



The Royal Society OF VICTORIA

Promoting science since 1854

PATRON: The Hon Linda Dessau AC
Governor of Victoria

PRESIDENT: Dr William Birch AM

Upcoming Events...



27th April: RSV Annual General Meeting

*Keynote: Laureate Professor Peter Doherty AC
"Innovation, liberal education and the role of science in society"*



30th April: Science for Science Fiction

*A One-Day Conference for Writers of Science Fiction
In partnership with Aurealis Magazine and the Emerging Writers Festival*

May Advance Notice:



11th May: Dr Mark Norman

"Meeting Conservation and Park Management Needs in a Changing World"



25th May: Ms Rose Hiscock

"The Science Gallery"

April 2017 Newsletter

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rsv.org.au



SUNDAY, 30th APRIL



A one-day conference for new and established authors of science fiction.

Learn valuable writing techniques and draw inspiration from real science to hone your craft!

Science and Science Fiction: a Symbiosis?



Science fiction in all its forms is one of the best science engagement avenues at our disposal, yet to accommodate a large, science-literate readership frustrated with “pseudoscience,” it’s important for writers to draw inspiration for science fiction from science fact.

Our writer-focused conference program is designed to provide the insights that all science fiction writers need to take their work to the next level. Featuring some of Melbourne's finest authors, scientists, publishers, communicators and educators, we will provide current and aspiring authors with expert insights on the finer points of the fiction writer's craft. Spend a day learning techniques for honing your manuscript and take the opportunity to learn to pitch your story to literary agents and publishers with some one-on-one coaching.*

We will also get your imagination firing from a foundation of solid science. The day will feature insights from working scientists (all with a taste for science fiction) to help dispel some common misunderstandings of scientific principles in classical mechanics, genetics and cloning, the mind-blowing nature of time, space, electromagnetism, quantum mechanics and the universe itself.

Discover some of the latest trends, developments and discoveries in science that offer fertile ground for your SF stories.

All participants will receive:

- Insights and guidance on genres within science fiction; writing dystopias, climate-based SF, 'hard' SF, junior fiction
- Technical guidance on story creation; world building, "dos and don'ts"
- Industry insights to getting published, including digital storytelling and alternative platforms
- An opportunity to pitch your story idea to a publisher for coaching and feedback
- The ability to network with fellow science and speculative fiction writers. Share ideas, and even your work if you choose
- Insights and hot tips from Victorian scientists who share your enthusiasm for science fiction
- A limited edition, print copy of Aurealis Magazine's **historic 100th edition!**

Fully catered for morning tea, lunch and afternoon tea. Register now for a great day of science for your science fiction, at Victoria's oldest learned society! With only 110 places available, and limited discounted rates for RSV members and subscribers to Aurealis, be sure to secure your ticket fast.

**please note signing up for a pitch session or being asked to send your full manuscript is not a guarantee of finding representation or publication.*



Speakers, full program and registrations are available online now at <http://ow.ly/2xSP309nUHp> call or email the RSV office to secure your place: 9663 5259, rsv@rsv.org.au.

From the President



In what is probably my last contribution as President, I thought something a bit different is in order.

A few weeks ago, I had opportunity to join a group of around a dozen geology students and four staff from Federation University's Ballarat campus on a four-day excursion to North-Eastern Victoria.



Students on Mt Wills summit

The plan was to spend two days introducing the students, a mix of 1st and 2nd years, to a wide range of rocks and minerals in a remote and historic region. The group was based at a comfortable lodge in Glen Wills, about 50 km north of Omeo, where tin and gold mines had opened up from the late 19th to early 20th centuries. I've been visiting the district since the 1970s, so am familiar with many aspects of its history, as well as its rocks and minerals, but there are always new things to discover.



A convoy in the Dorchap Range

A good example of this are the unusual phosphate minerals found in the rock type, known as

pegmatite, which yielded the tin ore on the slopes of Mt Wills in the 1890s. These were rediscovered by Ryan Eagle, who co-led the group, in 2009 and were described in a paper published in the Proceedings in 2015. The latest discovery was also made by Ryan, who was checking out similar rocks to the north of Mt Wills, in the Dorchap Range, west of the towns of Mitta Mitta and Eskdale. By chance and curiosity, Ryan found a pegmatite that contained one of the main lithium-bearing minerals, lithium aluminium silicate called spodumene, the first record in Victoria and possibly in Australia. As many members will know, lithium is now a very strategic element for its use in batteries, but it is difficult to find in economic quantities. As a result of this discovery, a mining company has applied for exploration leases over part of Dorchap Range.



