

Sunday 22 November 2020

	Field trip
	Kaikoura earthquake surface ruptures, landslides and building damage Leader: Andy Nicol (University of Canterbury)

Monday 23 November 2020

*STUDENT PRESENTATIONS

09.00	Registration Venue: C-Block Foyer				
10.00 - 10.30	Conference Opening Venue: C1 Mihi Whakatau Conference Opening Address – Cheryl de la Rey, Vice-Chancellor, University of Canterbury Conference Opening Welcome – Kari Bassett, Conference Convenor				
10.30 - 11.00	Plenary 1 Venue: C1 Braiding geoscience and mātauranga Māori: the case for a trans-epistemological approach Clare Wilkinson, School of Earth and Environment, University of Canterbury				
11.00 - 12.00	1A: Unravelling the Seascapes Unravelling the seascapes: processes that shape the marine environment of Aotearoa/ New Zealand Chair: Sarah Seabrook & Jess Hillman Venue: C1	1B: Hazards Symposium Creating partnerships between policy, practice & research Policies and strategies for risk reduction <i>In association with Silver Sponsor EQC</i> Chair: Andy Nicol Venue: C2	1C: Cryosphere The cryosphere- Southern Alps and ice deformation to Antarctica Chair: Heather Purdie & Lauren Vargo Venue: C3		
11.00 - 11.15	An Unusual Fossil Duck from the Greta Formation of North Canterbury gives an insight into the Fauna of late Miocene Coastal New Zealand. R. Paul Scofield	How does central government use and promote science in disaster risk reduction? Sara-Jayne McCurrach	*The role of atmospheric rivers in snow hydrology of the Southern Alps Rasool Porhemmat		
11.15 - 11.30	The last Gargantuan Penguin – an Eocene relict in the late Oligocene of the South Island, New Zealand? Marcus Richards		*Temperature and strain controls on ice deformation mechanisms: insights from the microstructures of samples deformed to progressively higher strains at -10, -20 and -30 °C Sheng Fan		
11.30 - 11.45	*New Puzzle Whale Pieces Together Past Phylogeny Dannielle Eagles	Science into policy: The role of relationships in effective natural hazard science communication Bill Fry	The Priestley Glacier Deformation Experiment David Prior		
11.45 - 12.00	New Zealand and IODP/ICDP: past, present, and future Stuart Henrys		Early and middle Miocene ice sheet dynamics in the Ross Sea: Results from core-log-seismic correlation Lara F. Pérez		
12.00 - 13.30	12.00 - 13.30 Lunch, meetings & poster viewing Venue: Sponsor & Exhibiton Area, C-Block				
12.30 - 13.30	12.30 - 13.30 All lunch time meetings are located in the Ernest Rutherford Building				
	Venue: ER219	Venue: ER220	Venue: ER221	Venue: Meet in the foyer of C-block	Venue: Puaka-James Hight - Library
	Student Workshop: The Road to Publication: Advice from Journal Editors Presented by Kari Bassett and Fei He	GeoNET Strategic Review Catherine Ross	Geochemistry SIG meeting Sebastian Naeher	Tour of the Ernest Rutherford Building Rob Spiers	Viewing of signed copy of William Smith's geological map of England and Wales (1815)

Monday 23 November 2020 cont.

