Issue 10, 16 October, 2014

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

In the three weeks since the last ANZIC Bulletin was sent out things have continued to be busy in the office. Neville Exon has prepared, submitted and had acceptance of an article to be published in the December issue of *The Australian Geologist*, based on the IODP white paper for the National Marine Science Plan. There will be a meeting at the Academy of Science building in Canberra on 25 and 26 November to help finalise the plan, and Neville Exon, Andrew Heap and Ben Clennell will be among the IODP-related scientists attending. Four IODP papers have been submitted to the ASEG-PESA meeting to be held in Perth next February, and at least three have been accepted. Universities are submitting their selections to attend the ANZIC-funded student Marine Geoscience Masterclass, to be held in Perth in the first week of December, to Catherine Beasley. Twenty students will attend.

One important piece of news is that sedimentologist Rob McKay of the Victoria University, Wellington, has taken over as Chair of the ANZIC Science Committee from the long-serving Stephen Gallagher of the University of Melbourne. Rob sailed on IODP Expedition 318 - Wilkes Land climate and oceanography - plays an important role in the ANDRILL program which drills deep stratigraphic holes off Antarctica from the floating ice sheet, and is lead proponent of IODP Proposal 751 in the Ross Sea investigating the Cenozoic climate history of the region. It will be a pleasure working with him, as it has been working with Stephen. Stephen has led the Science Committee since 2009 and has played a key part in its many successes, including the very successful Indian Ocean and Southwest Pacific IODP Workshops. He is now well into the preparations for next year's Indonesian Throughflow IODP Expedition 356 on the Northwest Shelf, on which he will be a co-chief scientist.

The Indian Monsoon Expedition 353 will sail at the end of November, with ANU paleoceanographer Gianluca Marino aboard. Our applications for the Indonesian Throughflow Expedition 356 have resulted in offers being made to two ANZIC scientists. Helen McGregor of ANU has accepted a position as a sedimentologist. We are now assessing applications for ANZIC scientific participation for *JOIDES Resolution* paleoceanographic IODP Expedition 359 in the Maldives, hard rock Expedition 360 to drill to the Moho southeast of Madagascar, and paleoceanographic Expedition 361 east and south of southern Africa.

The *JOIDES Resolution* will be working in the western Pacific in early 2017, and there are a number of strong proposals in the Australian and New Zealand regions. All the planned and proposed expeditions in our region are shown on the map below. The *JOIDES Resolution* Facility Board will schedule the vessel for the US Fiscal Year 2017 in May 2015. All new or revised IODP proposals, along with relevant existing proposals, will be considered by the Science Evaluation Panel in January, which will send its recommendations on to the various Facility Boards for scheduling.

A new round of IODP proposals was due on 1 October. A team led by Joanna Parr from CSIRO submitted *JOIDES Resolution* Pre-proposal 872, to better understand the extremely rich Solwara1 polymetallic sulphide deposit in the Manus Basin of PNG. A team led by Geoscience Australia and JAMSTEC scientists submitted Pre-proposal 871A, covering *Chikyu* deep drilling on the eastern Gondwana margin. Full Proposal 884-CPP, to investigate the Late Cretaceous black shales in the Great Australian Bight is being finalised for late submission by a group led by Peter McCabe and Simon Holford (Adelaide University), Jennie Totterdell (Geoscience Australia) and Neville Exon.

