



THE BULLETIN 461

THE ROYAL SOCIETY OF NEW SOUTH WALES

ABN 76 470 896 415

ISSN 1039-1843

APRIL 2022

For Your Diary

- 09 JAN–30 JUN
[RSNSW Exhibition: NEXUS 2022](#)
- 20 APR
[Ideas@theHouse: 'Nothing'](#)
- 04 MAY
[Liversidge Lecture](#)
- 11 MAY
[Poggendorff Lecture](#)
- 18 MAY
[Western NSW Branch Meeting 2022-2](#)



Patron of The Royal Society of NSW

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

FACE-TO-FACE RETURNS!

New beginnings ❖ New format ❖ New bar

155TH ANNUAL GENERAL MEETING AND
1302ND OGM AND OPEN LECTURE

**New frontiers in smart sensor technology for
a healthier, safer and sustainable future**

Wednesday, 6 April 2022



Professor Benjamin Eggleton FRSN FAA FTSE

University of Sydney Nano Institute
NSW Smart Sensing Network

Date/time: Wednesday, 6 April 2022, 5.30 PM for 6.00 PM AEST

Venue: Gallery Room, State Library of NSW, Sydney

Registration: [Required through Membes](#)

Entry: \$35 (Society members), \$45 (non-members), \$5 (students)

All are welcome.

See [page 4](#) for more information

From the President

Since I wrote my column for the February Bulletin, I am pleased and grateful to record that our Patron the Honourable Margaret Beazley AC QC has hosted the Society twice at Government House. The first occasion was a small ceremony on **23 February** at which Her Excellency presented medals and certificates to twenty-one RSNNSW Awards Winners from 2019, 2020 and 2021, the lag in years, and small attendance engendered of course by the pandemic.



We recognised the achievements of some of the finest minds in NSW as well as the exemplary service by volunteers who generously contributed their expertise to the Society. The latter Awards for Service to the Society were presented to Dr Erik Aslaksen FRSN, the Honourable John Dowd AO FRSN QC, Emeritus Professor Heinrich Hora FRSN, Mr Hubert Regtop MRSN and Mr Richard Wilmott MRSN (pictured above with Her Excellency). Congratulations to all winners.

[Further details about all awardees](#)

are posted on the Society's website. We were also able



to gather most of the 2021/2022 Council members who attended for a photograph with Her Excellency.

The second occasion was the RSNNSW Bicentennial Garden Party on **12 March** on which you will find a full report elsewhere in this Bulletin. The bright blue sky that emerged from the storm clouds before and after the celebration added lustre to this notable milestone for the Society and NSW.

Turning to governance of the Society, at its meeting on **16 March** Council paused to record that the

respective terms of three Council Members who are not standing for re-election will end on **6 April**. In addition to Committee Chair and Member roles, Emeritus Professor Ian Sloan AO FRSN FAA served as President from 2018–2020 and Immediate Past President in 2021, Dr Donald Hector AM FRSN served as President from 2012–2015 and Council Member for the past 12 months, and Professor Eric Knight FRSN served as Council Member for the past 12 months. We thank them most sincerely for their significant contributions to the Society.



The electronic ballot to elect four Council Members for a two-year term is now open until midday on **5 April**. Please refer to the personalised email sent to you from ElectionBuddy Elections on 15 March with the subject line 'Vote now: The Royal Society of NSW — Council Elections 2022'. Each of the Society's three Branches have held or will be holding their own AGM to elect Office-bearers for the forthcoming year. The body of work of Council and its Committees during the past year, which members are being asked to receive as a part of the election process, is presented in the [Annual Report of Council and Financial Report](#).

As in the previous Bulletin, I urge you to note in your calendar and watch out for your invitation to our 200th anniversary dinner on **24 June 2022** in the Great Hall at The University of Sydney. This will be a wonderful occasion and networking opportunity for up to 300 guests.

We continue to work for the Society and for NSW because we understand the need to enhance authentic and authoritative public discourse on a wide range of topics that are crucial to our future. I look forward to seeing you in person or online very soon.

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

155th Annual General Meeting, including Council Election

Date: Wednesday, 6 April 2022, 5:30 for 6:00 PM

Venue: Gallery Room, State Library of NSW,
Shakespeare Place, Sydney

Registration: [Registration for the AGM](#) is required through Membes (only if attending in person)

Entry: \$35 for Society members, \$45 for non-members, and \$5 for students

All are welcome. Light refreshments included.