13.30 - 15.30	2A: Unravelling the Seascap Unravelling the seascape: processes that shape the marine environment of Aotearoa/ New Zealand	2B: Hazards Symposium Creating partnerships between policy, practice & research. What does local government need from scientists? <i>In association with Silver Sponsor EQC</i>	2C: Cryosphere The cryosphere - Antarctica: past, present and future
	Chair: Jess Hillman & Sally Watson	Chair: James Thompson	Chair: Alex Gossart & Lauren Vargo
	Venue: C1	Venue: C2	Venue: C3
13.30 - 13.45	The Seabed 2030 Project: Collating bathymetry data in the South&West Pacific Ocean Arne Pallentin	Barriers and solutions for risk reduction: what does local government want/need from scientists? Simon Markham	Tracing Antarctic Cryosphere Origins to Climate And Tectonics: A new IODP Proposal Robert Mckay
13.45 - 14.00	Low-Energy, Erosional Boulder Beaches, Eastern Tasman Bay, New Zealand Warren Dickinson	Simon Markham	*Meteoric ground ice in mid-Miocene permafrost: a paleo-temperature proxy, upper McMurdo Dry Valleys of Antarctica Marjolaine Verret
14.00 - 14.15	Dynamic seafloor processes within the Subtropical Frontal Zone on the Chatham Rise and implications for regional sediment and organic carbon budgets Scott Nodder	Key issues for practitioners dealing with multiple natural hazards Marion Schoenfeld	*Sub-ice shelf sedimentary record at Kamb Ice Stream Grounding Zone, Siple Coast, West Antarctica Theo Calkin
14.15 - 14.30	HADAL sediment cores recovered from >9000 m water depth contain evidence of life and turbidites in the Kermadec Trench Alan Orpin	Marion Schoenfeld	The SWAIS 2C Project - Sensitivity of the West Antarctic Ice Sheet in a Warmer World Richard Levy
14.30 - 14.45	Keynote Speaker Temporal changes in bedform morphology in shallow marine environments Marta Ribó	Earthquake risk treatment – understanding trade-offs and building buy-in Hugh Cowan	*Integrating proxy and model estimates of Antarctic climate variability over the last millennium Olivia Truax
14.45 - 15.00	High sedimentation rates, earthquakes and the Tuaheni Landslide Complex offshore Tūranganui-a-Kiwa Joshu Mountjoy	Hugh Cowan	*Stabilizing and readvancing the grounding line of Pine Island Glacier Alanna Alevropoulos-Borrill
15.00 - 15.15	Spatio-temporal flow processes of a co-seismic turbidite: the Kaikōura Turbidite Lorna Strachan	Facilitated Q/A and panel discussion	*Investigating the seasonal dynamics of the Ross Ice Shelf, Antarctica using remote sensing data Francesca Baldacchino
15.15 - 15.30	What we do in the shallows: Natural and anthropogenic seafloor geomorphologies in a drowned river valley, New Zealand Sally Watson	Facilitated Q/A and panel discussion	Airborne sea ice thickness measurements in the western Ross Sea Wolfgang Rack
15.30 - 16.00	15.30 - 16.00 Afternoon tea Venue: Sponsor & Exhibition Area, C-Block		

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22–25 NOVEMBER, UNIVERSITY OF CANTERBURY CHRISTCHURCH

Monday 23 November 2020 cont.

16.00 - 17.30	3A: Unravelling the Seascape Unravelling the seascape: processes that shape the marine environment of Aotearoa/ New Zealand	3B: Hazards Symposium Creating partnerships between policy, practice & research. Promoting practitioner, iwi and researcher dialogue <i>In association with Silver Sponsor EQC</i>	3C: Petroleum Geoscience of Petroleum in New Zealand (in association with Oil and Gas SIG)
	Chair: Sally Watson & Sarah Seabrook	Chair: Richard Smith	Chair: Mac Beggs & Joanna Elliot
	Venue: C1	Venue: C2	Venue: C3
16.00 - 16.15	*Acoustic and geomorphic predictors of hydrothermal vents in an active back arc, offshore Taupō Volcanic Zone, New Zealand Erica Spain	Researcher-Practitioner integrated natural hazards research programmes – successes, lessons and opportunities Tom Wilson & Sarah Beaven	After the Cretaceous Cenozoic Research Project: 25 years of research and discovery in New Zealand's sedimentary basins Kyle Bland
16.15 - 16.30	How do subsurface processes of faulting and fluid flow impact the seascape? Jess Hillman	Lessons from early career Māori researchers working with Māori communities on community-based risk and resilience research Kristie-Lee Thomas & Lucy Kaiser	A window on Zealandia: how can we unlock the scientific value of decades worth of offshore petroleum exploration? Jess Robertson
16.30 - 16.45	Ecosystem Vulnerability to Hydrate Mining: Tracking the sphere of influence of methane seeps Sarah Seabrook		Reservoir and seal properties of volcanoclastic deposits from the Kora Volcano, offshore Taranaki Basin, New Zealand Jessica Fensom
16.45 - 17.00	Keynote Speaker *Concentrated gas hydrate deposits in thrust-related anticlines: insights into their evolution and assessment of hydrate volumes from the southern Hikurangi Margin Francesco Turco	Risk reduction through land-use planning for natural hazards Wendy Saunders	How McKee Oil Field changed the petroleum scene in New Zealand Julie Palmer
17.00 - 17.15	Seafloor pockmarks of the Chatham Rise, Canterbury Slope and Bounty Trough - distribution, structure and potential formation mechanisms Bryan Davy	Facilitated Q/A and panel discussion	Explorations in the nether: a history of coal seam gas in New Zealand Tim Moore (Virtual)
17.15 - 17.30	Seafloor pockmarks on the Chatham Rise and Bounty Trough – an overview on R/V Tangaroa Voyage 2006 Ingo Pecher		Māui field history Christine Coppell (Virtual)
17.30 - 19.00	17.30 - 19.00 Poster Session 1 Venue: Mezzanine Floor, C-Block <i>Brought to you by Silver Sponsor NIWA</i>	17.30 - 18.30 Icebreaker Reception Venue: Sponsor & Exhibition Area, C-Block Join in for a relaxed social evening. Food and drink will be available. Enjoy local craft beer provided by <i>Eruption Brewing</i> .	
19.00 - 20.30	Public Lecture Venue: C1 On shaky ground – the contribution of geoscience to disaster risk management in Aotearoa-New Zealand: Lessons from recent Earthquakes. Speakers: Andy Nicol, Professor of Earthquake Geology, University of Canterbury; Jo Horrocks, Chief Resilience and Research Officer, Earthquake Commission; Marion Schoenfeld, Senior Hazards Analyst, Christchurch City Council Facilitated by Tom Wilson - Professor of Disaster Risk and Resilience, University of Canterbury		
19.30	19.30 Onwards Early Career Researchers Mixer - Jenni Hopkins Location: Volstead, 55 Riccarton Road		

