSN</a>
Librarian	<a href="#">Mr John Hardie AM FRSN</a>
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Councillors	<a href="#">Professor Katherine Belov AO FRSN</a> <a href="#">Ms Pamela Griffith FRSN</a> <a href="#">Dr Donald Hector AM FRSN</a> <a href="#">Dr Davina Jackson FRSN</a> <a href="#">Professor Eric Knight FRSN</a> <a href="#">Emeritus Professor Robert Marks FRSN</a> <a href="#">Emerita Professor Christina Slade FRSN</a>
Hunter Branch Representative	<a href="#">Professor George Willis FRSN FAA</a>
Southern Highlands Branch Representative	<a href="#">Mr Mike Jonas MRSN</a>
Western Branch Representative	Dr David Nash FRSN

Editor: [Jason Antony MRSN](#)