Rule 4(c) of the [Society's Rules](#) requires that an Annual General Meeting (AGM) must be held in April of each year.

Business of the Annual General Meeting

The formal business of the Annual General Meeting, including the election of Council Members, will be conducted via an electronic ballot, in accordance with Rule 18(g)(ii).

Members, Fellows, and Distinguished Fellows, who are financial in 2022, will receive an email from the Society's Returning Officer, via the electronic balloting company, Election Buddy. This email will include a unique ballot link that provides a random, secret access key for each voter. Voter anonymity is assured by ballot settings which ensure that voter choices cannot be linked to any voter.

The ballot will run from **Tuesday 15 March 12:00 PM AEDT to Tuesday 5 April 12:00 PM AEST** and will address:

- Procedural Business:
 - Confirmation of the [Minutes of the 154th Annual General Meeting](#)
 - Confirmation that the [Annual Report of Council and the Financial Statements for 2021](#) be received
 - Confirmation of the proposed Auditors for 2022
- [Election](#) of Council members, namely:
 - Four (4) Councillors — from a field of five (5) candidates.



**THE
ROYAL SOCIETY
OF NEW SOUTH WALES**
ENRICHING LIVES THROUGH KNOWLEDGE SINCE 1821

155th Annual General Meeting 1302nd Ordinary General Meeting

The results of the ballot will be announced by the Returning Officer at the AGM on 6 April 2022 and will be posted on the Society's website on the following day.

The [Ordinary General Meeting](#) will commence immediately following the conclusion of the Annual General Meeting.

Relevant documents

Prior to voting, it is suggested that Members and Fellows read these documents in advance of the commencement of the ballot:

- [Agenda for this AGM](#)
- [Minutes of the previous AGM](#)
- [Annual Report from Council and Financial Statements for 2021](#)

Election of Ordinary Members of Council

Listed below are the nominations for the incoming Council received by the Secretary by 5:00 PM AEDT on Friday, 4 March 2022.

In all cases, candidates have been invited to provide an [optional statement](#) outlining how their expertise and experience fit them for these roles and will benefit the Society. These statements are available through the links below and also are provided as information on the Election Buddy electronic ballot form.

Candidates

Office/Role	Candidate
Councillors (4 positions)	Sean Brawley FRSN
	Philip Gale FRSN FRSC FRACI
	Pamela Griffith FRSN
	Robert Marks FRSN
	Rod Stowe PSM FRSN

After two years away, we are back in the State Library of NSW with an exciting program of events. To begin, our AGM heralds a new Society year. Then listen to Professor Ben Eggleton talk on the smart sensor technology revolution. Our new format in the Gallery Room will be more engaging and interactive, allowing greater opportunities for discussion and the exchange of ideas.

Coupled with that will be the chance to catch up with the Society's NEXUS exhibition in the adjacent Jean Garling Room if you haven't already seen it — and after the meeting, try out the State Library's brand new bar on the roof of the Mitchell building (enter from Hospital Road).

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
Co-Director, NSW Smart Sensing Network

Date: Wednesday, 6 April 2022, 5:30 for 6:00 PM

Venue: Gallery Room, State Library of NSW,
Shakespeare Place, Sydney

Registration: [Registration for the AGM and OGM](#) is required through Membes (only if attending in person). There is no live streaming but the lecture will be available on YouTube shortly thereafter

Entry: \$35 for Society members, \$45 for non-members, and \$5 for students

All are welcome. Light refreshments included.

Summary

Sensor devices that detect events or changes in their environment are used in everyday objects such as smartphones and ubiquitous applications of which most people are never aware. Recent advances in device physics, nanotechnology, AI, and sensor fusion are leading to a revolution in smart sensor technology that will provide multi-faceted interfaces to the three-dimensional physical, chemical, and data environment, enabling high-performance information gathering and real-time situational awareness. This talk overviews recent examples from industry and end-user sponsored projects, including research from the NSW Smart Sensing Network where we are exploring how smart sensors can forecast air pollution and urban heat, reduce the maintenance costs associated with leaks and breaks of water pipes, and

remotely monitor soil moisture; from Sydney Nano we will see how single-molecule sensing and wearables are providing for the rapid testing of infectious disease, underpinning a robust roadmap to COVID-19 recovery and beyond; and finally from the Jericho Smart Sensing sponsored by the Royal Australian Air Force, how smart sensors are providing the Air Force with enhanced, advanced situational awareness that enables smart, timely decision-making.

