

C. Ian Schipper

PhD (submitted)- University of Otago

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Research Interests

- Eruption mechanisms
- Volcaniclastic rocks and pyroclast textures
- Magma-water interaction
- Magma ascent and decompression processes
- Magma vesiculation and textural evolution
- Magmatic degassing systematics and volatile evolution

Education

2006- **The University of Otago**, Dunedin, New Zealand

PhD (Geology)

Thesis: *Submarine explosive volcanism at Lō`ihi Seamount, Hawai`i*

Submitted 30 September, 2009, results pending

2004 **The University of Otago**, Dunedin, New Zealand

MSc (Geology), with distinction

Thesis: *Chemical and Mineralogical Characterization of Pyroclastic Deposits from the ca. 1 Ma. Kidnappers and Rocky Hill Eruptions, Taupo Volcanic Zone, New Zealand*

2002 **The University of British Columbia**, Vancouver, BC, Canada

BASc (Environmental/Geotechnical Engineering)

Thesis: *The Catastrophic Failure of a Volcanic Dam at Mount Meager, Southwest British Columbia, 2360 BP: An Engineering Approach to Volcanic Hazards*

Awards Received: Christopher Riley Memorial Scholarship
George E. Winkler Memorial Scholarship
Outstanding Student Initiative Scholarship

Publications (and works in progress)

Schipper, C.I. (2007) Volcaniclastic Rocks (of the Manihiki Plateau). FS Sonne Cruise Report SO193 Manihiki: Temporal, Spatial, and Tectonic Evolution of Oceanic Plateaus. IMF GEOMAR, Kiel. No. 13:55-61.

Schipper, C.I. and White, J.D.L. (2009) No depth limit to hydrovolcanic limu o' Pele: evidence from Lō`ihi Seamount, Hawai`i. *Bulletin of Volcanology. Published online.* Doi: 10.1007/s00445-009-0315-5

Schipper, C.I., White, J.D.L., Houghton, B.F., Shimizu, N., and Stewart, R.B. (2009) "Poseidic" explosive eruptions at Loihi Seamount, Hawaii. *Geology. In review*

Schipper, C.I., White, J.D.L., and Houghton, B.F. Pre- and post-fragmentation textures in submarine pyroclasts from Lō`ihi Seamount, Hawai`i. *Journal of Volcanology and Geothermal Research. In review*

Schipper, C.I., White, J.D.L., Houghton, B.F., Shimizu, N., and Stewart, R.B. A closed-system degassing trigger to submarine explosive eruptions at Lō`ihi Seamount, Hawai`i. *In preparation*

Conference Presentations

Schipper, C.I., and White, J.D.L. (2009) Intra-vesicular extrusions: Sensitive indicators of submarine explosive conduit dynamics. Geological Society of New Zealand. *Upcoming oral presentation*

Schipper, C.I., White, J.D.L., Houghton, B.F., Shimizu, N., and Stewart, R.B. (2009) A deep-sea scoria cone at Lō`ihi Seamount: the product of "volatile-coupled, water-assisted" (VOCWA) eruption. European Geophysical Union: Vienna, Austria. *Oral presentation*

Schipper, C.I., White, J.D.L., Houghton, B.F., Shimizu, N., and Stewart, R.B. (2008) Submarine explosive eruptions at Lō`ihi Seamount, Hawai`i- the result of perfectly closed system degassing. American Geophysical Union: San Francisco, CA. *Poster*

Schipper, C.I., and White, J.D.L. (2008) No depth limit to hydrovolcanic limu o' Pele: evidence from Lō`ihi Seamount, Hawai`i. IAVCEI General Assembly, Reykjavik, Iceland. *Oral presentation*

Schipper, C.I., Houghton, B.F., Gonnermann, H.M., and White, J.D.L. (2007) Vesicle evolution in primary volcanoclastic deposits of Lō`ihi seamount, Hawai`i, with implications for submarine basalt explosivity. American Geophysical Union: San Francisco, CA. *Poster*

Schipper, C.I., White, J.D.L., and Houghton, B.F. (2007) Primary volcanoclastic deposits at Lō`ihi Seamount, Hawai`i: evidence for submarine explosive activity? Geological Society of New Zealand Miscellaneous Publication 123A. *Poster*

Earth Science/ Volcanology Experience

- 2009 Non-explosive magma-water interaction experiments, Physikalisch Vulkanologisches Labor, Universität Würzburg, Germany

- 2009 University of Otago third-year mapping field course, Swinburn, Otago, New Zealand: supervisor

- 2007 IMF GEOMAR, FS Sonne Cruise SO193, Manihiki Plateau: guest scientist

- 2007 University of Hawai`i field course in explosive volcanism, Kilauea Volcano, Hawai`i, and Taupo Volcanic Zone, New Zealand: guest student

- 2006 Hawaiian Undersea Research Laboratory Pisces IV/ Keana Kako`i Cruise P4-160 to P4-164, Lō`ihi Seamount: student scientist

- 2002 The Open University of London- Deformation Study of Mt. Etna, Sicily: field assistant

- 2001 University of Washington field course at Mt. Pinatubo, Philippines: exchange student

- 2000 U.S. Geologic Survey Hawaiian Volcano Observatory, Kilauea Volcano, Hawai`i: deformation group intern

- 1998 The University of British Columbia Geography Department: laboratory and field technician

- 1998 University of British Columbia Geology Department: field assistant

Professional Affiliations

European Geophysical Union (EGU)

American Geophysical Union (AGU)

International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI)

Geological Society of New Zealand (GSNZ)

Other Work Experience

- 2005 Adventures Pacific, Tofino, BC, Canada: whale watching tour guide and boat operator
- 2004 The University of Otago Central Library, Dunedin, New Zealand: reference department shelver
- 2001 Ecomarine Ocean Kayak Centre, Vancouver, BC, Canada: equipment manager