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Tuesday 24 November 2020

07.00	Registration Venue: C-Block Foyer		
08.00 - 08.30	Plenary 2 Venue: C1 Ability not gender: New Zealand women geologists in Antarctica. Margaret Bradshaw, School of Earth and Environment, University of Canterbury		
08.30 - 10.30	4A: Volcanism Overview and modelling studies	4B: Hazards Past, present, and future of natural hazard geoscience	4C: Sediments Sedimentation from Source to Sink: Modern Analogues and Ancient Examples (in association with Sedimentology SIG)
	Chair: Jenni Hopkins & Karoly Nemeth	Chair: Matiu Prebble	Chair: Andrew La Croix
	Venue: C1	Venue: C2	Venue: C3
08.30 - 08.45	Keynote Speaker Volcanism between New Zealand and New Caledonia: a stretched Late Eocene to Early Miocene magmatic arc on the Loyalty and Three Kings Ridges Nick Mortimer	Urbanisation and lava flow advancement: How the presence of buildings influences lava flow areal footprint modelling Sophia Tsang	The present is the key to the past: an online resource for modern depositional systems Angela Griffin
08.45 - 09.00	Volcanoes Buried in Te Riu-a-Māui/Zealandia Sedimentary Basins Alan Bischoff	Te tai pari o Aotearoa - new estimates of future sea level along New Zealand's coastline Richard Levy	*Susceptibility Factors Controlling the Occurrence of Slow-Moving Large Landslides in the Whanganui Basin Sediments, North Island Forest Williams
09.00 - 09.15	Recognition of cryptic igneous intrusions in New Zealand sedimentary basins Jane Newman	Answering to stakeholders: Sensitivity of liquefaction hazard during earthquakes to sea-level rise in the San Francisco Bay Area, California Anne Wein (Virtual)	*Process sedimentology of the Waikato River mouth, Port Waikato, New Zealand Anya Podrumac
09.15 - 09.30	New Zealand's mantle peridotite and serpentinite James Scott	Historical seismograms - Preserving and utilising a unique 100-year continuous record of New Zealand earth observations Paul Viskovic	*Insights from benthic foraminifera on Lyttelton Harbour/Whakaraupo sedimentation and anthropogenic impacts Zoë Dietrich
09.30 - 09.45	*Gas-particle transport and sedimentation of pyroclastic currents across topographic obstacles Lucas Corna	After the Big One: The Potential Impact of an Aftershock Sequence Following a Major Earthquake on the Hikurangi Subduction Interface David Burbidge	Evaluating post-depositional disturbance of distal tephra records from the 12.9 ka BP eruption of Laacher See Volcano through multidisciplinary investigations at Paddenluch and Krumpa, Germany Anke Zernack
09.45 - 10.00	*Hiding Behind an Obstacle? Probing the Hazard Impacts Inside Pyroclastic Currents Across Topographic Barriers Daniel Uhle	NZ DART array and tsunami early warning Bill Fry	*Measuring landscape evolution from inception to senescence; an example from the Cooloola Sand Mass, Australia Nicholas Patton
10.00 - 10.15	Constructing a model volcanic fissure for erupting a ton of wax Rosie Cole	An eruption in search of a volcano? The evidence at source for the mid-15th century Kuwae event Chris Ballard (Virtual)	Murchison Basin sandstone provenance: early Miocene Pacific Plate uplift and erosion Matt Sagar
10.15 - 10.30	*Shaky volcanology: how do bubbles respond to seismic waves in the laboratory? Gilles Seropian	Past natural hazards, environmental change, and oral traditions in Polynesia: case studies from Tikopia and Rapa Nui (Easter Island) Matiu Prebble	*Stratigraphy and Preliminary Results from the May 2019 drilling campaign of the 3.48 Ga Dresser Formation, Pilbara, Western Australia. Michaela Dobson
10.30 - 11.00	10.30 - 11.00 Morning tea Venue: Sponsor & Exhibition Area, C-Block		

