### Issue 2, 31 March, 2016

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

## News from the ANZIC Office

The ANZIC office has been very busy recently planning and carrying through three ANZIC meetings in Canberra, and producing the Annual Report for 2015 which will soon be available on www.iodp.org.au. The three meetings were scheduled consecutively, so that people could easily attend more than one:

- The Science Committee meeting was held at ANU on the morning of 15 March, with about ten participants. It was chaired by Rob McKay (Victoria University, Wellington) and covered topics such as the status of current drilling proposals; the development of planning workshops, with a major regional workshop to be developed for a December deadline; cruise participants; a review of post-cruise funding; and discussion of the annual student masterclasses in marine geoscience, which will continue. We are very grateful to stalwarts Alan Baxter, Trevor Falloon and Wouter Schellart, who are stepping down. Replacements will be called for shortly.
- The special Stakeholders' Meeting, designed to discuss broad aspects of ANZIC's plans as the new funding comes into play, was held at ANU on the afternoon of 15 March, with Richard Arculus in the chair and about 20 participants from Australia and New Zealand. It covered a variety of topics, including talks by Rob McKay on the broad sweep of forthcoming expeditions, Irina Borissova (Geoscience Australia) on the 2017 Naturaliste Plateau Expedition 369, and Ron Hackney (Geoscience Australia) on the plans for a Cretaceous deep-drilling Chikyu expedition on the Lord Howe Rise, hopefully for 2018. There was considerable useful discussion.
- The Governing Council Meeting at Geoscience Australia on 16 March, with about a dozen participants, was chaired by Geoff Garrett. It covered a standard range of topics, but was helped by the present sound financial situation. The general message that councillors took away is that things are going very well for us, with a number of expeditions in our region in the coming years, and some exciting science being carried out and in planning. Australia and New Zealand are getting a very good scientific return for the money being expended. Talks by Geoscience Australia scientists Irina Borissova and Ron Hackney illustrated how much that institution can contribute to ANZIC, and James Johnston, Chief of the Resources Division, welcomed us to GA.

The very interesting IODP Session at the Australian Earth Sciences Convention, in Adelaide from 26 to 30 June, is convened by Neville Exon and Richard Arculus. Early bird registrations will close on 15 April after authors have heard about the fate of their abstracts, but informally all have been accepted. The program enables us to report to the geoscience community on the various IODP expeditions of the recent past and plans for the future. Among the 16 speakers on 27 and 28 June will be: Brad Clement (US science operations) on the recent JOIDES Resolution Indian Ocean program; Richard Arculus (ANU) on recent drilling of the Izu-Bonin-Mariana arc; Stephen Gallagher (Melbourne University) on the recent drilling of the Miocene-Pliocene sequences off northwest Australia; Jamie Austin (IODP Forum chair) on IODP's future plans; Gilbert Camoin (ECORD) on the nature of the European IODP organisation; Neville Exon (ANU) on ANZIC's part in IODP; Nadine Hallmann (ECORD) on 2014-2018 alternative drilling platform expeditions; Irina Borissova (Geoscience Australia) on the 2017 Expedition 369 investigating the Cretaceous sedimentary history of the Naturaliste Plateau region; Rob McKay (Victoria University Wellington) on the forthcoming expeditions in the SW Pacific and Antarctica; Cornel de Ronde (Victoria University Wellington) on future drilling of the Brothers volcano hydrothermal system north of New Zealand; Ron Hackney (Geoscience Australia) on the proposed deep Chikyu drilling of the Lord Howe Rise; and Saneatsu Saito (JAMSTEC) on the early 2016 seismic profiling for that expedition. A full list of presentations will be in the next bulletin, and it should be noted that there will be an ANZIC Booth at AESC.



The JOIDES Resolution South African Climates Expedition 361 with John Rolison of the University of Otago aboard as an inorganic geochemist, and Luna Brentegani from QUT aboard as a nannofossil expert, is due to arrive in Cape Town today. It was designed to study the effects of the Agulhas Current on the southeast African margin in the last five million years. This is the strongest western boundary current in the Southern Hemisphere, transporting warm and saline surface waters from the tropical Indian Ocean along the East African margin to the tip of Africa. Exchanges of heat and moisture with the atmosphere influence southern African climates, including individual weather systems such as extratropical cyclone formation in the region and rainfall patterns. All six planned sites were very successfully cored, and the participants look forward to some exciting research.

The alternative platform Chixculub Impact Crater Expedition 364 is due to take place from 12 April to 8 June. Marco Coolen of Curtin University will be aboard as an organic geochemist. The expedition is designed to core through the peak ring of the Chicxulub K/T boundary impact crater to investigate (1) the nature and formational mechanism of peak rings, (2) how rocks are weakened during large impacts, (3) the nature and extent of post-impact hydrothermal circulation, (4) the deep biosphere and habitability of the peak ring, and (5) the recovery of life in a sterile zone. Of additional interest is the composition and character of impact breccias, melt rocks, and peak-ring rocks; and any observations from the core that would help constrain the volume of dust and climatically active gases released into the stratosphere by this impact.