About the speaker

Ben Eggleton is a Professor of Physics at the University of Sydney, Director of the University of Sydney Nano Institute (Sydney Nano), and co-Director of the NSW Smart Sensing Network.



He has received \$60 million in research funding, was an ARC Laureate Fellow, and was founding director of the ARC Centre of Excellence for Ultrahigh Bandwidth Devices for Optical Systems (CUDOS). His ground-breaking research in photonics underpins novel applications in telecommunications, quantum technologies, and smart sensors.

He has published over 500 journal papers cited over 40,000 times with an h-number of 110 (Google Scholar). Eggleton is a Fellow of the Australian Academy of Science, the Australian Academy of Technological Sciences and Engineering, the Optical Society of America (OSA), the International Society for Optics and Photonics (SPIE), the Institute of Electrical and Electronics Engineers (IEEE), and the Royal Society of NSW.



Ideas@theHouse

presented by

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



‘Nothing’

Richard Tognetti AO

Australian Chamber Orchestra

Date: Wednesday, 20 April 2022, 6:30 PM AEST

Venue: Live Streaming from Government House Sydney ([link to follow](#))

Entry: No charge

All are welcome.

Summary

‘Nothing’ is a show concept the Australian Chamber Orchestra is developing with its partners at Melbourne University and expects to produce in the near future. Following the talk, Richard will engage in a conversation with his interlocutor, Toby Chadd.

Building on a concept originally developed as a part of the 2011 Maribor Festival in Slovenia, Richard has said of his talk:

Nothing is but a Dream

I’ve been trying to convince people of its miraculous elements for years.

I put it on as a project once, in Slovenia. It had a soprano wearing Nothing.

Barry Humphries even performed the Nothing Nonsense verses of Facade.

I’m remounting Nothing.

You listeners can hear all about Nothing.

Entry costs Nothing. But to leave you have to Pay!

About the performers

‘...it’s our job to bring the listener in through our portal. A numinous moment when, hopefully, we can make time stand still.’

Richard Tognetti is the Artistic Director of the Australian Chamber Orchestra. He has established an international reputation for his compelling performances and artistic individualism.

Richard began his studies in his home town of Wollongong with William Primrose, then with Alice Waten at the Sydney Conservatorium, and Igor Ozim at the Bern Conservatory, where he was awarded the Tschumi Prize as the top graduate soloist in 1989. Later that year he led several performances of the Australian Chamber Orchestra, and that November was appointed as the Orchestra’s lead violin and, subsequently, Artistic Director. He was Artistic Director of the Festival Maribor in Slovenia from 2008 to 2015.

Richard performs on period, modern, and electric instruments and his numerous arrangements, compositions, and transcriptions have expanded the chamber orchestra repertoire and been performed throughout the world. As a director or soloist, Richard has appeared with many of the world’s leading orchestras, and in 2016 was the first Artist-in-Residence at the Barbican Centre’s Milton Court Concert Hall. Richard has also composed for numerous film soundtracks, including the ACO’s documentary films *Mountain*, *The Reef* and *Musica Surfica*.

Richard was appointed an Officer of the Order of Australia in 2010. He holds honorary doctorates from three Australian universities and was made a National Living Treasure in 1999. He performs on a 1743 Guarneri del Gesù violin, lent to him by an anonymous Australian private benefactor.

Toby Chadd recently joined ACO as Director of Artistic Planning following an impressive career at the ABC. He began as Label Manager at ABC Classic and Jazz in 2014, before becoming Content Manager in 2018. In this role, Toby revitalised the live music program, initiating the ABC’s largest composer commissioning project, developing a new strand of studio live streams and leading cross-genre content collaborations with major arts organisations. Prior to joining the ABC, Toby was Head of Communications at the Academy of Ancient Music in the UK.

by Bruce Ramage (Secretary)

The Society's Bicentennial Garden Party

Below is the speech given by Her Excellency the Honourable Margaret Beazley AC QC, Governor of New South Wales, on 12 March 2022 at Government House on the occasion of The Royal Society of New South Wales Bicentenary Garden Party.

*'Bujari gamarruwa
Diyn Babana Gamarada Gadigal Ngura'*

In the Sydney language of the people of the Eora Nation, I welcome you to Government House. In paying my respects to Elders, past, present and emerging of the Gadigal and of the Indigenous nations across New South Wales, I recognise their deep knowledge, care and custodianship of land, seas and waterways.

