

**PhD position in Earth sciences - paleontology,
GNS Science and Victoria University of Wellington,
Wellington, New Zealand**

Southern Ocean plankton diversity history using quantitative stratigraphy

The project will use compilations of existing and new biostratigraphic, physical, geophysical, and geochemical data from ocean cores and potentially some onshore sections, to generate a very high resolution Cenozoic history of phyto- and zooplankton from the Antarctic margin, Southern Ocean and SW Pacific. The data will be integrated using the quantitative biostratigraphic approach of constrained optimization (CONOP), and will draw on existing and upcoming geological drill core results in the region. The resulting time lines of biotic and physical history will then be used to interpret plankton macroevolutionary processes in the region over the Cenozoic in the context of global and regional tectonic, climatic, and other environmental changes.

The project will interface with a parallel study, based out of the University of Wisconsin, that will explicitly link and integrate CONOP with spectral analysis and astrochronological interpretation of CONOP-derived time lines.

Applicants must meet the entry requirements for PhD study at Victoria University: please refer to the Faculty of Graduate Research, www.victoria.ac.nz/fgr. In the first instance, potential candidates should apply directly to Prof. James Crampton at the email address given below, indicating clearly that they wish to be considered for the “Plankton diversity history” scholarship.

Closing date for applications:
5.00pm (NZ time), 30th November, 2017.

Specific enquiries about the project can be directed to:
Professor James Crampton, j.crampton@gns.cri.nz
Dr Richard Levy, r.levy@gns.cri.nz
Dr Rob McKay, rob.mckay@vuw.ac.nz

