



The Royal Society OF VICTORIA

Promoting science since 1854

PATRON: The Hon Linda Dessau AM
Governor of Victoria

PRESIDENT: Dr William Birch AM

Upcoming Events...

9th February @ 7:00pm:

LiDAR: Bringing Heritage Places into the Digital Age

Tim Smith, Executive Director, Heritage Victoria



16th February @ 5:45pm:

Breaking News – An Insider's Guide to the New Media Climate

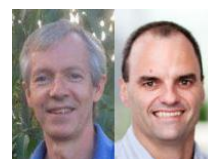
Panel Session with Tanya Ha, Associate, Science in Public



23rd February @ 7:00pm:

Accounting for Carbon Storage in Trees

Professor Ian Woodrow & A/Professor Brad Potter, University of Melbourne



March Advance Notice:

9th March: J E Cummins Oration

Dairy Science: Functional Food and Gut Health

A/Professor Sally Gras, Director, ARC Dairy Innovation Hub

23rd March: Targeting New Cancer Treatments

Professor Miles Prince AM

Director, Centre for Blood Cell Therapies, Peter MacCallum Cancer Centre

Director, Molecular Oncology & Cancer Immunology, Epworth Hospital

February 2017 Newsletter

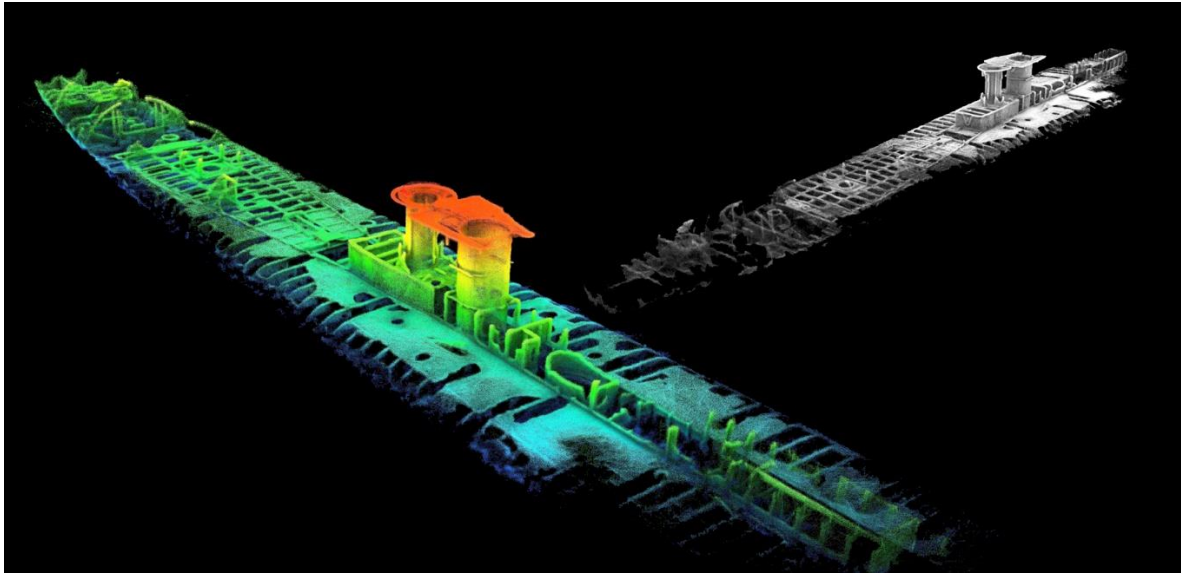
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February Meetings

LiDAR: Bringing Heritage Places into the Digital Age

3D Mapping of Submarines, Structures, Landscapes and More



Thursday, 9th February 2017 at 7:00pm.

Speaker: **Tim Smith**
Executive Director, Heritage Victoria

Heritage Victoria has put LiDAR (Light Detection And Ranging) technology to stunningly good use through a range of recent projects aimed at accurately mapping our heritage places for a 21st century audience. Working with CSIRO and their Zebedee LiDAR scanning system, Heritage Victoria has modelled sites from the Royal Exhibition Building, Murtoa Stick shed at Horsham, to World War One submarine shipwrecks in Port Phillip Bay.