[Her Excellency then welcomed:]

- Dr Susan Pond AM, President
- Royal Society Fellows and Members — what I would term: *'the Royal Society Family'*!
- I especially welcome descendants and family members of former Presidents, including of [James Douglas Stewart](#), the Society's President in 1927, a renowned veterinary scientist and of David Branigan AM, the Royal Society's President in 1995, and an eminent geologist.
- In recognising the service of Presidents, past and present, I acknowledge that of John Hardie AM, the longest serving President, whose membership of the Royal Society spans a quarter of the history of the Royal Society in NSW.

The Royal Society of New South Wales and its progenitor societies have deeply impacted the intellectual life of our nation. Much of that has been recorded in its unique library collection, charting the evolution of intellectual thought in New South Wales for 200 years.

Had there been an opening celebratory garden party all those 200 years ago, it would have been across the road in Bridge Street on the sight of Old Government House, construction of this House not commencing until the late 1830s, with the Governor taking up residence in 1846. The



Our Patron engaging with Garden Party guests

Moreton Bay Fig tree which stands so grandly beside the House was planted as a sapling at that time.

As at the Society's founding date, there were few local Indigenous people, the population having been decimated by a smallpox outbreak which left the community bereft of its elders and thus its leadership. Its impact remains today. The European population numbered some 30,000. Although the number of free settlers had begun to increase rapidly after the end of the [Napoleonic Wars](#), convicts still comprised 40% of the white population. Squatters had begun to occupy the vast plains of rural New South Wales following the first inland settlement in Bathurst.

The [New South Wales Legislative Council](#), an appointed legislative body providing advice to the Governor and Australia's oldest legislative body, was not established until 1823.¹

It was into this disparate admixture of peoples that the Philosophical Society of Australasia stepped in 1821, with ten members, and Governor Brisbane as first President, established *'with a view to enquiring into the various branches of physical science of this vast continent and its adjacent regions'*.² Society members met at each other's homes, sharing the books and papers they had brought with them, or were able to

¹ <https://www.parliament.nsw.gov.au/lc/roleandhistory/Pages/The-history-of-the-Council.aspx>

² <https://www.royalsoc.org.au/about-us/history>

(continued)

have shipped from London, encouraging one another in their scientific interests.

Professor AJ Elkin in his 1966 Centenary³ Oration described the aspirations of those first members thus: ‘These little gatherings held out hopes of being oases of refreshment in what must have seemed a cultural desert’.⁴ That refreshing start — as visionary as it was — would be short-lived.

By the end of 1822, Judge Barron Field had written that the ‘little Society’ has ‘expired in the baneful atmosphere of distracted politics’.⁵ He revised that description a few years later, stating that the Society was ‘in a state of suspended animation’.⁶ Three decades later the establishment of Sydney University, which had been the great dream of the Society, gave it a significant new lease of life.⁷

The path since has not always been smooth, with vicissitudes of impecuniousness, politics, fallings-out and fallings back-in, and with the significant honour



of Royal favour being conferred in 1866. But through it all, the Royal Society has continued to be that nexus of ideas and discovery, challenging us to think differently, analyse the latest research, to discuss, debate and understand some of the major issues confronting humanity.

So it is, that in marking 200 years, we have much to celebrate:

- 3260 papers delivered to the Society in all its forms, since 1822, many published in scholarly journals;
- The oldest and most prestigious awards in Australia;
- 480 Fellows, including 17 Distinguished Fellows — *at 2021 count!* — and 212 esteemed members;
- Seven annual Royal Society and Four Learned Academies Forums, hosted here at Government House;
- The success of *Ideas@theHouse*;
- The foundation in 2021 of a new Royal Society Western branch; and
- This year’s fascinating *NEXUS* exhibition, held at the State Library.⁸

A bicentenary of an institution whose purpose has been to ‘enrich lives through knowledge’⁹ is an occasion that richly deserves to be celebrated. Indeed, it is of State — and of national importance — that this occasion be recognised. As much as in the past, research, inquiry, discussion and debate are critical to our future.

Congratulations, Royal Society! Please join me in a Toast ...

