



UNIVERSIDAD COMPLUTENSE
MADRID

Universidad Complutense de Madrid

Curriculum vitae abreviado (últimos 5 años)

Nombre: Kelvin Berryman

Fecha: 20-julio-2005

ATENCION: Deben firmarse al margen todas las hojas del curriculum

Curriculum Vitae

Full name: Dr Kelvin R Berryman

Present position: Principal Scientist

Present employer: Institute of Geological & Nuclear Sciences Ltd

Present work address: 69 Gracefield Road
PO Box 30368
Lower Hutt

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Home address: 18 Cluny Rd, Plimmerton, ph 2332078

Academic qualification:)

BSc, Victoria University of Wellington (VUW) (1974)

BSc (Hons - 1st class) VUW (1977), geology

PhD, VUW (1990), geology

Years as a practising researcher: 29

Honours/distinctions/membership of societies, institutions, committees:

- Member of NZ Geological Society,
- Past Vice President of Neotectonics Commission of INQUA,
- Member of the New Zealand National Society for Earthquake Engineering,
- Management Committee of New Zealand National Society for Earthquake Engineering 1981-1986,
- Otto Glogau award of the New Zealand National Society for Earthquake Engineering in 1993 & 2000,
- Convenor of NZ Royal Society Committee for Quaternary Research 1981-87,
- Member of the Loadings Code Committee of Standards New Zealand 1981-92,
- Hochstetter Award of the Geological Society of New Zealand in 1995,
- Member of Editorial Boards of *Geology* (1990-1992) & *NZJGG* (1997-2001),
- NZ representative to IGCP projects 206 (1987-1992) & 274 (1988-1992)
- Awarded NZ Science and Technology Bronze Medal by the Royal Society of New Zealand, 2000
- Co-leader of International Lithosphere Program II-5 project, 2000-2003.
- Appointed to Tertiary Education Commission review panel for Natural Physical Sciences of the Performance Based Research Fund, 2003-

Professional positions held: (years, position, institution, activity)

1974-92, Scientist, New Zealand Geological Survey
 - Leader of Earth Deformation Section (1981-1985)
1992-present Scientist, Institute of Geological & Nuclear Sciences Ltd
 - Leader of Earth Deformation Programme 1996-1998
 - Leader of Active Landscape Programme (NSOF) 1999-2003
 - Leader of Natural Geological Hazards Programme 2003-

Present research/professional speciality:

- Coastal neotectonics using former shorelines to determine vertical crustal deformation.

- Earthquake geology, paleoseismology, and fault behaviour studies on active faults in New Zealand and elsewhere.
- Earthquake hazard studies from site specific to national scale.
- Earthquake geology studies of the Alpine fault.
- Landscape evolution studies.

Number of refereed publications: 79

Number of patents: 0

Number of other significant publications: 100+ contract reports

List of major achievements pertinent to this research proposal:

1. Major publications (in the last five years).

Cochran U, Berryman K, Zachariasen J, Mildenhall D, Hayward B, Southall K, et al. Paleoeological insights into subduction zone earthquake occurrence, eastern north island, new zealand. *Geological Society of America Bulletin*. 2006 Oct [cited 2006 Sep 26];118(9-10):1051-74.

Sutherland R, Berryman K, Norris R. Quaternary slip rate and geomorphology of the alpine fault; implications for kinematics and seismic hazard in southwest new zealand. *Geological Society of America Bulletin*. 2006 Apr [cited 2006 Sep 26];118(3-4):464-74.

Nairn IA, Hedenquist JW, Villamor P, Berryman KR, Shane PA. The approximately AD (sub 1315) tarawera and waiotapu eruptions, new zealand; contemporaneous rhyolite and hydrothermal eruptions driven by an arrested basalt dike system? *Bulletin of Volcanology*. 2005 Feb [cited 2006 Sep 26];67(2):186-93.

Nicol A, Walsh J, Berryman K, Nodder SD. Growth of a normal fault by the accumulation of slip over millions of years. *J Struct Geol*. 2005 [cited 2006 Sep 26];27(2):327-42.

Apted M, Berryman K, Chapman N, Cloos M, Connor C, Kitayama K, et al. Locating a radioactive waste repository in the ring of fire. *EOS Trans Am Geophys Union*. 2004 09 Nov [cited 2006 Sep 26];85(45):465, 471.