Neville Exon and Catherine Beasley

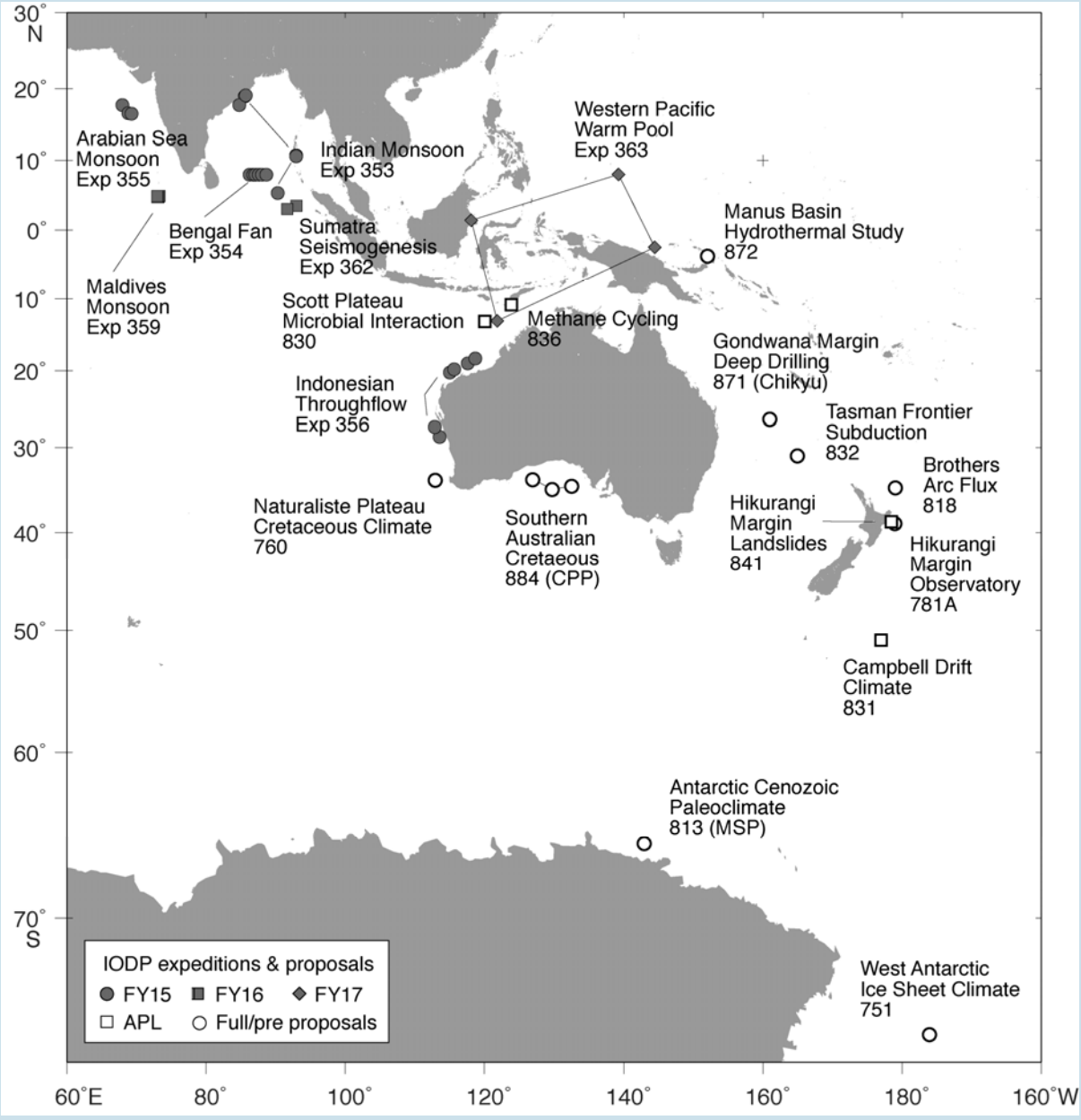
JOIDES Resolution in the Australasian Region (US F/Y 2015 –2017)

Scheduled Expeditions

- 353 Indian Monsoon (staffed)
- 354 Bengal Fan (staffed)
- 355 Arabian Sea Monsoon (staffed)
- 356 Indonesian Throughflow (in progress)
- 359 Maldives Monsoon (in progress)
- 360 Indian Ridge Moho (in progress)
- 361 South African Climates (in progress)
- 362 Sumatran Seismogenesis (not yet open)
- 363 Western Pacific Warm Pool (not yet open)