*To the Royal Society of New South Wales and the next 200 years: Omnia Quærite!*¹⁰

³ Centenary of designation as a Royal Society

⁴ AP Elkin: Centenary Oration (1966): page 13. <https://royalsoc.org.au/images/pdf/CentenaryVolume/CV-oo-Elkin.pdf>

⁵ *ibid*, page 14

⁶ *ibid*, page 15

⁷ University of Sydney, founded 1850

⁸ <https://www.royalsoc.org.au/events-news/events-2022>

⁹ 200-year motto

¹⁰ ‘Question everything’: Royal Society motto

Photographs from The Society's Bicentennial Garden Party



Governor addressing guests



Guests listening to the Governor



Guests gather for the Governor's address



Kate Carruthers, Guy and Sue Loucks



Mara Moustafine and Andrew Jakubowicz



Ross Griffith and John McDonald

Photographs from The Society's Bicentennial Garden Party (continued)



Virginia Judge (R), daughter Rebecca Niumeitolu (L)



Christina Thurn and Sean Brawley



Harry Marquis and his grandmother Victoria Marquis



Stephen Hill and Stuart Midgley



Catherine and George Willis



Medy Hassan and Robert Whittaker

Report: Events Committee

by Christina Slade (Chair, Events Committee)
and Lindsay Botten (Webmaster)

The Events committee takes responsibility for organising the addresses that form the heart of our monthly general meetings. Our plan this year is to alternate face-to-face and virtual meetings where possible. On 2 March, as is traditional, the PhD and Masters by research candidates who have been awarded the Society's Jak Kelly Award and the Royal Society of NSW Scholarships for 2021 addressed the Society during the Ordinary General Meeting. Steve Weller and Kathy Belov managed the Q&As with great panache, with the new Zoom masters, Guy Loucks and Kate Carruthers, and the video pre- and post-production by Lindsay Botten, ensuring a very high quality production. The [recording of this presentation](#) is available on our YouTube channel

We have planned our first face-to-face meeting in two years to be the Ordinary General Meeting and the Annual General Meeting on 6 April. These will be held in the Gallery Room of the State Library of NSW (off Shakespeare Place) commencing at 6:00 PM, with light refreshments available from 5:30 PM. The speaker for the evening is Professor Ben Eggleton, Director of the University of Sydney Nano Institute and Co-Director of the NSW Smart Sensing Network who will speak on '[New frontiers in smart sensor technology for a healthier, safer and sustainable future](#)'. Please note that [registration is required](#) for this face-to-face event, and that while live streaming will not be available on the night, the event is being recorded and will be available on our [YouTube channel](#) shortly thereafter.

The Events Committee is also responsible for coordinating the named lectures, the Clarke, Liversidge, Poggendorff, and Pollock awards, generally in collaboration with the University where the recipient is based. This year we are arranging the delayed award

lectures from 2020. The first of these, the Clarke Memorial Lecture, took place on the evening of 17 March, with Professor Michelle Leishman speaking on '[From bulldozers, pests, and pathogens to climate change and urban futures: the tough life of plants](#)' — a link to the recording of this event is available on the Society's website.

The Events committee is also responsible for organising the *Ideas@theHouse* series that is jointly presented by Her Excellency the Honourable Margaret Beazley AC QC, Governor of NSW, and the Royal Society of NSW. [The first in this series](#) for 2022 will be presented on 20 April by the distinguished Australian violinist and orchestral director Richard Tognetti who will talk about 'Nothing', with live streaming available from Government House, Sydney from 6:30 PM.

We also work with representatives of the Western, Hunter and Southern Highlands branches, endeavouring to stagger meetings and ensure that meetings are recorded, where possible. The first meeting for 2022 of the Western NSW Branch was held on 15 March in The Grange on the Bathurst campus of Charles Sturt University (CSU) and included an excellent panel discussion on '[Public Trust and Science in Times of Coronavirus](#)'. Panellists were Emeritus Professor Robert Clancy AM FRSN, Michelle Grattan AO FASSA, Chief Political Correspondent of *The Conversation*, and Professor Jane Quinn of CSU, expertly led by the moderator Professor Mark Evans FRSN, the newly appointed Deputy Vice-Chancellor (Research) at CSU and the incoming Chair of the Western NSW Branch. A recording of this [forum is now available](#) on our YouTube channel.

The event program for the year in [Sydney](#), the [Hunter region](#), the [Southern Highlands](#), and in [Western NSW](#) is available on the Society's website at the preceding links.

