



**Next HEDG event:
Tuesday 21 October 2014
Newcastle Museum, 6.30pm**



The 2014 theme for Earth Science Week is : "Earth's Connected Systems."

The life aquatic and the life aeromagnetic: what two months on a drill ship can tell you about the Macquarie Arc

Dr Bob Musgrave

(Research Geophysicist, Geological Survey of NSW, NSW Trade & Investment)

About the talk

Dr Bob Musgrave joined the research ship JOIDES Resolution during April and May of 2014. Expedition 350 of the International Ocean Discovery Program (IODP) studied undersea volcanoes of the Izu–Bonin volcanic arc, south of Japan. The Izu–Bonin Arc is the model for the “subduction factory” in which crust with a continental composition is originally formed, before accretion to an existing continent — a prime mechanism of continental growth. Drilling sampled rock from 1800m below the sea floor in water more than 2km deep. Bob will discuss similarities between the Izu–Bonin Arc and the Macquarie Arc near Orange in the NSW gold–copper belt, and implications for the current controversy over the nature of the Macquarie Arc.

About the speaker

Dr Bob Musgrave was part of a team of 34 scientists, representing 10 countries, on IODP Expedition 350. He is an Honorary Associate of the University of Sydney, the host organisation for the expedition. Bob was selected to join the expedition due to his internationally recognised expertise in palaeomagnetism. While aboard, he introduced his international colleagues to two-up and drop bears.

Venue

McIntyre Theatrette, Newcastle Museum

Time

Drinks and nibbles at 6.00pm, presentation at 6.30pm

Cost

Free entry and nibbles. Cash bar for beer, wine, soft drinks

RSVP

By COB Friday 17th October 2014 to phil.gilmore@trade.nsw.gov.au



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