Proposals under consideration

- 751 West Antarctic Ice Sheet
- 760 Naturaliste Plateau
- 781/A Hikurangi Margin Observatory
- 813 Antarctic Cenozoic Paleoclimate
- 818 Brothers Arc Flux
- 831 Campbell Drift Climate
- 832 Tasman Frontier Subduction
- 836 Methane Cycling
- 841 Hikurangi Margin Landslides
- 871 Gondwana Margin Deep Drilling (*Chikyu*)
- 872 Manus Basin Hydrothermal Study
- 884 Southern Australian Cretaceous (CPP)



Note: US Fiscal Year commences 1 October the previous year. Therefore the first expeditions scheduled FY 2015 will commence in 2014.

IODP INTEGRATED OCEAN DRILLING PROGRAM

DISCOVERY • UNDERSTANDING • ACTION

Submit an IODP-related Workshop Proposal

The Consortium for Ocean Leadership is currently accepting workshop proposals submitted to the U.S. Science Support Program (USSSP) associated with the International Ocean Discovery Program (IODP). Proposed workshops should promote the development of new ideas to study the Earth's processes and history via scientific ocean drilling. Funding may be requested for small meetings or to support participants at larger, international workshops. Meetings and workshops may focus on a scientific theme or topic, or they may focus on a geographic region, integrating multiple topics. Broad-based scientific community involvement, co-sponsorship by related programs, and the active participation of graduate students are strongly encouraged.

The submission deadline is November 15, 2014.

For more information, please visit: http://iodp-usssp.org/funding/workshops/

USSSP funding would cover US Participants expenses to attend any IODP Workshop including new proposals in the Australian region. If you are considering either a regional or thematic workshop please contact Neville Exon on (02) 61255131 or Neville.Exon@anu.edu.au

Just a reminder that ANZIC is a member of STA and we encourage members to engage with the information and opportunities offered to better promote your activities.

Welcome to the spring edition of the STA newsletter, designed to keep you up to date on what STA is doing, ways you can be involved, and developing issues for all of us who work in science and technology.

It has been a big month in Canberra with the release of the long-awaited STEM plan from Chief Scientist Ian Chubb, and Minister Macfarlane's announcement of a Government innovation document that promises to address some of the issues Chubb raises (speech and press release).

Back in the STA office we are planning a bigger and better Science meets Parliament (SmP) for STA's 30th birthday in 2015, and rolling out a series of events that takes big science debates to the public and parliament.

Remember we are here to help you navigate the maze of Federal Parliament, and are always available to talk or offer advice ahead of a parliamentary visit, or on ways to better engage with local parliamentarians. Just call or email.

Also between newsletters, a great way to keep abreast of STA activities, developing issues, information and debates is to keep an eye on STA's Twitter and Facebook feeds.

http://scienceandtechnologyaustralia.org.au/wp-content/uploads/2014/10/STA-September-Newsletter-2014_Web.html

AT SEA

Expedition 352: Izu Bonin Mariana, has been successfully completed. ANZIC participant, Tim Chapman of Sydney University reported:

Scientifically I viewed the expedition as highly successful, all the primary objectives were resolved, in association to a series of unexpected findings. The expedition provides the first clear sequence of a forearc stratigraphy. The attainment of dyke complex is a rare achievement that should not be understated.

We would like to thank Tim for participating and wish him all the best with his research.

The JOIDES Resolution is currently in port for maintenance in advance of Expedition 353, embarking in November 2014. Gianluca Marino, of the ANU will be sailing as the team's Stratigraphic Correlator.