Pegmatite on track, Invincible coupe

During their two days, the students examined the tin-and phosphate-bearing pegmatites around Glen Wills, fossicked on the dumps of the old Maude mine, including an after-dark stint with UV lamps that showed up minerals fluorescing brilliant blue, red and yellow, and also collected samples at several of the lithium-bearing pegmatites. They also were familiarised with the many different metamorphic rock types forming the bedrock of the region. A highlight was the ascent to the summit of Mt Wills for spectacular 360-degree mountain scenery, and an opportunity to try out the two drones for 3-D video photography. The return trip on the final day was via Falls Creek, where a quarry exposes well-formed cooling columns in an old basalt flow.

This excursion was a new experience for all the students. They were able to see first-hand how a range of minerals, many rare and unusual, form in characteristic geological environments. They gained an appreciation for the region's rich mining history, as well as the magnificent forest scenery. I couldn't have imagined a better, all-round, 'science-outreach' experience.

NOTICE OF ANNUAL GENERAL MEETING

The Royal Society of Victoria's **Annual General Meeting** will be convened AT **6:00pm** on **27th April, 2017**

All **voting members** of the Royal Society of Victoria are requested to attend the Annual General Meeting in April to review the Society's performance over the course of 2016, noting a quorum of 50 will be required to proceed. The annual statement will be circulated ahead of the meeting for review and discussion on the night. Please note the earlier start time of **6pm**.

Following the meeting's main business, we will be delighted to induct **Laureate Professor Peter Doherty AC** as a Fellow of the Royal Society of Victoria and welcome some of our newest members. Following the AGM, Professor Doherty will deliver a public lecture provisionally titled "Innovation, Liberal Education and the Role of Science in Society." Light refreshments and supper will be served during the evening.

We can only accept voting members at the AGM (student members are currently ineligible to vote in elections or at the AGM, but all are welcome to attend the function and Professor Doherty's lecture from 7pm).



50 voting members present in person or by proxy are required for the meeting to proceed. **Please register**

your intention to attend using the short form online at <https://rsv.org.au/events/rsv-annual-general-meeting-2016/> or by calling the RSV office on 9663 5259. Student members are ineligible to vote in Council elections and at the Annual General Meetings.

If you are unable to attend, please nominate a **proxy** to vote in your place by completing the form on the last page of this newsletter, also available from our website at <https://rsv.org.au/proxy-form-for-voting-at-2016-rsv-agm/>. AGM papers will be distributed to voting members via email in the coming week.

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2017 RSV Council Election Results

Thanks to all members who returned their ballot papers. We had a return of 114 ballots, roughly on par with the 2016 return, with no invalid papers – well done everyone!

Following the report to the Council meeting of 23 March, we are now pleased to advise the following are deemed elected to Council from 2017 to 2019:

Professor Tom Beer
Ms Pam Borger
Mr John Link
Mr Viktor Perunicic
Professor David Walker

Congratulations to our new Councillors, who will begin their two year tenure effective of the Annual General Meeting on 27 April.

Particular thanks to Tony Pagnin and Graeme Hart for their interest, two skilled and well-connected RSV members we look forward to involving in the lively business of our committees!

* * *

Nominations for RSV Membership

Nominations for membership of the Society have been received on behalf of:

Ms **Ella PLUMANN'S POUTON**, Student
Mrs **Arjumand KHAN**, Home Maker
Associate Professor **Jerry Courvisanos**, Academic

Unless Members request a ballot, they will be considered for election by Council and if elected, will be announced at the Annual General Meeting of the Royal Society of Victoria held on 27th April.

Recently elected members who have not yet signed the Society's membership book are invited to attend the 9th March meeting to be formally welcomed as members. **Please inform the office if you plan to attend, so we can prepare your membership certificate for collection.**

Vale Alan Yen



The Society's Council records with sadness the passing of RSV member **Associate Professor Alan Yen** after a short illness. Alan joined the Society in 1986, was an RSV Councillor from 2005 to 2007 and made generous contributions to the life of the Society, particularly as Honorary Editor of our journal, the *Proceedings of the Royal Society of Victoria*. Alan's PhD was on psyllids associated with Acacia, and he worked on invertebrate surveys, the conservation of threatened invertebrates, human entomophagy,

and biosecurity associated with native Australian and exotic insects.

He was a notable researcher and advocate for the addition of edible insects to global cuisine to fulfil current and future demands for protein intake, developed from his studies on the traditional insect foods of the Indigenous peoples of Central Australia.

Fondly remembered as a kind and gentle man, our deepest condolences go out to Alan's family, friends and colleagues.

Field Trips in 2017

Discover the Eucalypts of the Brisbane Ranges with Leon Costermans



The legendary Leon Costermans: insights from a botanist and geologist in one handy package!

Our participation in National Eucalypt Day 2017 got started with a dire forecast for “a month’s worth of rain” for our big outing, which failed to deter our enthusiastic group of novice eucalypt spotters! Our day began with a thorough introduction to the tricky business of telling one tree from another in the Burke & Wills Room with Leon Costermans.