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Tuesday 24 November 2020 cont.

11.00 - 13.00	5A: Volcanism Caldera Volcanism	5B: Engineering Geology Recent Advances in Engineering Geology	5C: Climate Climate Past and Present (in association with Friends of the Pleistocene SIG)	
	Chair: Alan Bischoff & Karoly Nemeth	Chair: Richmond Beetham & Clark Fenton	Chair: Katelyn Johnson & Shaun Eaves	
	Venue: C1	Venue: C2	Venue: C3	
11.00 - 11.15	Taupō: what we know (and don't know) about New Zealand's youngest supervolcano Simon Barker	Keynote Speaker Building on Difficult Ground - Two Case Studies David Bell	Keynote Speaker Urban greenhouse gas emission response to COVID-19 shutdowns in New Zealand and North America Jocelyn Turnbull	
11.15 - 11.30	*Componentry and textural characteristics of pyroclasts from the Taupo 232 CE Y2 eruption – implications for conduit dynamics and eruption evolution. Hannah Walters	New Zealand Community Fault Model Hannu Seebeck	Quaternary evolution of one of the world's largest coastal dune systems, Fraser Island and Cooloola, SE Queensland, Australia Jamie Shulmeister	
11.30 - 11.45	*The Conditions and Dynamics of Magma Fragmentation and Plume Stability during the Y5 Phase of the Taupo 232 CE Eruption Sarah Tapscott	It's not Over When the Shaking Stops: Lessons in Resilience from the Kaikoura Earthquake Richard Justice	A data-model comparison of marine primary productivity during the Last Glacial Maximum and the Last Inter-Glacial Elizabeth Keller	
11.45 - 12.00	*Rhyolite magma factory in the central Taupō Volcanic Zone: magma extraction depths for dome eruptions complementing structural models of the crust Sarah Smithies	Documenting some of what we learned from mitigating rockfall risk following the 2016 Kaikoura earthquake Rori Green	*New fossil wood from Zealandia and its use in reconstructing paleoclimate Mathew Vanner	
12.00 - 12.15	Violent Taupō eruption triggered a megathrust earthquake in 6th century CE Brendan Duffy (Virtual)	*Laboratory simulations of rainfall-induced landslide reactivation mechanisms following the 2016 Kaikoura Earthquake Joshua Lee	Climate signals from Foulden Maar: Temperature, rainfall, elevated atmospheric CO2 and global greening in earliest Miocene Zealandia Daphne Lee	
12.15 - 12.30	An idea: scientific drilling project “interaction”: interaction between life, rifting and caldera tectonics in Okataina Pilar Villamor	Reinforced Soil Bund as passive protection structures: the New Zealand Experience Eric Ewe	*Constraining the age and depositional processes of Taylor 2 Drift with cosmogenic nuclides in Pearse Valley, Antarctica Jacob Anderson	
12.30 - 12.45	Mafic magmatism in the Taupo Volcanic Zone, New Zealand: insights into the birth and death of very large volume rhyolitic systems Georg Zellmer	*Spatial and temporal aspects of Deep- Seated Gravitational Slope Deformations on the South Island of New Zealand Romy Ridl	Filling the gaps in Antarctica's observational records using Gaussian Process Regression Mario Krapp	
12.45 - 13.00	Keynote Speaker *The 2.1 Ma Waiteariki Ignimbrite: defining a new super-eruption at the onset of TVZ volcanism Marlena Prentice	*Geomorphology and geotechnical characterization of the Queenstown Hill landslide Laura Gnesko	Emergence of critical climate states during the Plio-Pleistocene Nicholas Golledge	
13.00 - 14.30	13.00 - 14.30 Lunch, meetings & poster viewing Venue: Sponsor & Exhibition Area and Poster Display, C-Block			
13.30 - 14.30	13.30 - 14.30 All lunch time meetings are located in the Ernest Rutherford Building			
	Venue: ER213	Venue: ER219	Venue: ER 221	Venue: Meet in the C-block foyer
	LAVANZ SIG / IAVCEI VolcanoFest meeting	Life after University: Industry Advice for Students	Friends of Pleistocene SIG meeting	Tour of the Ernest Rutherford Building
	Geoff Kilgour/Ben Kennedy	Clark Fenton	Peter Almond	Rob Spiers
				Venue: Puaka-James Hight - Library
				Viewing of signed copy of William Smith's geological map of England and Wales (1815)

