Registration Details

Complete your details and post, email or phone in your registration today. Registrations are limited and close 21 September 2022

GNS Science Private Bag 2000, Taupo 3352, New Zealand

Contact: Fiona Buxton Telephone: +64-7-3748211 Email: <u>f.buxton@gns.cri.nz</u>

Name:	
Organisation & address:	
Phone:	Fax:
Email:	
Special	dietary or other needs:
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Payment Details

\$600 per person + GST including course dinner

O Optional field trip: Taranaki \$100 per person (+GST)

O Invoice my organisation. Order No:

 ${igodot}$ Credit card, please purchase via these webpages:

https://shop.gns.cri.nz/volc-2022/ https://shop.gns.cri.nz/volc-2022_ft/

Please note you need to add the course and the optional field trip SEPARATELY as two different items to your cart, before checking out in the online shop link above.

The course cost will be charged for cancellations less than 7 days before the event. However, substitutions may be made at any stage at no cost.



Cars damaged by thick ashfall in the Usu eruption 2000 Japan. Photo: Tony Hurst, GNS Science



Mt Taranaki with Panitahi Fanthams Peak in the foreground. The older Pouakai Volcano is in the middle distance to the left with New Plymouth beyond. Photo: Brad Scott, GNS Science.

How well will your organisation cope with a future volcanic crisis?

This two day course will present a state-of-the-art assessment of volcanic hazards in New Zealand, and will help you better understand how your organisation can better prepare for, and mitigate against, a future volcanic crisis.

Volcanologists, social scientists and emergency managers form part of the multi-disciplinary team that explores relationships between the physical and social aspects of natural hazards and their management.

The course is designed for those involved in all aspects of natural hazard management: planners, educators, engineers, local and central government policy makers, insurance managers, emergency managers and business, utility and property owners.

GNS Science

2022 VOLCANO SHORT COURSE

Novotel

Cnr Hobson and Leach Streets, New Plymouth 28-30 September 2022 Taranaki Volcano Field Trip (optional) 30 September 2022

Learn about volcanoes, their hazards, impacts to society and mitigation strategies in this interactive two-day course.



Mt Taranaki with cows. Cows are vulnerable to volcanic ash as are most aspects of agriculture, and infrastructure. Electrical generation, transmission (pictured) and distribution can all be affected by ash and other eruptive products. All other infrastructure is to some degree dependent on electricity and there are a range of mitigation strategies available. The lower peak to the left is Panitahi Fanthams Peak (at least 7000 years old). The summit vent last erupted in 1790AD. Photo: Lloyd Homer, GNS Science.



SPEAKER PROFILES

Carol Stewart is an Associate Professor in Environmental Health in the College of Health, Massey University, and is a co-director of the International Volcanic Health Hazards Network (<u>www.ivhhn.org</u>)

Christina Magill is a Hazard and Risk Scientist at GNS Science. Her research involves modelling the physical, economic and health impacts of disasters, with a special interest in the impacts of long-duration volcanic eruptions.

Brad Scott, GNS Science, is a Volcanologist based at Wairakei. He has been involved in volcano monitoring and eruption responses for over 40 years and has a wealth of experience from New Zealand and other active volcanoes. He currently focuses on assessment and communication of volcanic hazards.

Jon Procter, is a Professor at Massey University, is a volcanologist and has experience in modelling volcanic hazards. Jon is lead of the Resilience to Natures Challenges – Volcano program focussed on developing methods to assess and forecast volcanic hazards. Other areas of research also focus on community engagement and mātauranga Māori.

Craig Miller is a Volcano Geophysicist at GNS Science, Wairakei, and in the GeoNet monitoring team. He has built volcano monitoring networks in NZ and in the South Pacific and uses geophysical techniques to model the internal structure of volcanoes to find out what makes them tick.

Graham Leonard, GNS Science. Graham's current research involves volcanic mapping, developing eruption histories, volcanic and tsunami hazard mapping, multi-agency emergency and warning response planning.

Sarah Gauden-Ing is an CDEM Planner at Taranaki Civil Defence Emergency Management. She focus on understanding the processes, including volcanic processes, that could trigger an emergency response. Then planning for that response or working to reduce the potential impact of any volcanic process.

Grant Wilson is Acting Team Leader Hazard Risk Management Advisor at the National Emergency Management Agency (NEMA). He has a background in emergency management and risk assessment in both New Zealand and Australia. He studied at the University of Canterbury with research focused on volcanic impacts. At NEMA he leads volcanic and tsunami work programmes.

Tom Wilson is a Professor in Disaster Risk and Resilience at the University of Canterbury. Tom's main research interests are natural hazard risk assessment, with a focus on volcanic impacts to critical infrastructure, agriculture and communities.

PROGRAMME

DAY ONE: Wednesday 28 Sept 2021, 9 am - 5 pm.

Registration and welcome (coffee from 8:45 am)

- Pinatubo video and discussion
- The volcano problem and introduction to Aotearoa's volcanoes
- Near vent hazards, impacts, and mitigation
- · Volcanic ash: hazards, impacts and mitigation
- Discussion

6:30pm dinner at a local restaurant

DAY TWO: Thursday 29 Sept 2021, 9 am - 5 pm.

- · Ash and gas impacts on health
- Fatality risks from volcanic eruptions
- Managing the volcano problem
- Monitoring Aotearoa's volcanoes
- Management of volcanic risk in Aotearoa
- Taranaki volcanic impacts and risk management

DAY THREE: Friday 30 Sept 2021, 9 am - 4 pm.

Explore Taranaki Mounga and the surrounding region, including visits to some key infrastructure, communities, and industries at risk from future volcanic eruptions.

- Departs 9 am
- Explore Mt Taranaki volcano and ringplain.
- Return at approx. 4 pm

Morning and afternoon tea, lunch, course dinner and refreshments included. Lunch included in optional field trip.



GNS Science offers this course on volcanoes annually. GNS Science specialises in improving the understanding of New Zealand's geologically active landscape and assessing the risk and impact of earthquakes, volcanoes, landslides and tsunami (www.gns.cri.nz). It also runs the GeoNet monitoring project, which is cofunded by EQC (www.geonet.org.nz).

WHO IS THE COURSE FOR?

The course will be particularly relevant for:

- Central and Local Government,
- Infrastructure companies, NGOs
- Those involved in the management of volcanic risk: emergency managers, public health unit and DHB staff, regional council environmental monitoring, primary industries.

There will be plenty of interactive discussion, and you can learn from both New Zealand and overseas experiences.