Berryman K, Villamor P. Surface rupture of the poulter fault in the 1929 march 9 arthur's pass earthquake, and redefinition of the kakapo fault, new zealand. *N Z J Geol Geophys*. 2004 Jun [cited 2006 Sep 26];47(2):341-51.

Chagué-Goff, C.; Dawson, S.; Goff, J.R.; Zachariasen, J.; Berryman, K.R.; Garnett, D.L.; Waldron; H.M.; Mildenhall, D.C. 2001: A Mid Holocene (c. 6300 years BP) catastrophic saltwater inundation in Northern Hawke's Bay, New Zealand. *Sedimentary Geology* 150: 89-102.

Gomez, B.; Fulthorpe, C.; Carter, L.; Berryman, K.; Browne, G.; Green, M.; Hicks, M.; Trustrum, N. 2001: Continental margin sedimentation to be studied in New Zealand. *Eos, Transactions, American Geophysical Union*: 82: 161, 166-167.

Stirling, M.; Pettinga, Y.; Berryman, K.; Yetton, M. 2001: Probabilistic seismic hazard assessment of the Canterbury region, New Zealand. *Bulletin of the NZ Nat. Soc. Earthquake Engineering* 34(4): 318-334.

Prentice, C.; Kendrick, K.; Berryman, K.; Bayasgalan, A.; Ritz, J.; Spencer, J. 2002: Prehistoric ruptures of the Gurvan Bulag fault, Gobi Altay, Mongolia. *Journal of Geophysical Research* 107(B12): 2321-39.

Berryman, K.R.; Hull, A.G. 2003: Tectonic controls on late Quaternary shorelines in New Zealand: A review and prospects for future research. Chapter 2 In: Goff, J.; Nichol, S.; Rouse, H.L. (editors) *The New Zealand Coast: Te Tai O Aotearoa*. Brassell Publishing, Wellington.

Schemer, E.R.; Van Dissen, R.J.; Berryman, K.R.; Kelsey, H.M.; Cashman, S.M. 2004: Active faults, paleoseismology, and historical fault rupture in northern Wairarapa, North Island, New Zealand. *New Zealand Journal of Geology & Geophysics* 47: 101-122.

2. Major achievements in commercial, social and environmental areas

- Invited lecturer at International Symposium on Quaternary Environmental Change in the Asia and western Pacific region, Tokyo, 1997.
- Short Course Lecturer in Quaternary geomorphology and tectonics in Dehra Dun, India in 1996, and in Cambrils, Spain in 2000.
- Editorial Board of the journal; *Geology* (1990-1992), and editorial advisory panel of *NZ Journal of Geology & Geophysics* (1996-2000).
- I have developed the GNS initiative in landscape evolution research involving interaction with West Coast and Canterbury agencies and communities.
- Along with colleagues in NIWA and Landcare Research we successfully advocated New Zealand as a world study site for the US National Science Foundation, Source to Sink initiative.
- Assistance with Year 12 & 13 Earth Science curriculum for Correspondence School.
- Invitation (2002-present) to join international review panel established to provide expert assistance on geological siting requirements for the development of a Japanese repository for high-level nuclear waste.
- Currently supervising a FRST post-doc (Nicola Litchfield), a Swiss funded post-doc in GNS (Mira Persaud), and co-supervising a PhD student at VUW (Kate Wilson).
- Member of Physical Sciences Panel established by the Tertiary Education Commission (TEC) to administer Performance Based Research Funding in NZ Tertiary Institutions (2003-2004).

3. Demonstration of relationships with end-users.

- Member of the Loadings Code Committee of Standards New Zealand (1988-94).
- Co-Principal Investigator of GNS contract to ECNZ for Seismic Safety Evaluation of the Matahina Dam (1995-1998).
- Involvement in approximately 50 consultancy reports in the past 5 years.
- One of the principal GNS investigators working with Mighty River Power on Seismic Safety Evaluation of Waikato River Hydro facilities (1998-2003).
- One of the principal GNS investigators working with Meridian Energy on Seismic Safety Evaluation of Waitaki River Hydro facilities (1997-2003).
- GNS project leader for seismic hazard evaluation for the Replacement Research Reactor Project at Lucas Heights, Sydney, Australia (1999-2002).