Report: Southern Highlands Branch

by Anne Wood (Branch Secretary)

Transgenerational Epigenetics

Dr Alyson Ashe

Senior Lecturer and Group Leader, School of Life and Environmental Sciences, University of Sydney



In this talk, Dr Ashe presented the science of epigenetics to an audience of 45 attendees in the Carrington Room at the Mittagong RSL. She told of how she first developed an interest in this relatively new research field when completing her PhD in epigenetics with Professor Emma Whitelaw at the University of Sydney. This absorbing interest then took her on to complete a postdoctoral research program with Professor Eric Miska at the Gurdon Institute, Cambridge UK.

It was at Cambridge that she brought her love of epigenetics to a new model organism, the nematode worm *Caenorhabditis elegans*. Using this model, she established a robust assay for studying transgenerational epigenetic inheritance. Dr Ashe moved back to

the University of Sydney in 2014 to develop her own research program with a prestigious ARC DECRA fellowship. Subsequently she was also awarded an ARC Future Fellowship.

Dr Ashe described epigenetics as one of the mechanisms by which cells control expression of genes, and which has long been known to be heritable across cell divisions. This is how each of the tissues in our body maintains its cellular identity, for example as a liver cell or a neuron in the brain. When epigenetic control goes wrong, it can often lead to cancer.

She added that it has been thought for decades that all epigenetic marks must be cleared between generations, to allow a new developing organism to start with a clean slate. However, it has recently become clear that in some circumstances, epigenetic marks can be passed between generations and influence offspring, grandchildren and beyond. Dr Ashe stated that provocatively, this idea suggests that in some ways Lamarck may have been correct with his theory of the inheritance of acquired traits.

Throughout this lecture, Dr Ashe provided copious experimental data by her group. The audience clearly showed their appreciation of her presentation of these absorbing studies — question time was almost as long as the lecture itself.

Journal & Proceedings of the Royal Society of New South Wales

The December issue of the *Journal* has now been mailed out to those members who subscribed to the 2021 volume including two issues.

A reminder: With the introduction of the new Membes membership management system



Journal and Proceedings

of the

Royal Society
of
New South Wales

"...for encouragement of Academic and Intellectual in Science, Art, Literature and Philosophy."

last year, membership renewals for 2022 were a bit different. Your subscription to the paper copy of the *Journal* did not appear on your invoice. That meant that you needed to log into Membes to subscribe to the *Journal* (an 'opt in' rather than an 'opt out' system). If you did not renew your *Journal* subscription when you paid your 2022 dues, you need to do so now in order to be sure of receiving the first issue for 2022 due out in July. You have until the end of April to do so at the Society's [Online Shop](#).

Council Member Kathy Belov appointed interim DVC (Research) at USyd

Council Member and Society Fellow, Professor Kathy Belov AO FRSN, has just been appointed as the interim Deputy Vice-Chancellor (Research) at the University of Sydney. Her term will extend from 2 April until the arrival in July of [Professor Emma Johnston AO FRSN FTSE](#) as the substantive replacement for Professor Duncan Ivison FRSN FAHA who is stepping down at the conclusion of his 5-year term.



Professor Belov is currently Pro-Vice-Chancellor (Global Engagement) where she has helped to identify and enable strategic opportunities for partnership and collaboration in research and education and has led the development of the University's international engagement strategy.

She is also a Professor of Comparative Genomics in the School of Life and Environmental Sciences and was previously Associate Dean (Research) in the Faculty of Veterinary Science. As a leading geneticist, Professor Belov is known for her campaigning work to save Tasmanian devils from extinction in a successful Save the Tasmanian Devil Program.

Professor Belov has received numerous awards, including the Genetics Society of Australasia MJD White Medal for her outstanding contribution to genetics and science and prior to that the Ross Crozier Medal for mid-career researchers. She has won the prestigious Australasian Academy of Science Fenner Medal for Research in Biology, Eureka Award for Environmental Research, and was a recipient of the ARC's Future Fellowship for mid-career researchers.

The Council of the Royal Society of NSW wishes to warmly congratulate Professor Belov on her appointment.

Society Fellow honoured with 2022 AAS Macfarlane Burnet Medal

Society Fellow, Professor Steven Simpson AC FRSN FRS FAA has been awarded one of the Australian Academy of Science's two highest honours — the 2022 [Macfarlane Burnet Medal and Lecture](#) — for his research that has led to a groundbreaking approach to nutrition.