Aside from introducing us to the variety and characteristics of different species and their expressions in different settings, Leon illustrated how the enormous diversity of species found in the nearby Brisbane Ranges are a product of the area’s unique geology.

Signed field books in hand, we headed out on the bus to the historic Djerriwarrh Creek Bridge, near Melton for our first stop. Leon has a meticulous nature and demonstrated his prowess as a demonstrator and teacher par excellence in the field, where he was truly in his element. He had us working hard in no time, and while the brain cells were certainly getting a vigorous workout, we found ourselves becoming more and more familiar with both the characteristics of the different trees and Leon’s methodology for identification.



Box? Mallee? Box Mallee?! Help!

After picking up friends from Bendigo, we traversed a long, flat landscape of grasslands – some of which were unique, indigenous species with threatened status, as pointed out by Eucalypt Australia CEO Dr Bram Mason – before arriving at the Brisbane Ranges National Park and finding ourselves back in the trees.



Here we were accompanied by Parks Victoria rangers Scott, Mike and Alex, who provided a briefing on the management of the park and its diverse flora and fauna.

This stop was perhaps the most intensive in terms of presenting a number of species in close proximity and a gentle challenge to the novice eucalypt spotter. With some botanists and enthusiasts among us, Leon made it clear nobody was to help the uninitiated! Books in hand, we convened, exchanged notes and generally came to a consensus together. Remarkably (and perhaps with a little coaching) we were almost always right! We were developing new superpowers and keen to test them on new targets.

We won’t be so tough on you though. Below is an example of *Eucalyptus obliqua*, the Messmate. Leon explained it was the first eucalypt to be described in the Linnaean system, collected during Cook’s 3rd voyage. Aside from observing the bark, leaves and gumnuts, Leon taught us it’s also

important to observe the topology and the character of the soils to make a clear identification.



The rain gods smiled on us, keeping the deluge at bay throughout the morning in this dry sclerophyll forest which we were repeatedly assured was in a “double rain shadow” by someone not unlike myself. Our luck held out for our wonderful lunch at the Steiglitz Historic Park, where we were stuffed full of incredible food by the locals!



Steiglitz

Steiglitz is a remarkable place, a once bustling gold rush boom town of 2,000 now populated and maintained as a tourist destination by about 12 locals and Parks Victoria. We spent our break in the blacksmith's gorgeous old cottage; not unlike the RSV's Hall, steadfastly from the 19th century! Warmly recommended for an outing, particularly with a large group like ours. We'll find a way to visit again I'm sure.



RSV Members Julie Boyce, Nicola Williams and Madelaine Willcocks with eucalypt enthusiast Gavin at Steiglitz

We weren't off the hook at Steiglitz, however; a quick walk across an old bridge took us to a flattened area (colourfully, the site of a 19th century mining scam) where we once again got busy with books and identification sheets.



This is one of my favourite locals, the *Eucalyptus leucoxylon* or Yellow Gum. A terrific preview of the individual currently shooting up in my back yard in a few decades' time! The gorgeous colours of this tree's patchy bark belies its status as a close sibling of the ironbark – essentially the same tree, except for the bark! No wonder some botanical taxonomy scholars leave the eucalypts for last, they are remarkably adaptable, hybridise readily and can change their expression dramatically according to their environment.



The heavens could wait no longer and at our next stop we were treated to an utter deluge! There was time for a quick I.D. of ironbarks, stringybarks and a long leafed box unique to the area, but even the promise of Bill's curiously tiny umbrella couldn't keep the rain at bay. It didn't matter – we'd seen heaps, had a great time, and were ready to head home, with a few quick stops to check out some species through the aquarium-like windows of the bus.



The CEO got tired and emotional and gave everyone a real spray at the end. Bram had me on boot duty, applying fungicide on everyone's soles back in Melbourne to stop the spread of some nasty pest species of fungus that I didn't quite catch the name of. Annie and John Link are getting the treatment here.

Terrific to "go bush" with real insight. Our grateful thanks are to Leon Costermans for his time and wonderful teaching, but also to colleagues Dr Mike Bayly and Kurt Petersen for coming along to support and coach our large group in the field, and especially Bram and the Board of [Eucalypt Australia](#) for helping organise, convening and subsidising the trip. A great day! - **Mike Flattley**

* * *

Explore the Collections of the Melbourne Museum

Thursday, 18 May 2017 @ 2.00pm

Next up: the wonderful collections and displays on show at the Melbourne Museum are but the tip of the iceberg; behind the scenes are curatorial and research collections and teams dedicated to the study, conservation and activation of a vast legacy of specimens, artefacts, devices and cultural objects that range across the many fields of science.



