Optional GTW - Oamaru Field Trip

PETROLEUM SYSTEMS ASSOCIATED WITH VOLCANISM

18th to 20th March 2017

NORTH ISLAND NEW ZEALAND

Field trip to the Taupo Volcanic Zone to observe modern structures and deposits in active volcanoes and their implication on petroleum systems

Information and expression of interest, please contact Alan Bischoff
alan.bischoff@pg.canterbury.ac.nz

Day 1: Rotorua - Taupo
Meeting in Rotorua. Structures controling permeability in lava domes. Pyroclastic deposits: facies, geometries, distribution, processes, permo-porosity, exploration and production in geothermal systems.
Overnight in Taupo.

Day 2: Taupo Supervolcano and Tongariro National Park
Caldera volcanoes: dimensions, geotectonic setting, rifting and volcanism. Facies and reservoir analogue in Pukeonake scoria cone. Epiclastic deposits. Seals and traps in stratovolcanoes.
Overnight in Whakapapa Village.

Day 3: Tongariro National Park
Lava flow deposits, geometries, permo-porosity, distal to proximal faciologic distribution, eruptive and associated sedimentary processes. Correlation with seismic data.
Drop off in Taranaki.

Information

- Event promoted by the UC - AAPG student chapter
- Minimum 10 and maximum 30 participants
- Price according with the number of participants
- Forecast cost is around $500 pp
- Includes: land transport, guides, field trip guidebook
- Do not include: air transport, accomodation, food

Please manifest your interest to
alan.bischoff@pg.canterbury.ac.nz by 31/12/2016

Field Trip Guides

Dr Darren Gravley
Darren is a Senior Lecturer in volcanology and geothermal systems at the University of Canterbury. Research focuses on large silicic volcanism and its magmatic and tectonic controls, and associated geothermal systems. Active research areas include New Zealand, western U.S., Japan and Brazil. Expertise includes caldera and dome structures, ignimbrite characterisation, volcaniclastic lithofacies associations, volcanic geomorphology, and magmatic-volcanic-tectonic interplay at the plate boundary to individual volcano scale. Principal investigator of the source to surface geothermal research programme at Canterbury Univeristy.

Alan P. Bischoff
Alan graduated as a specialist in Petroleum Geology in 2004. He worked as a marine and exploration geologist offshore Brazil employed by Petrobras and has completed post-graduate studies in sequence stratigraphy, sedimentology and basin analysis. In 2015 Alan has joined University of Canterbury in a PhD reserach studying the impact of volcanism on sedimentary basins and petroleum systems. His main research interest is in sequence stratigraphy, seismic interpretation, paleoenvironmental reconstitution and characterization of volcanic systems within sedimentary basins.

Dr Paul A. Ashwell
Paul is a Senior Tutor at the Department of Geological Sciences at the University of Canterbury. His studies are related with the formation of rhyolite domes in the Taupo Volcanic Zone, with particular reference to Ruawahia Dome, Tarawera and Ngongotaha Dome, Rotorua. Paul's main research interest is in physical and experimental volcanology, particularly the links between how lava domes grow, how lava dome structures are formed, and how lava domes collapse to form pyroclastic flows.