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Tuesday 24 November 2020 cont.

14.30 - 16.30	6A: Volcanism Intermediate Volcanism	6B: Transition Zone Subduction to Strike-Slip Transition in Central New Zealand	6C: Climate Climate Past and Present (in association with Friends of the Pleistocene SIG)
	Chair: Alan Bischoff & Jenni Hopkins	Chair: Emily Warren-Smith & Ilma del Carmen Juarez Garfias	Chair: Andrew Lorrey & Peter Almond
	Venue: C1	Venue: C2	Venue: C3
14.30 - 14.45	Keynote Speaker Whakaari/White Island: a review of New Zealand's most active volcano Geoff Kilgour	Seismogenesis Hikurangi Integrated Research Experiment (SHIRE): a lot has been happening in Middle Earth Stuart Henrys	Keynote Speaker Bye Bye, Bipolar Seesaw? David Barrell
14.45 - 15.00	Real-time Eruption Forecasting and Early Warning at Whakaari Shane Cronin	*What controls the along-strike segmentations of shallow slow slip events? Insights from 3D numerical modeling of slow slip events along the Hikurangi margin, New Zealand Andrea Perez	What lies beneath? A palynological and sedimentological history of the Wellington Basin (CBD) over the Late Pleistocene Matthew Ryan
15.00 - 15.15	*Hydrothermal rock alteration as a possible control on eruption dynamics at Whakaari volcano Shreya Kanakiya	*Adjoint tomography of the Hikurangi subduction zone and New Zealand's North Island using an automated workflow Bryant Chow	Latitudinal migration of Southern Hemisphere westerly winds during the early Holocene Greer Gilmer
15.15 - 15.30	Phreatic eruptions from hyper-acidic wet volcanic systems: The role of hydrothermal sealing in the 27 April 2016 eruption from White Island, New Zealand Bruce Christenson	Assessment of tsunami source complexities at the Northern Tonga Trench and comparisons with local tsunami source potential at the Southern Hikurangi margin Shaun Williams	Multiproxy speleothem records from Aotearoa New Zealand map latitudinal shift of westerly winds across the Early Holocene Christopher Wood
15.30 - 15.45	Reconstructing the dynamics of jets and pyroclastic currents of the 9 December 2019 Whakaari eruption Ermanno Brosch	Keynote Speaker 10-years of earthquakes on and around the 2016 M7.8 Kaikōura earthquake Calum Chamberlain	Climate modulation of laminae deposition in Adélie Land, East Antarctica Katelyn M. Johnson
15.45 - 16.00	Ambient Noise Velocity Changes at Whakaari, White Island 2012-2020 Katie Jacobs	Heterogeneous stresses and brittle-ductile deformation during shallow crustal faulting, Hungaroa Fault Zone, Hikurangi Subduction Margin, New Zealand Marcel Mizera	*Significant variations in late Holocene South Pacific gyre strength Nicholas Hitt
16.00 - 16.15	The December 9 eruption of Whakaari/White Island Geoff Kilgour	Material properties, from seismic attenuation, influence multiple fault rupture and ductile creep of the Kaikōura Mw 7.8 earthquake, New Zealand Donna Eberhart-phillips	A 7300 year record of long- and short-term environmental changes (inc. a tsunami) in a backbarrier wetland, Moawhitu, Rangitoto kite Tonga/d'Urville Island Catherine Chagué
16.15 - 16.30	Keynote Speaker The geological history and hazards of a long-lived stratovolcano, Mt. Taranaki, New Zealand Shane Cronin	Marlborough Fault System: topographic fabric of a complex 4D transition zone in central New Zealand Phaedra Upton	Decadal scale changes in flood frequency over the past 2600 years from an annually resolved sediment record from Lake Ohau Gavin Dunbar
16.30 - 17.30	16.30 - 17.30 Afternoon Tea and Poster Session 2 Venue: Sponsor & Exhibition Area and Mezzanine Level, C-Block Local craft beer provided by <i>Eruption Brewing</i> Poster Session brought to you by <i>Silver Sponsor NIWA</i>		
17.30 - 18.30	GSNZ AGM Venue: C1		
18.45 / 19.00	18.45 / 19.00 – Late Conference Dinner Venue: Ti-Kouka, Haere-roa, UCSA Events Centre, University of Canterbury Theme: mā pango, mā whero : collaboration and cooperation to achieve a goal: red and black		