An exclusive offering to members of the Royal Society of Victoria and the Young Scientists of Australia (Melbourne Chapter). Join us for an exciting dive into the rich record of scientific collection held in trust by Museum Victoria for current and future generations.

Eventbrite

Places are free to members of both organisations, but strictly limited. Please register online with Eventbrite at <http://ow.ly/aKSr309nJJE>, call the

office on 9663 5259, or email us at rsv@sciencevictoria.org.au.

Unknown Membership Payments

Thanks to everyone who has now renewed their membership payments; membership is key to our Society's capacity to function, both financially and as a collective of talented people with a broad skill base. If you still haven't renewed your 2017 subscription (or can't remember!), please call James in the office on **9663 5259** to make arrangements. Our second subscription reminder will go out in the next month for outstanding payments, via email.

Meanwhile, James is struggling to reconcile some payments that have come through without an identifying descriptor. Are any of these yours? Please let us know on the number above to avoid any confusion:

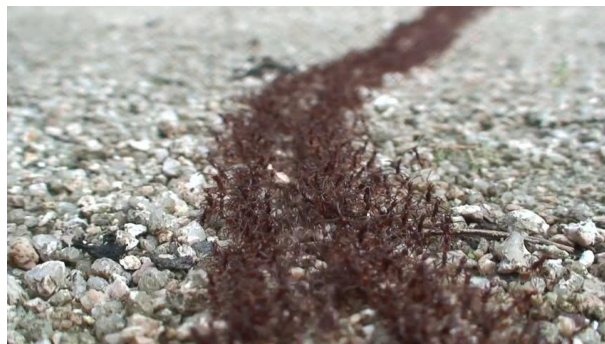
1/3/17 Description: Big Sky Credit Union. Amount: \$130.00 (Emeritus)

17/3/17 Description: Royal Society Bank Vic. Amount: \$200.00 (Ordinary)

20/3/17 Description: RSV Sub and Volume CBA. Amount: \$250.00 (Ordinary & Proceedings)

March for Science

22 April 2016



The Society has thrown its support behind the Melbourne organisers of the [March for Science](#) on 22 April and we have qualified that support in a position statement published online at <https://rsv.org.au/rsv-support-march-science-melbourne/>.

With many members and friends keen to take part, we'll be convening a group on the grounds of the Royal Society of Victoria at **12:30pm on Saturday 22nd April** so we can head down to join the main March at the State Library together. Please register your intention to join us using the link provided above (bottom of the page) so we can look out for you! We'll have some RSV t-shirts and a placard or two handy on the day. Hope to see you there.



**PROXY Form for Voting at the Annual General Meeting of
THE ROYAL SOCIETY OF VICTORIA (INC)**

In accordance with the Rules of the Society, financial Members of the Royal Society of Victoria Inc. may vote in person or by proxy. Rule 21 (1) requires notice of the appointment of a proxy, who is a member of the Society, to be given or sent to the Honorary Secretary at the Society's Office no later than **5.00 pm on 26th April 2017**, the day before the meeting, **which will be held at 6:00 pm on Thursday 27th April 2017** in the Society's Ellery Theatre.

To assist Members in lodging notice of the appointment of a proxy this form is provided.

I.....
(Block letters please)

being a Member of The Royal Society of Victoria Inc. appoint as my proxy

☐

The Chairman of the Meeting*

☐

.....*

(Name of the Member who is to be proxy, block letters
please)

***Please tick one box.**

My instructions are to vote for / against (circle one for each motion)

If direction to vote 'For' or 'Against' is not provided, the Proxy is considered undirected and so may be used at the discretion of the nominated Proxy holder.

Moved: W. Birch

Seconded: N. Williams

For / Against

That in accordance with Rule 11 (4) (a) the Minutes of the 2015 Annual General Meeting held 28th April 2016 as presented to Council be confirmed.

Moved: W. Birch

Seconded: N. Williams

For / Against

That the 2016 Annual Report (including the President's Report) of the Royal Society of Victoria be received in accordance with Rule 11 (4) (b) and (c).

Moved: N. Kennedy

Seconded: N. Williams

For / Against

That the 2016 Financial Report and Auditor's statement of the Royal Society of Victoria be received in accordance with Rule 11 (4) (b) and (d).

Moved: N. Williams

Seconded: Mr D. Zerman

For / Against

That Mr Jonathan D. Madgwick BBus ACA be invited to accept the position of Honorary Auditor of the Royal Society of Victoria for 2017.

Signature

Date

Please return to:
The Honorary Secretary
The Royal Society of Victoria
8 La Trobe Street
Melbourne VIC 3000

To reach the Royal Society of Victoria office not later than 5.00pm on Wednesday 26th April, 2017