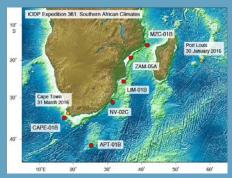
There were two suitable applicants for *JOIDES Resolution* South China Sea Rifted Margin Expeditions 367 & 368, which aim to understand the mechanisms of lithosphere extension during continental breakup at a non-volcanic rifted margin. The two-month expeditions will be in early 2017. The names of Kelsie Dadd (Macquarie University) and Isabel Sauermilch (University of Tasmania) have gone to the expedition organisers, and they will almost certainly be accepted.

A book entitled Exploring the Earth under the Sea with the subtitle Australian and New Zealand achievements in the first phase of IODP Scientific Ocean Drilling, 2008-2013, will be published by ANU Press this year. It will be a high-quality legacy document, celebrating ANZIC's achievements in the first phase of IODP: interesting reading for people with a scientific background, with some exciting science and personal anecdotes covered in special sections within it.

**Neville Exon and Catherine Beasley** 

# AT SEA

Expedition 361 South African Climates is concluded and will dock in Capetown today. With close to six kilometres of core collected in spite of some very high seas, the science party participants will have plenty to do on their return. For an excellent overview, check out the *JOIDES* Resolution on Youtube



### https://www.youtube.com/user/theJOIDESResolution

There will now be a break in the JOIDES Resolution schedule until the latter half of the year, when the Sumatra Seismogenic Zone Expedition 362 will take place, with Tobias Colson of the University of Western Australia sailing as physical properties specialist and Sarah Kachovich of the University of Queensland sailing as a radiolarian specialist. It is designed to investigate the role of input materials in shallow seismogenic slip and forearc plateau development, in this region which generated the disastrous Sumatran earthquake and tsunami. The Western Pacific Warm Pool Expedition 363 will follow, with Brad Opdyke of ANU aboard as a sedimentologist, and Jennifer Wurtzel of ANU as a petrophysicist. The expedition aims to understand the interaction between climate and the warm pool from the middle Miocene to the Holocene.

Follow the JOIDES Resolution on Facebook and read daily or weekly reports at: http://iodp.tamu.edu/



### ASSISTANT RESEARCH SCIENTIST

- IODP Expedition Project Manager/Staff Scientist

The International Ocean Discovery Program (IODP) at Texas A&M University invites applications for an Assistant Research



Scientist (Expedition Project Manager/Staff Scientist) in our Science Operations section. Preference will be given to applicants with expertise in petrology, inorganic (fluid) geochemistry, downhole logging, petrophysics, and sedimentology. However, applicants in any field of geoscience pertinent to IODP will be considered.

A Ph.D. in geosciences or related field, and demonstrated on-going research experience is required. Applicants must have a demonstrated fluency in written and spoken English. Experience as a seagoing scientist, especially in scientific ocean drilling, is preferred.

This position will serve as the Expedition Project Manager to coordinate all aspects of precruise expedition planning, sea-going implementation, and postcruise activities. These duties include sailing as the IODP scientific representative on a two-month IODP expedition approximately once every 1 to 2 years.

Individual scientific research, as well as collaboration with colleagues at Texas A&M University in fulfilling its educational mission, is required.

This position will also provide scientific advice on laboratory developments in their area of specialization including scientific implementation of downhole logging on the *JOIDES Resolution*. Applicants must be able to cooperate and work harmoniously with others, have the ability to be an effective team leader, and foster collaboration among diverse scientific participants. Passing a new employee medical exam and annual seagoing medical exams are a requirement of the position.

Salary will be commensurate with qualifications and experience of the applicant. This is a regular full time position, contingent upon continuing availability of funds for IODP. We will begin reviewing applications on 16 May 2016, but will continue to accept applications until candidates are selected for interviews. Applicants may access the TAMU application at <a href="https://jobpath.tamu.edu">https://jobpath.tamu.edu</a> and apply online with reference to Posting Number O00086FY16, attach a curriculum vita, list of published papers, statement of research interests, and names and addresses of three references. Quick Link - <a href="http://jobpath.tamu.edu/postings/93404">http://jobpath.tamu.edu/postings/93404</a>



The Japan Agency for Marine-Earth Science and Technology (JAMSTEC) and Japan Drilling Earth Science Consortium (J-DESC) will conduct a three-day scientific ocean drilling school aboard the IODP Scientific Riser Drilling Vessel Chikyu. Consider extending your stay in Japan to participate in this event, which includes tours of the cutting edge laboratories, equipment, and facilities aboard Chikyu, and meet leading scientists for lectures.

This onboard school is opened to all international students, graduate students, researchers, and educators. Details about this course are below:

Date: July 3 (Sun.) to July 6 (Wed.)

Cost: Free (includes round-trip bus transportation from Yokohama to Chikyu and back, accommodation aboard Chikyu, and food).

Eligible applicants: Undergraduate and Graduate students, Researchers, and Educators

All who are interested in registering are encouraged to send an email to: <a href="mailto:chikyuschool\_2016@jamstec.go.jp">chikyuschool\_2016@jamstec.go.jp</a>

JAMSTEC and Goldschmidt conference 2016 LOC are also organizing a one-day field trip of D/V Chikyu. Please see the Goldschmidt 2016 website (<a href="http://goldschmidt.info/2016/eventTypeView?type=Field%20Trip">http://goldschmidt.info/2016/eventTypeView?type=Field%20Trip</a>) for more information on this one-day trip.

We are looking forward to seeing you aboard!!

