Issue 7, 24 September, 2015

Australia and New Zealand form the Australia-New Zealand IODP Consortium (ANZIC), and the two countries have access to all IODP activities. This bulletin provides current news, job opportunities, scholarships and events relating to both national and international scientific communities.



For more information contact: Website: www.iodp.org.au Website: drill.gns.cri.nz

APPLY NOW TO SAIL in 2016

EXPEDITION 366: Mariana Convergent Margin APPLICATIONS CLOSE: 15 October 2015

News from the ANZIC Office

The ANZIC Governing Council met by telephone on 9 September in what was a routine business meeting. Any new initiatives await the results of the ARC/LIEF bid, which we hope for in late October, when the new Minister for Education has fully settled in. There are many exciting expeditions planned or proposed in our region through until late 2018, as set out below as part of Neville Exon's report to Council. Recent writing has ensured that refined full proposals for two co-funded expeditions in the Australian region will be going to the Science Evaluation Panel this month. Their chances of being scheduled are good but there are still several hurdles to clear.

Lord Howe Rise Cretaceous drilling Proposal 871-CPP to use Chikyu

Southern Australian Cretaceous drilling Proposal 884-CPP to use JOIDES Resolution

It was confirmed that there will be an IODP Session and Booth at the Australian Earth Science Convention from 26 to 30 June next year, in the Adelaide Convention Centre. This is our major chance to report to the geoscience community on the various IODP expeditions of the recent past and plans for the future. Adelaide is a good venue, especially if the co-funded Great Australian Bight Cretaceous Proposal 884 (CPP) continues to move ahead. Clearly there will also be interest in the planned SW Australia Cretaceous Expedition 369, and the forthcoming expeditions in the Pacific. Early bird abstract submissions open on November 3, when Neville Exon will encourage people to get involved.

The ANZIC Annual Report for 2014 is with the printers. The printed version will be sent out to key players in the next week or so, and it will also be available on our web site.

In late May, we offered funding, under the title *Special funding for Australians for analytical work on ocean drilling material*, for scientists to work on legacy material. Applications have closed and the ANZIC Science Committee under the leadership of Rob McKay from Victoria University, Wellington, has evaluated 17 excellent proposals. The grants will be finalised this month.

We recently called for applications for the following *JOIDES Resolution* Mariana Convergent Margin Expedition 366, which will investigate geochemical, tectonic, and biological processes at intermediate depths in an active subduction zone. This expedition will core the summits and flanks of serpentinite mud volcanoes on the forearc of the Mariana system, a non-accretionary convergent plate margin in the western Pacific. *The deadline for applications to ANZIC will be 15 October*.



The JOIDES Resolution will be in Darwin on 30th September, after the Northwest Shelf IODP Expedition 356. The Expedition is investigating the last 5 million years of paleoceanography, paleoclimate and vertical tectonics off northwest Australia. Stephen Gallagher of the University of Melbourne is a co-chief scientist, and three other Australian scientists are aboard. Thomas Lang of Museum Victoria is sailing as an outreach person with an American colleague sharing the role. In Darwin there will be a VIP visit on 30th September. There will also be a visit by the Assistant Minister for Science and press conference on the morning of 1st of October.

For anyone wanting to follow happenings on the ship, please follow their activities on:

http://joidesresolution.org/blog twitter.com/TheJR instagram.com/joides_resolution/

Anyone wanting to schedule a videoconference for any classroom or group can do so at http://joidesresolution.org/node/1746 (or the link directly to the form is bit.do/JRexp356). Things have been going well.

Craig Sloss (QUT) will join the *JOIDES Resolution* Maldives Monsoon Expedition 359 at the beginning of October as a sedimentologist.

A new and excellent book entitled *Southern Surveyor: Stories from onboard Australia's Ocean Research Vessel* has been sent out to those who contributed, and will be generally available soon (see documentation below). This doughty National Facility, now replaced by *Investigator*, did a sterling job over many years, and four Australian geoscientists involved in IODP – Richard Arculus, Neville Exon, Andrew Heap, and Patrick De Deckker – are among those who tell stories about life aboard.

Many of you will be interested in an important document entitled *Great Barrier Report Card 2014* (http://www.reefplan.qld.gov.au/measuring-success/report-cards/2014/assets/gbr-2014report-card.pdf) has just been assembled under the leadership of the Queensland Chief Scientist, Geoff Garrett (also Chairman on the ANZIC Governing Council). It "incorporates significant improvements to the reporting methods and details progress towards the updated targets in the Reef Water Quality Protection Plan 2013. It assesses the combined results of all Reef Plan actions up to June 2014 as well as changes in riparian and wetland extent between 2009 and 2013. Results show the need to accelerate the rate of change and drive innovation to meet the ambitious targets. However, not all activities undertaken during the reporting period are included so the results are considered a conservative estimate of progress."