Come along and see the remarkable application of some of this technology to help the management of and public engagement with some of our key State significant heritage places; particularly those that are harder to access for most people! Some inventive 3D modelling of overseas heritage places from Cambodia to the AE2 submarine wreck site (1915) near Gallipoli will also be included.

About the speaker:



Tim Smith is the Executive Director of Heritage Victoria, located within the Department of Environment, Land, Water & Planning in Melbourne. Tim manages a team of 33 heritage specialists, implements the provisions of the State Heritage Act 1995 and Commonwealth Historic Shipwrecks Act 1976 in Victoria, and delivers the Victorian Government's \$30M Living Heritage Grants program.

With over 25 years' experience working in the Government heritage sector, he has specialty expertise in managing teams, media and public engagement, field practice and policy, defence and moveable heritage, State Government property asset management, and web/publications delivery. He is a recognised expert in his specialty field of maritime archaeology (Commonwealth Historic Shipwrecks Delegate), and has an extensive background in both Federal and State

Government liaison, Ministerial and stakeholder consultation, legislation and compliance, grants, and in supporting the business of peak bodies such as the Heritage Council.

In a private capacity, Tim has a longstanding involvement in international archaeological projects in the Middle East, Turkey, Greece and Italy. He has led private projects mapping the underwater battlefield cultural landscape at Gallipoli, Turkey, and is a member of both the AE2 (1915) expedition safeguarding Australia's Gallipoli submarine in the Dardanelles, and the search for the AE1 lost off Papua New Guinea (1914). A past leader of the internationally recognised project managing the 1942 Japanese midget submarine wreck M24 at Sydney (2006-13), Tim has been awarded a UNESCO Award of Distinction for heritage management and is a Member of ICOMOS.



Places are strictly limited, bookings essential! Book online now at <http://ow.ly/evzh308fxkc> call or email the RSV office to secure your place: 9663 5259, rsv@rsv.org.au.



Sustainable Living Festival

Australia | 4–28 Feb 2017

The Royal Society of Victoria is convening the following two events as components of the 2017 Sustainable Living Festival in February. For more information about the Festival program, refer to their website at www.slf.org.au.

Breaking News: An Insider's Guide to the New Media Climate



Thursday, 16th February 2017 at 5:45pm.

Panel Discussion

Chair: Tanya Ha, Associate, Science in Public

What turns environmental science and issues into news for media outlets and their audiences? Where have all the science and environment reporters gone? How do you get your sustainability story into the news? What goes on behind the scenes in a newsroom?

Find out what journalists need from you in order to tell your story in an engaging way while remaining true to the science. Hosted by environmental campaigner, science journalist and broadcaster Tanya Ha, this event is a must for environmental advocates and researchers who need to know how to work with the media we have, rather than an idealised version we might hope for.

Join us to meet Melbourne's mainstream media; we'll bring together a panel of working journalists from print, online, TV and radio to answer your questions, tell us about what they do, and what they look for in a story. We'll also learn from the experiences of a researcher from the Melbourne Sustainable Society Institute of working with the media.

Presented in partnership with Science in Public and the Melbourne Sustainable Society Institute as part of the National Sustainable Living Festival 2017.



