Issue 4, 21 May, 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

TOUR THE *JOIDES Resolution* in Fremantle, 2015

We will be offering community members the opportunity to tour the ship, in port on August 1st, 2015. Please contact the ANZIC office as places will be strictly limited.

News from the ANZIC Office

Mike Coffin (University of Tasmania) and Andrew Roberts (ANU) attended the *JOIDES Resolution* Facility Board meeting in the United States on 12-13 May, and there will be a full report on that meeting in the next Bulletin. The great news from that meeting is that there will be two *JOIDES Resolution* expeditions in our region in 2017 & 2018. Summaries of all proposals are available on www.iodp.org.

- Naturaliste Plateau Cretaceous Climate Proposal 760 off southwest Australia, with lead proponent Richard Hobbs of Durham University and key proponent Irina Borissova of Geoscience Australia
- Hikurangi Subduction Margin Proposal 781A east of the North Island of New Zealand, with lead proponent Demien Saffer of Penn State University in the USA, and key proponents from New Zealand institutions: GNS Science, NIWA and Auckland University

Other highly ranked expeditions in our region that could still be scheduled for drilling in 2018 are:

- ECORD Antarctic Climate Expedition Proposal 813 south of Hobart is recommended for scheduling using an alternative drilling vessel for the fiscal year 2018
- JR Brothers Volcano Arc Flux Proposal 818 north of New Zealand, with lead proponent Cornel le Ronde of GNS Science in New Zealand; unofficially there is a good chance of it being scheduled in 2018
- JR West Antarctic Ice Sheet Climate Proposal 751 is with the JOIDES Resolution Facility Board
- JR Tasman Frontier Subduction Proposal 832 (Lord Howe Rise) is with the Science Evaluation Panel
- JR Southern Australian Cretaceous CPP Proposal 884 will have a revised version with the Science Evaluation Panel in October 2015

Chikyu Gondwana Margin Deep Drilling CPP Proposal 871 (Lord Howe Rise) will be ready as a full proposal later this year (see summary below). Drilling could perhaps occur in late 2017.

Alan Baxter (UNE) has produced a brief report on the *JOIDES Resolution* Bengal Fan Expedition 354 of early this year, which is produced below. The aim of the expedition was to investigate Himalayan uplift and the related onset of the Asian monsoon. A fascinating result is that, in the area studied, muddy turbidites from Himalayan uplift were first deposited in the Late Oligocene and the first sand

News from the office, cont...

Gianluca Marino (ANU) sailed as a stratigraphic correlator on IODP Expedition 353 in late 2014 and early 2015 and reports on it below. Expedition 353 targeted a hitherto unexplored region of the Bay of Bengal, which sits in the core convective region of the vitally important Indo-Asian monsoon system. It is addressing the much-debated onset of the monsoon during the Miocene (~8 million years ago) and the wet/dry oscillations accompanying the glacial-interglacial cycles of the Quaternary (last ~2.5 million years).

Oliver Nebel (Monash University) attended the IODP workshop on Indian Ocean crust-mantle drilling, as a representative of ANZIC. A brief report is below. The workshop took place at the Woods Hole Oceanographic Institution on 13th-16th May. It was to help plan the *JOIDES Resolution* IODP Expedition 360, scheduled for late 2015, which will drill into the Atlantis Bank, a magmatic core complex located at the Southwest Indian Ridge, east of southern Africa. Mark Kendrick (ANU petrologist) and Luna Brentagani (QUT nannofossil expert) will join the expedition at the end of November. Luna has recently submitted her PhD at ANU, and we congratulate her as a late addition to this expedition.

Plans are moving forward for the IODP Forum Workshop to be held in Canberra from 8-10 July. About 40 scientists from around the world will attend this meeting looking at the implementation of the science set out in the IODP Science Plan. It will be chaired by Keir Becker of the University of Florida, and his successor Jamie Austin of the University of Texas at Austin will also attend. Geoff Garrett, the ANZIC Chairman, will attend and we will host a VIP dinner involving key visitors and high-level Australian stakeholders.

Plans are also developing for the port call of *JOIDES Resolution* in Fremantle before it sails on the Northwest Shelf IODP Expedition 356, with tours of the ship to be held on 31 July and 1 August. The expedition will investigate the last 5 million years of paleoceanography, paleoclimate and vertical tectonics in the region. Stephen Gallagher of the University of Melbourne will be a co-chief scientist, and we have invited senior Federal Ministers to visit the vessel on 31 July. Three other Australians will also be aboard.

As regards other expeditioners on *JOIDES Resolution*, Sophie Bratkenov (Macquarie University) is at sea as an organic geochemist on the Arabian Sea Monsoon Expedition 355. Craig Sloss (QUT) will join the Maldives Monsoon Expedition 359 at the end of September as a sedimentologist.

Morgan Williams (ANU) will take part as an inorganic geochemist in the Science Party in Bremen early in 2016 for the European-funded alternative platform Expedition 357, investigating Atlantis Massif Serpentinization and Life on the northern mid-Atlantic Ridge.

ANZIC applications for positions on the *JOIDES Resolution* Sumatra Seismogenic Zone Expedition 362, starting at the end of July 2016, and for the European-funded Chixculub Impact Crater Expedition 364 in the Gulf of Mexico in mid-2016, are being assessed.

Geoff Garrett initiated a discussion with Michael Lund of *The Conversation* about running a series of articles by ANZIC scientists about particularly interesting scientific results, and that should come to fruition fairly soon.

Neville Exon and Catherine Beasley