Wednesday 25 November 2020

07.00	Registration Venue: C-Block Foyer		
08.00 - 08.30	Plenary 3 Venue: C1 Prediction of seismic hazards in NZ using physics-based methods: Opportunities for integration across the geosciences Brendon A. Bradley, Professor of Earthquake Engineering, University of Canterbury and Director, QuakeCoRE: The NZ Centre for Earthquake Resilience		
08.30 - 10.30	7A: Volcanism Trip around the South Pacific	7B: Active Tectonics Active tectonics of New Zealand - 40 years of advances	7C: Minerals Mineral Deposits: Geology, Exploration and Resources (in association with AusIMM)
	Chair: Jenni Hopkins & Alan Bischoff	Chair: Rob Langridge	Chair: Michael Gazley
	Venue: C1	Venue: C2	Venue: C3
08.30 - 08.45	A granite in the Otago Schist: Caravel-1, offshore north Otago Andy Tulloch	Keynote Speaker Reflections on advances in active tectonics in New Zealand in the past 40 years Kelvin Berryman	Geochemical signatures of epithermal Au-Ag deposits of the Hauraki Goldfield, Coromandel Volcanic Zone, New Zealand Anthony (Tony) Christie
08.45 - 09.00	*Geochemistry of the 26th June 2019 eruption products from Ulawun volcano, Papua New Guinea Marco Rebecchi	AF8: Five years of science and emergency management collaboration to improve resilience in the South Island Caroline Orchiston	*Delineating Mineral Resources By Integrating Biogeochemical And Geological Exploration Approaches Using Hyperspectral Remote Sensing Rupsa Chakraborty
09.00 - 09.15	*Facies architecture of the NE sector of Lyttelton Volcano, Banks Peninsula Marcos Rossetti	Clyde Dam, Otago: 40 years of hazards science Mark Stirling	Nimbyism in Marlborough - Reconsenting Barracks Quarry David Bell
09.15 - 09.30	Understanding composite volcano architecture through hydrothermal alteration mapping – A case study for Mt Ruapehu, New Zealand Gabor Kereszturi	*Ground Motion Simulations for Dunedin - Mosgiel Area Anna Kowal	*Expanding the Footprint of Orogenic Gold: Trace Elements in Sulphides Showing Potential Harry Davies
09.30 - 09.45	*Magma-ficent Earthquakes: Using historical records to inform baseline seismicity in the Auckland Volcanic Field Sian Camp	Filling the gaps: progress toward an improved understanding of subduction earthquake hazard on the Hikurangi margin, New Zealand. Kate Clark	*In-situ Scheelite REE geochemistry reveals evolving fluids during orogenic Otago Schist gold-tungsten mineralisation in New Zealand Marshall Palmer
09.45 - 10.00	The role of hydrovolcanism in the formation of the Cenozoic monogenetic volcanic fields of Zealandia Károly Németh	*Progress towards integrating the onshore and offshore paleoseismic record on the central Hikurangi subduction margin Charlotte Pizer	Structurally-focused gold deposits in the Reefton Goldfield Mark Rattenbury
10.00 - 10.15	Basalt karst Bruce W. Hayward	*Distinguishing turbidite tails from background sedimentation on the Hikurangi Margin and its implications for dating turbidites Stephanie Tickle	*Crucial Metals in Exposed Mantle: Ni, Co, Cu & Zn in Zealandia's Ultramafic Rocks Stephanie Junior
10.15 - 10.30	Linking deep crustal processes to surface uplift: a petrochronologic case study from the Transantarctic Mountains John Cottle	*The influence of off-fault deformation on the distribution of coseismic landslides from the 2016 Mw 7.8 Kaikōura earthquake Colin Bloom	Copper mobility in the near-surface environment from hematite-goethite-hosted Cu-Au mineralisation, Katoka, Zambia Michael Gazley
10.30 - 11.00	10.30 - 11.00 Morning tea Venue: Sponsor & Exhibition Area, C-Block		