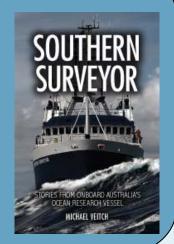
Neville Exon and Catherine Beasley

Southern Surveyor

'The deepest trenches, highest mountains, biggest earthquakes, most explosive volcanoes are all associated with these places. We're discovering things all the time.'

For ten years, the RV Southern Surveyor represented the vanguard of Australian marine science. On over 100 voyages, this former North Sea fishing trawler with her distinctive blue and white livery carried scientists and technicians across the Southern, Pacific and Indian oceans as well as the waters off northern Australia. She conducted physical, chemical, geological and biological investigations and deployed state-of-the-art instruments to map vast unexplored tracts of the seafloor.

Available for pre-order at http://www.publish.csiro.au/pid/7339.htm





Australian Geoscience Council Inc.





35th International Geological Congress Travel Grant Scheme for Early-Career Australian and New Zealand Geoscientists

Specific funding is available to provide Australian and New Zealand geoscientists in the early stages of their careers with opportunities to travel internationally to further their careers as geoscientists by, for example, participating in professionally organised geoscientific conferences or conventions, undertaking field work in appropriate areas, visiting and working with appropriate international experts, inspecting appropriate mines or other geoscientific features such as type localities, etc.

For more information www.agc.org.au.

ATSEA

Expedition 356: Indonesian Throughflow





For anyone wanting to follow happenings on the ship, the blog is at http://joidesresolution.org/blog, the twitter is twitter.com/TheJR, the instagram is instagram.com/joidesresolution/. Anyone wanting to schedule a videoconference for any classroom or group can do so at http://joidesresolution.org/node/1746 (or the link directly to the form is bit.do/JRexp356).

Feel like stalking us? Track us live using the interactive map at http://joidesresolution.org/node/4055/map? width=750&height=600&iframe=true&fastIframe=false





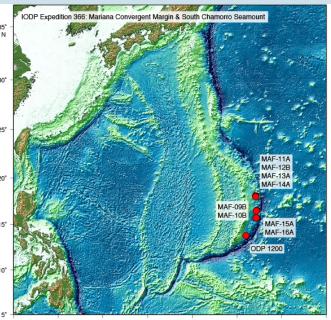
APPLY TO SAIL WITH IODP in 2016



Mariana Convergent Margin: Expedition 366

We are now accepting ANZIC applications for scientific participation for the *JOIDES Resolution Mariana Convergent Margin Expedition (366)*. The expedition will be two months long, in the period 30 November 2016 to end of January 2017. Opportunities exist for researchers (including graduate students) in all specialties – including but not limited to sedimentologists, structural geologists, paleontologists, biostratigraphers, petrologists, paleomagnetists, petrophysicists, borehole geophysicists, microbiologists, and inorganic/organic geochemists.

The expedition schedule (http://iodp.tamu.edu/scienceops/expeditions/mariana_convergent_margin.html) includes links to the original IODP proposal and expedition planning information, including a map showing the proposed sites.



The IODP Mariana Convergent Margin Expedition (based on IODP proposals 505-Full5 and 693-APL) will investigate geochemical, tectonic, and biological processes at intermediate depths of an active subduction zone. This expedition will core the summits and flanks of serpentinite mud volcanoes on the forearc of the Mariana system, a non-accretionary convergent plate margin in the western Pacific. In addition, a reentry cone and casing system will be installed at three of these sites to provide the infrastructure for post-cruise installation of long-term monitoring; the existing Hole 1200C borehole observatory (CORK) will also be removed.

Sediments, rocks, and fluids recovered during this expedition will be used to (1) to understand mass transport and geochemical cycling in subduction zones of non-accretionary forearcs at convergent margins; (2) to ascertain spatial and temporal variability of slab-relate fluids in the forearc environment to trace dehydration, carbonate dissolution, and water/rock reactions in the subduction zone; (3) to understand physical properties of the subduction zone as controls over dehydration reactions and seismicity; (4) to study spatial and tem-

poral variability in metamorphic and tectonic processes and the history of these processes in non-accretionary forearc regions; and (5) to investigate controls over biological activity associated with these mud volcano processes.

For ANZIC scientists all travel costs should be covered. In addition the ANZIC IODP Office may provide up to \$A40,000 for post-cruise activities (mainly analytical costs) for Australian and New Zealand university and research institution scientists and post-graduate students, if funding cannot be obtained in any other way. Applications for such funding can only be made after expeditions are completed and samples are in hand.

The deadline for scientists to submit applications to ANZIC is Thursday, 15 October. We are calling for applications so early to allow people to consider their long term plans. We know that students will have trouble with the long lead time, but keeping this call open until mid October will help somewhat. There will be further calls later in the year. This is an excellent opportunity for scientists, doctoral students or post docs to collaborate with an international team of scientists.

The deadline for scientists to submit applications to ANZIC is Wednesday, 15 October.

