

WELCOME TO THE ROTORUA BRANCH OF THE ROYAL SOCIETY TE APĀRANGI FOR 2020

FROM THE PRESIDENT:

We are pleased to announce the start of our programme for 2021. Please note the change from the usual venue and dates over the next few months. We are still in the process of booking speakers so watch out for new announcements from newsletters or on our website www.rotoruascience.org/news/

We are always open to suggestions for speakers, or topics of interest, and welcome anyone who wishes to help for our small organizing team. Feel free to contact me at laura.raymond@scionresearch.com or any of the committee members - Lloyd Donaldson, Stefan Hill, Louise Sanford, Samuel Arnet, Hanno Fairburn, and Rowland Burdon.



Membership for 2021 is now due. The Rotorua Branch of the Royal Society Te Apārangi has been active in Rotorua for more than 40 years. We rely on member subscription to partly support the cost of bringing top New Zealand and international speakers to Rotorua. Membership is only \$20 per year for individuals or families and this gets you on our mailing list for information on upcoming lectures, and a chance to hear about topical science issues presented by New Zealand's leading science researchers.

A membership form is available on our web site www.rotoruascience.org/membership/ make sure to your email address is clear so we can send you information. You can pay by cash at our meetings or by electronic banking. Our bank account details are as follows:
Westpac – Royal Society of NZ Rotorua 03 1552 0093123 00
Please make sure your name is clearly shown in the reference box when setting up the payment.

Looking forward to seeing you all at our next event,

Laura Raymond (PhD)
Branch President
The Rotorua Branch of the Royal Society Te Apārangi

Branch President – Laura Raymond, Treasurer – Lloyd Donaldson, Scion, 49 Sala Street, Private Bag 3020, Rotorua,
email: laura.raymond@scionresearch.com website: <https://www.rotoruascience.org>

First announcement of Programme for 2021

Tuesday 16th February – Douglas Gaunt (Scion, Rotorua) '*Structural aspects of Te Whare Nui o Tuteata*'

Tuesday 9th March – Brad Scott (GNS, Rotorua) '*The geological history and hazards of the Rotorua District*'

Tuesday 16th March – Hannah Blumhardt and Liam Prince (The Rubbish Trip, Wellington) '*Living without a rubbish bin – the world of zero waste*' Co-sponsored with Envirohub's Sustainable Backyard programme

Tuesday 13th April – Gretel Ingrid Boswijk (University of Auckland) '*Environmental, and socio-economic history of kauri*'

Tuesday 8th June – Neil Gemmell (Otago Uni, Dunedin) '*Tuatara genome*'

Tuesday 10th August – Shirley Kerr (author of 'Exploring the Kaimai bush', Rotorua) '*Exploring fungi from Rotorua/Kaimai bush*'

We are still in the process of booking speakers so watch out for new announcements from newsletters or on our website www.rotoruascience.org/news/



www.facebook.com/RotoruaRoyalSociety

Lecture for 16th February 2021

Structural aspects of Te Whare Nui o Tuteata

Douglas Gaunt
Scion, Rotorua



ROTORUA | Tuesday 16th February, 6pm.
Te Whare Nui o Tuteata (new Scion entrance,
entry from Titokorangi Drive (Long Mile Rd)
Free entry for members
\$5 donation for non-members
All welcome.

The new three storey Hub building at Scion's campus in Rotorua is an innovative approach to providing seismic resilience in timber. A demonstration project for Scion's work in the timber industry it utilises several forms of engineered timber, including an LVL diagrid to provide gravity support and bracing at the perimeter of the floorplates to provide 100% of the building's lateral resistance.

The three-storey wood framed building is named "Te Whare Nui o Tuteata" gifted by Ngā Hapū e Toru who hold mana over the whenua. The name Te Whare Nui o Tuteata acknowledges the mana of the tupuna Tuteata, from whom Ngā Hapū e Toru descend and the connection to the whenua, Titokorangi.

Doug will give a tour and talk about structural aspects of Te Whare Nui o Tuteata, exploring the different wood products used, the novel earthquake damping system, the benefits of timber construction over steel and concrete.

Doug is one of Scion's Principal researchers with 35+ years' experience, recently leading science areas in timber engineering, timber drying, built environment, wood protection, and wood modification. He started as a structural engineer including 5 years designing steel, masonry and concrete buildings in the UK. Involved with national and international timber standards, product development, industry support



Lecture for 16th February 2021

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Scion, Rotorua



To get to the venue please drive all the way down Tītikorangi Drive (formerly Long Mile Rd). The three-storey wood framed building 'Te Whare Nui o Tuteata' will be clearly visible and parking is available to the left of the building.

<https://www.scionresearch.com/about-us/about-scion/location-and-contact>



Lecture for 9th March 2021

The geological history and hazards of the Rotorua District

Brad Scott
GNS

ROTORUA | Tuesday 9th March, 6pm.
Rimu Room, Scion, 49 Sala Street, Rotorua.
Free entry for members – please sign in at the door.
\$5 donation for non-members – please pay at the door.
All welcome.



The Rotorua District lies in the northern portion of the Taupo Volcanic Zone, a active area of volcanism and tectonic activity. The volcanic activity is dominated by caldera style eruptions, these can produce very large volumes of eruption deposit and change the local landscape.

The Okataina Volcanic Centre (OVC) dominates in the Rotorua District, having produced about 80 km³ of eruption deposit in the last 27,000 years from 12 eruptions. The OVC has a significant influence on the local landforms, controlling the formation of the lakes in the district. Active ground deformation and tectonic activity leads to faulting and many local earthquakes. A by-product of the volcanic activity is the large scale geothermal systems found in the region. The heat is related to the magmatic activity, while the faulting provides the fracture paths for the fluids to reach the surface.



Okataina Volcanic Centre/ Mt Tarawera Volcano
Photo: GNS

Event for 16th March 2021 – note the change in venue

Living without a rubbish bin – the world of zero waste

The Rubbish Trip

A PRESENTATION BY

THE RUBBISH TRIP

WHEN?
Tuesday 16 March 2021, 6–8pm

WHERE?
The Netherlands Society Hall, Neil Hunt
Park, Tarawera Road
Rotorua

FREE EVENT!
+ zero waste nibbles

2021 Sustainable Backyards

ROTORUA BRANCH ROYAL SOCIETY TE APĀRANGI

Are you keen to have less waste in your life, but not sure how? Want to know what New Zealand could do to slash our country's waste footprint, and make landfills and plastic pollution a thing of the past?

Join Hannah and Liam of The Rubbish Trip, for an intro to the world of zero waste!

Hannah and Liam have been living without a rubbish bin for over six years. In this two-hour workshop they'll guide you through the hows and the whys of a less wasteful lifestyle, including:

- What is the zero waste movement? Why is waste reduction important, in Aotearoa and abroad?
- Loads of tips for how to reduce the rubbish in your life (including fun DIY household products, cosmetics, and other life hacks).
- Ideas for waste-busting campaigns, policies and actions you can support to help communities, businesses and government to go waste-free too (not just households!)

This event is free; everyone is welcome, and there'll be free zero waste nibbles too.

The Rubbish Trip is run by Hannah and Liam. They've been living without a rubbish bin since the beginning of 2015 and have a raging passion for all things zero waste. Since they launched The Rubbish Trip in 2017 they've delivered over 400 presentations to over 20,000 people across every region of Aotearoa New Zealand.

This event is part of Envirohub Bay of Plenty's 2021 Sustainable Backyards Programme and co-sponsored by the Rotorua Branch of the Royal Society.