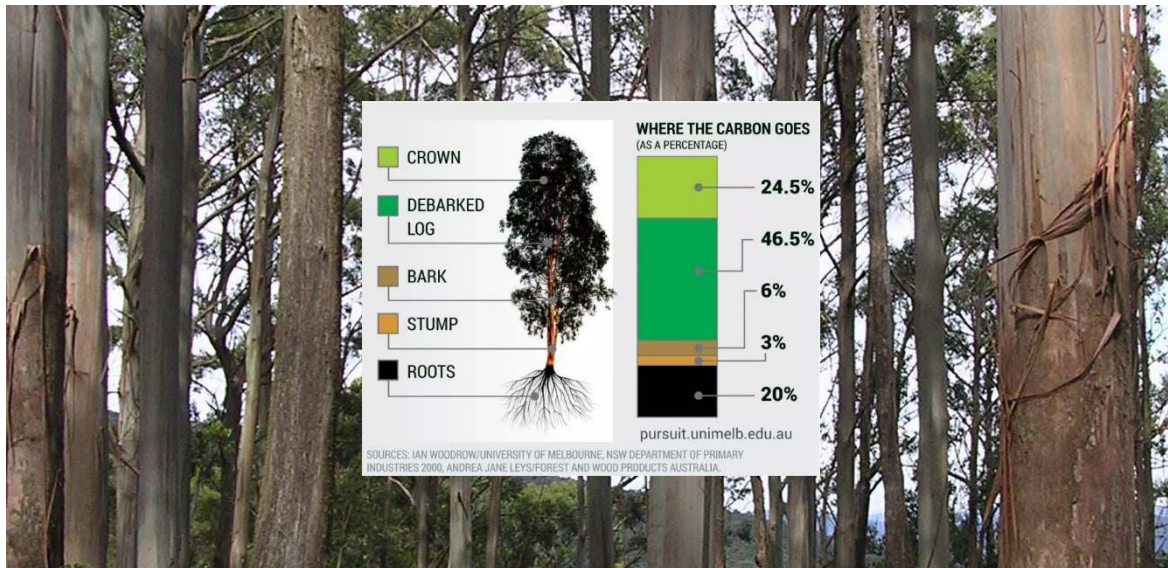
MELBOURNE SUSTAINABLE
SOCIETY INSTITUTE

scienceinpublic



Places are strictly limited, bookings essential! Book online now at <http://ow.ly/m1Uw308fxdE> call or email the RSV office to secure your place: 9663 5259, rsv@rsv.org.au.

Accounting for Carbon Storage in Trees



Thursday, 23rd February 2017 at 7:00pm.

Speakers:

Professor Ian Woodrow

Head, School of Environmental & Forest Science
The University of Melbourne

A/Professor Brad Potter

Co-Director, Asia Pacific Social Impact Centre
The University of Melbourne

The creation of robust accounting models for carbon storage in trees has increasing importance for a sustainable business and finance sector to underpin sound business decisions in the emerging carbon economy. However, the enormous diversity of tree species and their different behaviours in a range of environments poses a challenge to standardising an approach to carbon accounting through investment in forests, woodlands and plantations.

In response, A/Professor Brad Potter and Professor Ian Woodrow are collaborating to develop a process-based carbon model from the complex urban ecosystem of Melbourne's Royal Botanic Gardens and its 6440 trees, for subsequent road-testing with its sister Royal Botanic Gardens further north in Sydney. Ian brings a biological scientist's deep understanding of plant behaviours, systems and growth rates under different conditions to the project, while Brad brings his thorough knowledge of business modelling and emerging reporting requirements as a social and environmental impact accountant. One of the world's largest measurements of urban tree growth, the study provides an important test case and fills a significant knowledge gap, deriving southern hemisphere data on urban trees to complement the existing body of tree carbon research from North America.

Come learn more about the development of this model, the new means by which the information produced by carbon models can be communicated to interested parties and the opportunity for an enhanced basis for understanding, measuring and reporting carbon emissions to assist investors in deciding how to most effectively allocate resources to reduce our society's carbon emissions.

About the speakers:

Associate Professor Brad Potter is an Associate Professor in Accounting at the University of Melbourne and co-director of the Asia Pacific Social Impact Centre. Much of his research involves collaboration with key organisations and individuals in accounting and business, including the two major professional accounting bodies, accounting standard setters and government regulators. In recent years, Brad's research has primarily focused on the measurement and reporting approaches used by entities to communicate diverse information relating to performance, position and social and environmental impact and the relevance of that information for stakeholders.

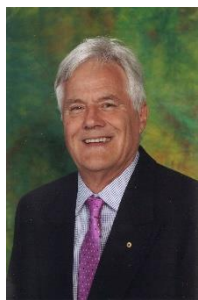
Professor Ian Woodrow has published widely on plant carbon and secondary metabolism and leads the Plant Physiology Group in the School of BioSciences at the University of Melbourne. Ian was head of the School of Botany from 2010 to 2014, and will be head of the new School of Environmental and Forest Science from 2017.