Follow the JR on Facebook

SPE WA November Technical Luncheon -

The Challenges of Drilling a 7km Offshore Borehole to Penetrate a Seismically Active Subduction Zone

The Integrated Ocean Drilling Program (IODP) has embarked on an ambitious deep exploration project to drill a scientific borehole into the mega-splay of the Nankai Trough Subduction Zone located ~450 km SW of Tokyo, Japan. This international project (NanTroSEIZE) is the 1st attempt to drill, test, sample and instrument an active subduction plate boundary capable of generating M8+ earthquakes. The scientific objectives are to understand the physics of subduction earthquakes capable of generating massive tsunamis.

We present a geomechanical postmortem of Exp 348 to explain the NPT encountered while drilling in this harsh environment and illustrate the process of using LWD and engineering information to design a forward well plan that delivers the borehole in a condition suitable for scientific observations in this all-important international project.

Event Details
Location: Parmelia Hilton, Mill St, Perth.
Date: 05/11/2014
Time: 12:00 for 12:30 PM start
RSVP by 03/11/2014

Registration Price:
Member $67.00
Student $30.00
Non-Members $77.00

Hereby we have the pleasure to inform you about the organization of the session "Revealing palaeoceanographic variability from Contourite Depositional Systems: state-of-the-art and future challenges" during the XIX INQUA Congress, organized from 27 July to 2 August, 2015, in Nagoya, Japan. The title for this congress is "Quaternary Perspectives on Climate Change, Natural Hazards and Civilization".

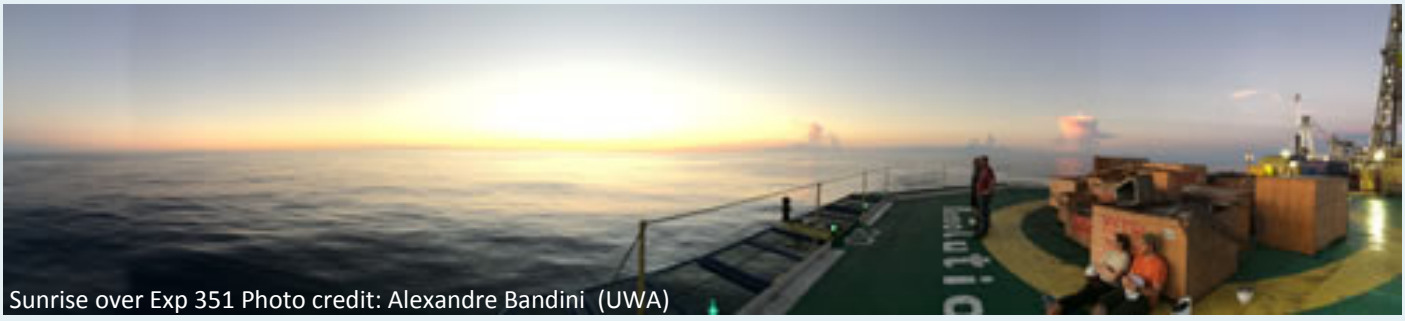
We kindly invite you to consider submitting an abstract for this session. You can find the abstract of the session below.

The call for abstracts and preregistration will open soon and will close on 20 December 2014.

You may find more information of this meeting on http://inqua2015.jp or through Facebook https://www.facebook.com/INQUA2015

ABSTRACT of session:

Contourite Depositional Systems contain an association of erosional and depositional sedimentary features, which are driven through a complex interaction of bottom currents, pre-existing seabed morphology and sediment supply, reflecting the oceanographic response on the variable atmospheric processes. Although most of the large present-day contourite drifts have been initiated within the Neogene, they all experienced an intensification since the start of the Quaternary, whereas some responded even more vigorously with respect to the Middle Pleistocene Revolution. Both geophysical records as coring and drilling, allow to extract a wealth of palaeoceanographic information from the contourite deposits, enabling to reconstruct the spatially and temporally variable currents pathways, orientation, intensities, as well as all related water-mass properties. During the last decade, improved technologies and a higher awareness of the contourite paradigm has revealed more small-scaled examples along the ocean margins, as well as in shallow water environments and even within lakes.


Sunrise over Exp 351 Photo credit: Alexandre Bandini (UWA)