

Joint ECORD/IODP-ICDP Activities EGU 2013

7–12 April 2013, Vienna, Austria



With more than 13,000 participants from 95 countries in 2012, the European Geosciences Union (EGU) General Assembly is a major conference to present IODP and ICDP to the science community in Europe. For the fourth year ECORD/IODP and ICDP will join their efforts to promote ocean and continental research drilling at the European Geosciences Union General Assembly 2013 in Vienna, Austria.

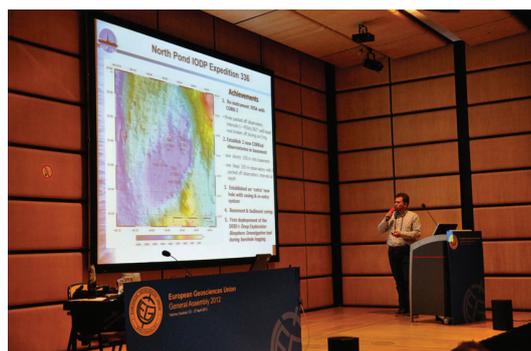
IODP-ICDP Exhibition Booth (#52-53-54 in the Main Hall): will provide a focal point for the scientific drilling community and also for scientists from other fields of research (biology, oceanology, etc.). Visitors can collect the most recent information about the programs (expeditions, projects, workshops, summer schools, training courses, etc.) and meet IODP and ICDP participants and representa-

tives. Lively downhole-logging demonstrations will be organized by ICDP and ECORD.

Joint IODP-ICDP Townhall Meeting: Co-convenors Gilbert Camoin and Uli Harms will provide updates on recent scientific achievements and upcoming new projects, as well as sharing views on the exciting challenges of both programs.

Interdivision IODP-ICDP session (CL5.9): will be co-organized by Convenor Carlota Escutia, and Co-Convenors Ursula Röhl, Ulrich Harms, Thomas Wiersberg, and Rüdiger Stein. The session will address major achievements and perspectives in scientific ocean and continental drilling with special emphasis on the European contributions to IODP and ICDP. Perspectives and visions for drilling projects using a multi-platform approach will be tackled.

Times, dates and locations will be announced on the ECORD website at <http://www.ecord.org/pi/egu13.html>



CHIKYU+10 International Workshop

21–23 April 2013, Tokyo, Japan



Beginning in October 2013, the unique deep-sea drilling vessel *Chikyu* (www.jamstec.go.jp/chikyu/eng/CHIKYU) will continue deep drilling, logging, and observatory deployment beneath the world's oceans for the new International Ocean Discovery Program, IODP (www.iodp.org/new-program). To assist in decadal planning, the workshop CHIKYU+10 (www.jamstec.go.jp/chikyu+10), organized by the Japan Agency for Marine-Earth Science and Technology (JAMSTEC) with coordination assistance

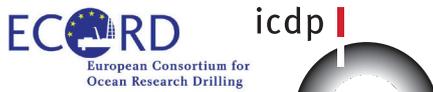
by IODP Management International, is being held in April 2013.

CHIKYU+10 brings international researchers together to discuss D/V *Chikyu*'s next decade of exploration. The five workshop themes encompass completed, active, or proposed *Chikyu* projects—Active Faults, Earth's Mantle, Deep Life, Continent Formation, Sediment Secrets—as well as a “blue sky” area for new ideas. Thematic discussions will highlight D/V *Chikyu*'s accomplishments during the Integrated Ocean Drilling Program, current science proposals, and new ideas to use *Chikyu*'s deep riser capability. Presentations at the workshop combine invited keynote talks with white papers submitted by the international community. CHIKYU+10 will emphasize participation by early career researchers.

The workshop report, containing scientific perspectives and recommendations developed by the participants, will be made available to JAMSTEC and other governmental officials who have the task of creating the financial and operational models for *Chikyu*'s next decade of deep exploration.

MagellanPlus Workshop Series Programme

15–17 April 2013, London, U.K.
6–8 May 2013, Brisighella, Italy



The ECORD/ICDP MagellanPlus Workshop Series Programme is designed to support European and Canadian scientists in developing new and innovative science proposals for submission to IODP and ICDP.