Presented as part of the National Sustainable Living Festival 2017.



Places are strictly limited, bookings essential! Book online now at <http://ow.ly/qYM4308fxhi> call or email the RSV office to secure your place: 9663 5259, rsv@rsv.org.au.

From the President



Even though January has just about finished, this is my first opportunity to wish all our members a happy new year. I hope everyone had a pleasant and reinvigorating break over the festive season. With the office now open and Mike, Malourie and James back on deck and brimming with enthusiasm, the 2017 programme will soon be off and running. We get off to a great start on February 9, when Tim Smith, Executive Director of Heritage Victoria, will explain how the new LIDAR modelling technique is revolutionising the mapping of heritage places. It promises to be fascinating, so I look forward to seeing a capacity audience, continuing the trend from last year. Check out the Society's website for all this year's lectures and plan your schedule around them; you won't be disappointed.

For the next few months Council and staff will be occupied with elections and the preparation of the Annual Report, in the lead up to the AGM at the end of April. Professor Peter Doherty, our latest Fellow, has agreed to talk to us on how and why he finds science so inspiring, so I'd encourage everyone to come along for what promises to be a memorable evening.

One significant development this year will be the addition of two new part-time staff members. Council has agreed to a two-year trial of positions to deal with the preparation of grant applications and to help with the administration of our awards. This is intended to free Mike up to do more work in science outreach, which has become a valuable and very visible aspect of the Society's programme. The new staff will come on board in a few months' time after the usual recruitment process.

In the meantime, I look forward to seeing you at the Society.

RSV Outreach Program

Migrant Science Communication Accelerator



Following the earlier support provided by the [Inner North Community Foundation](#), 2016 ended on a high note with welcome news of a further grant from the [Scanlon Foundation](#) to scale up our project! Applications closed on New Year's Eve, and we

interviewed 15 shortlisted applicants on Wednesday 18th January with our partners from [Cultural Infusion](#) (Douglas Montgomery, Ann Woelk and Alex Prior) and members of the [Australian Science Communicators](#) (RSV Outreach Committee member Dr Amy Nisselle, [Science in Public](#) Chief of Staff Toni Stevens and [VLSCI](#) Communications Officer Dr Christina Hall). Grateful thanks to our dedicated panellists for their time, expertise and insights.



Panellists in the Von Mueller Room. Clockwise from top left: Doug Montgomery, Alex Prior, Toni Stevens, Ann Woelk and Christina Hall

As you may recall from our December 2016 newsletter, schools in Victoria are required to deliver two new curriculum components in 2017 – “Science as an International Endeavour,” and “Intercultural Understanding.” This provides an opportunity to combine learning about science and learning about other cultures in a single session, and our project aims to activate and channel latent science expertise in our migrant community toward this end.

The interviews have revealed a compelling array of stories from around the world and, in particular, confirmed many of the project proposal's underlying assumptions. With applicants from the continents of South America, Eastern Europe, Africa, South Asia and the Middle East, the perspective our applicants provided on Australia's status as a privileged oasis of (relatively) successful multiculturalism, gender equity, civil peace and economic prosperity was invaluable. It was plain to many applicants – many of whom are survivors of war, poverty and social upheaval - that this privilege was invisible to many native Australians, and valued accordingly. Observations on the low status and visibility of Australia's Indigenous peoples relative to applicants' countries of origin were also sobering and well made. This was a diverse, well-educated, insightful and, above all, resilient group of people with important cultural perspectives to share.

The general level of science training, expertise and acumen was very good. All applicants had tertiary qualifications in the sciences, and many were formerly either science teachers or otherwise occupied in engaging young people with scientific principles in their countries of origin. Following migration, most have encountered significant hurdles to activating this expertise in Australia. Many of these impediments have been structural in nature – visa restrictions, or bonded placements to sponsoring regional areas with few relevant employment opportunities - while others are the result of language barriers, isolation from the professional and social networks required to raise awareness of opportunities and access to guidance on how to approach local science-related roles in a culturally-appropriate way. Many are between jobs, volunteering, in traineeships, studying and/or supporting families as labourers and cleaners. Some are returning to work after starting a family, approaching the Australian workforce for the first time.