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11.00 - 13.00	8A: Geo-Teaching & Practice Geo-Education, Outreach, & International Development (GeOID) (in association with GeOID SIG)	8B: Active Tectonics Active tectonics of New Zealand - 40 years of advances	8C: Geochemistry Geochemical tools and applications to reconstruct environmental and climate change, human impact and Earth history in New Zealand, Australia and Antarctica (in association with Geochemistry SIG)
	Chair: Michael Petterson	Chair: Kate Clark	Chair: Sebastian Naeher & Dan Sinclair
	Venue: C1	Venue: C2	Venue: C3
11.00 - 11.15	Interconnected Geoscience for International Development Michael Petterson	Creation and destruction of Holocene marine terraces at Mahia Peninsula Mark Dickson	Keynote Effects of organic matter complexation on partitioning of transition metals into calcite: cave-analogue crystal growth studies. Adam Hartland
11.15 - 11.30	Abstract of a Geo-technical Advisor: Two Years Volunteering in Vanuatu Simon Bloomberg	Continuing on the Legacy: Marine terrace study at Aramoana, southern Hawke's Bay Nicola Litchfield	*Trace metal partitioning in cave (and cave-analogue) carbonate precipitates – towards a quantitative hydrological proxy in stalagmites. Sebastian N. Höpker
11.30 - 11.45	Engineering Geology Industry-Academia Partnerships: Experiences from the UC Quake Centre Dams Project Clark Fenton	The 2022 New Zealand National Seismic Hazard Model Revision Matthew Gerstenberger	Climatic signals in chemical weathering and soil production on New Zealand's North Island. Claire E Lukens
11.45 - 12.00	Assessing the merits of different educational outreach activities Julian Thomson	*Do large earthquakes recur regularly, randomly or clustered together in New Zealand? Jonathan Griffin	*Climatic effects on rapid chemical and physical denudation rates measured with cosmogenic nuclides in the Ōhau catchment, New Zealand. Maia Bellingham
12.00 - 12.15	Keynote A brief history of the GeoEd SIG Glenn Vallender	Variability of earthquake recurrence intervals; implications for seismic processes and hazards in New Zealand Andy Nicol	*Reconstructing the influence of agricultural intensification on lake ecosystem health using paleo-environmental reconstruction. Jake Parrish
12.15 - 12.30	GeoCamp and Tūhura Papatūānuku – engaging students with hands-on science outreach Jess I T Hillman	*Tectonic geomorphology and paleoseismology of the Torlesse fault, mid-Canterbury, New Zealand. Santosh Dhakal	Combining organic biomarker and compound-specific stable isotope records with high-resolution sediment imaging to reconstruct environmental and climate changes from New Zealand lake sediments. Sebastian Naeher
12.30 - 12.45	*Understanding Unrest in and around Lake Taupo through Serious Gaming Sriparna Saha	*Late Holocene paleoearthquake rupture history of the Leader fault in North Canterbury prior to the 2016 Kaikōura earthquake. Tabitha Bushell	*Hydrogeochemical controls on the uranium isotope systematics of New Zealand rivers: Implications for the reconstruction of past ocean oxygenation changes. Ben Perrett
12.45 - 13.00	*Communicating the Geology of the Otago Central Rail Trail Jenny K. Stein	Map-view restorations of the South Island, New Zealand: a new reconstruction of the last 10 Myr of evolution of the Alpine and Wairau faults Francesca Ghisetti	*Biogeochemical cycling of the uranium isotope system down a permanently de-oxygenated fjord: Implications for de-oxygenation in the past oceans. William Preston
13.00 - 14.30	13.00 - 14.30 Lunch, meetings & poster viewing Venue: Sponsor & Exhibition Area and Poster Display, C-Block		

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Wednesday 25 November 2020 cont.