Professor Stephen Simpson, from the University of Sydney, has revolutionised the scientific understanding of swarming in locusts, with research spanning neurochemical events in the brains of individual locusts to continental-scale mass migration. Together with colleague David Raubenheimer, he has also developed a powerfully integrative framework for nutrition called the Geometric Framework, which he devised and tested using insects. The Framework

has since been applied to a wide range of organisms, from slime moulds to humans, and to problems from aquaculture and conservation biology, to dietary causes of human obesity and ageing. Since



2012, Professor Simpson has applied his biological and biomedical research and knowledge to ease the burden of chronic disease in humans through a unique, cross-disciplinary initiative at the Charles Perkins Centre at the University of Sydney.

The Council of the Royal Society of NSW warmly congratulates Professor Simpson on this great honour.

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, 6 April 6:30 PM AEST	1302 nd 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
Wednesday, 20 April 6:30 PM AEST	Ideas@theHouse: April 2022 Topic: 'Nothing' Richard Tognetti AO, Australian Chamber Orchestra
Wednesday, 4 May 6:30 PM AEST	Liversidge Lecture (2020 — delayed) Topic: Drug discovery inspired by natural products Professor Richard Payne FRSN, University of Sydney
Wednesday, 11 May 6:00 PM AEST	Poggendorff Lecture (2020 — delayed) Are weeds becoming a new native species? Professor Angela Moles FRSN, UNSW Sydney
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 MAIAT'SIS Wal Fife Theatre (Building 14, Room 212) Charles Stuart University (Wagga Wagga Campus)
Wednesday, 1 June 6:30 PM AEST	1303 rd 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 th 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 th OGM and Open Lecture Topic: to be advised Professor Kathy Belov AO FRSN, University of Sydney
Wednesday, 7 September 6:30 PM AEST	1306 th OGM and Open Lecture Is Fairweather an Australian artist? And does it matter? Claire Roberts, University of Melbourne and Nick Jose, University of Adelaide

Date	Event
Wednesday, 5 October 6:30 PM AEDT	1307 th 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 th OGM and Open Lecture Topic: to be advised Presenter: to be advised

Welcome to new members

The Royal Society of New South Wales warmly welcomes the following new members to the Society's ranks, effective from 2 March 2022.

Fellows

- Professor Igor Aharonovich
- Professor Clive Baldock
- Professor Anthony Cunningham
- Professor Roy Green
- Professor Renee Elmina Leon
- Dr Tuan Van Nguyen
- Dr James Renwick
- Professor Shawn Ross

Members

- Dr Holly Randell-Moon
- Dr Diana Wyndham

Associate Members

- Mr Cory Thomas

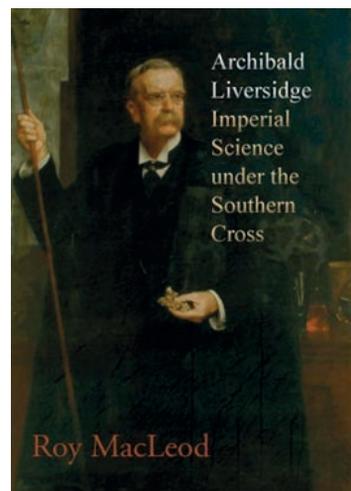
Archibald Liversidge: Imperial Science under the Southern Cross

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



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	Dr Susan Pond AM FRSN FTSE FAHMS
Vice-President	Ms Judith Wheeldon AM FRSN
Past President	Emeritus Professor Ian Sloan AO FRSN FAA
Secretary	Mr Bruce Ramage MRSN
Treasurer	Mr John Cameron MRSN
Librarian	Mr John Hardie AM FRSN
Webmaster	Emeritus Professor Lindsay Botten FRSN
Councillors	Professor Katherine Belov AO FRSN Dr Jessica Milner Davis FRSN Ms Pamela Griffith FRSN Dr Donald Hector AM FRSN Dr Davina Jackson FRSN Professor Eric Knight FRSN Emeritus Professor Robert Marks FRSN Emerita Professor Christina Slade FRSN
Hunter Branch Representative	Professor George Willis FRSN FAA
Southern Highlands Branch Representative	Mr Mike Jonas MRSN
Western NSW Branch Representative (interim)	Dr David Nash FRSN

Editor: [Jason Antony MRSN](#)

THE VIEWS EXPRESSED IN THIS PUBLICATION DO NOT NECESSARILY REFLECT THOSE OF THE SOCIETY.