In order to facilitate more networking opportunities and social inclusion in the Victorian science community for our short-listed applicants, all have been provided with a year's membership of the Royal Society of Victoria and will be invited to attend our

various events and activities over the course of 2017. I warmly encourage all our established members to attend as many of these functions as you can, and to make yourselves known to our new members (whether program applicants or otherwise) to ensure our Society continues to share a passion for science that unites people from all over the globe.

Meanwhile, the seven successful applicants are currently being selected as we complete some final interviews and deliberate as a partnership group. These will be coached in providing a unique presentation on the migrant experience and a perspective on science as an activity that pervades human cultures around the world over the next 12 weeks, developing valuable incursion modules for Victorian schools and an opportunity for workforce development and participation in a new niche education activity.

- Mike Flattley, CEO

Field Trips in 2017

The pilot Field Trip program proved popular in 2016 and will continue this year. Our first excursion for the year will be:

Discover the Eucalypts of the Brisbane Ranges with Leon Costermans

Tuesday 21st March 2017

To celebrate National Eucalypt Day in 2017, the Royal Society of Victoria and [Eucalypt Australia](#) are offering a rare opportunity to explore the beautiful Brisbane Ranges National Park to the west of Melbourne with botanist, geologist and author of the iconic [Native Trees and Shrubs of South-Eastern Australia](#), **Leon Costermans**.



On the Burchell Trail, southern Brisbane Ranges (photo: [Melbourne Walks](#))

Setting out by bus from the Royal Society of Victoria early in the day, a short 45 minute journey will take us to the Brisbane Ranges to start exploring and learning to identify some of the area's indigenous eucalypt species, their ecological roles and habitat ranges. The excursion will incorporate a bus tour, a gentle bushwalk and a barbeque lunch at the Steiglitz Historic Park.



Leon is a longstanding member of the RSV. He has been describing and publishing guides to eucalypt species endemic to South-Eastern Australia for decades, assisting generations of Victorians to develop a knowledge of and passion for our indigenous trees and plants. He was

recognised by Eucalypt Australia for his lifetime contributions to the conservation of eucalypts with the award of the [Bjarne K Dahl Medal](#) in 2016, pictured above with Mr Alison Teese OAM, Chair of the Bjarne K Dahl Trust, at the close of the 2016

“Conserving Eucalypts” symposium at the Royal Society of Victoria.

Join us on 21 March, and make a deeper connection to country with one of Victoria’s most respected botanists. Places are strictly limited and interest is already high, so **please book promptly!** Tickets are offered at \$20 per person for RSV Members and \$30 for non-members.



This excursion is subsidised through the generous support of [Eucalypt Australia](http://www.eucalyptaustralia.org.au) as part of the week-long program of events planned around **National Eucalypt Day 2017** (23rd March).

Please register online with Eventbrite at <http://ow.ly/MEcv308fx6C>, call the office on 9663 5259, or email us at rsv@sciencevictoria.org.au. Payment in full on registration please.

Nominations for RSV Membership

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

Mr **Winshon Duvian LOZADA RESTREPO**, Cleaner, Science Teacher

Mr **Yves NININHAZWE**, Lab Assistant

Mr **Reza BIJANI**, Violin Teacher, Veterinary Medical Scientist

Mrs **Saba OVEISI**, Teacher

Mr **Ravinder Singh BHOLA**, Customer Service Officer, Science Teacher

Mrs **Suranji Dilrukani Sampath RANEHIPURA DEWAGE**, Student

Mr **Aruna Janaka Perera HEWA WATHUDURAGE**, Wool Classer, Agricultural Scientist, Biotechnologist

Mrs **Chamari Sewwandi Ariyadasa KANKANI GAHARALALAGE**,

Mrs **Imen SAIDI**, Primary Carer, Science Teacher

Dr **Biruh Shimekit GEBRETSADIK**, Laboratory Technologist

Mrs **Marija PAVELA**, Cleaner, Chemistry Teacher

Mr **Jose Jairo VILLARREAL DIAZ**, Masters Student

Miss **Alejandra Catalina MULLAN MENDOZA**, Anthropologist, Teacher, Student

Mrs **Sudarshani Anuruddhika KUMARA PATHIRAJAGE**, Volunteer School Laboratory Assistant, Mathematics Teacher

Mrs **Carolina ZULUAGA**, Entrepreneur

Unless Members request a ballot, they will be considered for election by Council and if elected, will be announced at the Ordinary Meeting of the Royal Society of Victoria held on 9th March.