13.30 - 14.30		13.30 - 14.30			
All lunch time meetings are located in the Ernest Rutherford Building					
Venue: ER213	Venue: ER219	Venue: ER220	Venue: ER221	Venue: ER263	Venue: Meet in the C-block foyer
GEOID SIG meeting Michael Petterson	AusIMM Student Event: Career paths in the minerals industry - enabling a sustainable future Michael Gazley	Sedimentology SIG meeting Karoly Nemeth	Oil & Gas SIG meeting Mac Beggs	Palaeontology SIG/ New Zealand Fossil Record File Catherine Reid	Tour of the Ernest Rutherford Building Rob Spiers
14.30 - 15.30		14.30 - 15.30		14.30 - 15.30	
9A: Geo-Teaching & Practice Geo-Education, Outreach, & International Development (GeOID) (in association with GeOID SIG)		9B: Active Tectonics Active tectonics of New Zealand - 40 years of advances		9C: Geochemistry Geochemical tools and applications to reconstruct environmental and climate change, human impact and Earth history in New Zealand, Australia and Antarctica (in association with Geochemistry SIG)	
Chair: Michael Petterson		Chair: Mark Stirling		Chair: Sebastian Naeher & Dan Sinclair	
Venue: C1		Venue: C2		Venue: C3	
14.30 - 14.45	Keynote Speaker Lessons learned in building virtual fieldtrip for undergraduate Geology students James Scott	From Edgecumbe Earthquake to today: how the initial paleoseismic studies in the Taupō Rift have shaped our understanding of active fault behaviour in the rift Pilar Villamor	Iti-proxy evidence for a millennial expansion of the South Pacific Gyre driven by ENSO/SAM interactions Daniel Sinclair		
14.45 - 15.00	Teaching science communication in the time of crisis: Updating the Auckland Volcanic Field simulation Sophia Tsang	Heat and mass transport in the deep TVZ Warwick Kissling	Informing Ramped Pyrolysis Radiocarbon Dating with Parallel Pyrolysis-GC-MS Analysis Catherine Ginnane		
15.00 - 15.15	Covid-19 induced online sedimentology teaching: an opportunity for the integration of digital Earthscience technologies into 21st century curricula Lorna Strachan	Forecasting tsunamis in New Zealand using precomputed scenarios database and DART observations Aditya Gusman	The Forgotten Variable: Effects of sample preparation on geochemistry of invertebrate skeletal carbonate Abby Smith		
15.15 - 15.30	What do undergraduate students gain from field experiences? A practical guide to assessment and evaluation Alison Jolley (Virtual)	Advances in understanding the Alpine Fault through the lens of Berryman (1975) etc. Robert Langridge	Earthquake-induced landsliding enhances carbon export from land to oceans over millennial timescales Jamie Howarth		
15.30 - 16.30		15:30 - 16:30			
Venue: C1					
Closing Ceremony & Student Awards					
We will hear from Kari Bassett, Conference Convenor; MBIE; NZJGG and the 2021 Conference Committee. Followed by the GSNZ best student presentation awards.					



Thursday 26 November 2020

Workshop		
AusIMM - Placer Deposit Forum Venue: C1 in C-Block		
The forum will be chaired by Tony Christie and speakers will include Kerry Stanaway, Dave Crow, Tom Ritchie, and John Youngson		
Field Trips		
<p>Petroleum exploration and production in North Canterbury</p> <p>Leaders: Mac Beggs (University of Canterbury), Nick Jackson (Elemental Petroleum Consultants), Bill Leask (Elemental Petroleum Consultants), Andy Nicol (University of Canterbury)</p>	<p>Banks Peninsula's Best Bits: Volcanology, Research and Geopark</p> <p>Leaders: Sam Hampton (University of Canterbury/Frontiers Abroad) and Darren Gravley (University of Canterbury/Frontiers Abroad)</p>	<p>Walking Tour of Christchurch CBD Rebuild</p> <p>Leaders: Clark Fenton (UC SEE) and Brandy Alger (UC QuakeCore)</p>

Friday 27 & Saturday 28 November 2020

Field Trip	
West Coast placer mineral deposits	
Leader: John Taylor with support from Nick Whetter, John Jounson, John Barry, John Morris, and Tom Ritchie	