Recently elected members who have not yet signed the Society’s membership book are invited to attend the 9th February meeting to be formally welcomed as members. Please inform the office if you plan to attend.

2017 RSV Council Elections



Thanks to all members who have agreed to be nominated for the officer and ordinary member positions on Council for the 2017 to 2019 period.

Council Officers: We received a single nomination for each of the advertised officer positions. Accordingly, we are pleased to advise the following RSV members, are deemed elected to the officer roles for the 2017 – 2019 Council:

- Mr David Zerman, President
- Mrs Nicola Williams, Vice-President
- Mr Andrew Davison, Treasurer
- Associate Professor Peter Baines, Secretary



Congratulations to all! These officers will comprise the RSV’s next Executive Committee following the **27 April AGM**, and will be joined by Dr William Birch AM as Immediate Past President.

Ordinary Members: As we have received seven excellent nominations for the five positions of ordinary member of Council, an election will be held. Electoral materials accompany this newsletter in the hard copy mail-out to all RSV members with voting rights. Please carefully consider the candidates and their statements, then place a **SINGLE TICK** against your preferred candidate **ONLY**.

All Ballot Papers must be returned to the Returning Officer, care of the Royal Society of Victoria, sealed in the envelope provided. Ballot Papers must be received by no later than **3.30pm on Monday, 6th March 2017** to be considered valid.



Ellery Theatre, The Royal Society of Victoria, 8 La Trobe St, Melbourne

All lecture details and bookings are made available online from:

<http://www.royalsocietyvictoria.org.au/lecture-program/>

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- 9th February – Mr Tim Smith, Executive Director of Heritage Victoria, “LiDAR: Bringing Heritage Places into the Digital Age”
- 23rd February – Professor Ian Woodrow and A/Professor Brad Potter, “Accounting for Carbon Storage in Trees”
- 9th March – **J E Cummins Oration** - A/Professor Sally Gras, “Dairy Science: Functional Food and Gut Health”
- 23rd March - Professor Miles Prince, “Targeting New Cancer Treatments”
- 13th April – No lecture (Easter Break)
- 27th April – RSV Annual General Meeting, featuring Professor Peter Doherty**
- 11th May – Dr Mark Norman, “Meeting Conservation and Park Management Needs in a Changing World”
- 25th May – Ms Rose Hiscock, “The Science Gallery”
- 8th June – Panel Discussion – “Exoplanets and Extra-terrestrial Life”
- 22rd June – **A W Howitt Lecture** - Dr Andrew Tomkins, “Meteorites and Cosmic Dust: Insights to the Early Solar System and Earth” *Joint GSAV Meeting*
- 13th July – **Joint ATSE Lecture** – To be advised
- 28th July – Professor James Warren & Professor Lynne Selwood, “Ripping Yarns: Two Lives in Science” (lunchtime)
- 17th August – 2017 Young Scientist Research Prizes (National Science Week)**
- 24th August – Professor Kate Smith-Miles, “Optimisation, Pattern Recognition, and Modelling of Complex Systems”
- 8th September – Professor David Dunkerley, “Drylands and Water Management”
- 28th September – Phillip Law Postdoctoral Award for the Physical Sciences Lecture**
- 12th October – Dr Thomas Oxley, “Stendrode: Enabling Thought-Controlled Prosthetic Limbs”
- 26TH October – Professor Paul Sunnucks, “Adaptation of Animals to Climate Change – Natural or Induced?”
- 9th November – Science Communication Lecture & Graduate Prize - Tanya Ha, “Science Writing: Finding the Balance between Head and Heart”**
- 23rd November – Very Young Scientists (Science Talent Search Bursary Recipients)**
- 14th December – RSV Research Medal Lecture & President’s Soiree**