Two Workshops are planned for the 2013 spring:

(1) Exploring the Cretaceous Greenhouse through Scientific Drilling (by Stuart Robinson and Timothy Bralower) 15–17 April, 2013—London, United Kingdom) <http://iodp-ussp.org/workshop/cretaceous/>

(2) Deep-sea Record of Mediterranean Messinian Events (DREAM) (by A. Camerlenghi, G. deLange, R. Flecker, D. Garcia-Castellanos, C. Hübscher, W. Krijgsman, J. Lofi, S. Lugli, V. Manzi, T. McGenity, G. Panieri, M. Rabineau, M. Roveri and F.J. Sierro), 6–8 May 2013—Brisighella, Italy.

Calls for MagellanPlus workshop proposals are issued twice a year in February and July. For more information visit: <http://www.essac.ecord.org/index.php?mod=workshop&page=call-workshop>

ECORD–Urbino Summer School: Palaeoclimatology

10–30 July 2013, Urbino, Italy
Registration Deadline: 30 April 2013



With eight years of experience, the Faculty of Sciences and Technologies of the University of Urbino, Italy, has organized the Urbino Summer School in Paleoclimatology (USSP) for the 2013 summer.

The course is designed to provide early-career graduate students from around the world with an intensive

educational experience in reconstructing Cretaceous-Neogene paleoclimate dynamics and history. World experts in the diverse disciplines subsumed within paleoclimatology (e.g., paleontology, sedimentology, geochemistry, climatology, etc.) converge to provide a combination of lecturing on paleoclimate related topics and mentoring on exploration, integration, and synthesis of disparate paleoclimate data and modeling. With this goal, an introductory part presents the general evolution of climates from both a proxy and model perspective to provide the students with a view of model-data disparities as targets for additional investigation and opportunities for improved understanding.

ECORD-ESSAC-USSP fellowships are available for high-potential graduate students. ECORD-based scholarships are available for participants from ECORD countries to attend the international USSP. Scholarships are competitively awarded and cover student accommodation and tuition expenses. More information is available at the ESSAC webpage: <http://www.essac.ecord.org/index.php?mod=education&page=scholarships>

Urbino's location within the Umbria-Marche Basin provides exceptional field access to regional stratigraphic records of the Cenozoic paleoclimatic history and events focused upon by the USSP.

The USSP will include a field trip led by Professors Galeotti (University

Urbino) and Brinkhuis (Utrecht University), who have published extensively on the region and its paleoclimatic record.

The deadline for early registration in the Urbino Summer School is 30 April 2013. Details at: <http://www.urbinosp.it/>, and contact: simone.galeotti@uniurb.it

ECORD Summer School 2013 in Bremen

9–20 September 2013, Bremen, Germany
Registration Deadline: 30 April 2013



"Deep-Sea Sediments: From Stratigraphy to Age Models"

The Center for Marine Environmental Sciences (Marum) at the University of Bremen, Germany, will host the 7th ECORD Summer School for early career scientists (PhD students and young post-docs) interested in the understanding of past environmental conditions based on the study of ocean sediment cores.

Because the IODP Bremen Core Repository (BCR) and the MARUM Laboratories offer unique analytical facilities, this summer school will combine lab exercises on IODP-style "ship-board" methodologies with interactive discussions on the field of the stratigraphy and age models for the testing of climate related hypotheses in the context scientific drilling.

The students will be trained through a "virtual ship", getting familiarized with the "real" IODP ship-board techniques and core description methods.

A large pool of qualified teachers from prestigious institutions around the world will be guiding the students in this exciting experience.

The deadline to apply for participation in the Summer School is 30 April 2013. More information about the program and how to apply is available at: http://www.marum.de/en/ECORD_Summer_School_2013.html#Section51214

Contact: jbuelten@marum.de



Moreover, students are encouraged to apply for ECORD scholarships to attend the Summer School. For more information visit the ESSAC webpage: <http://www.essac.ecord.org/index.php?mod=education&page=scholarships>

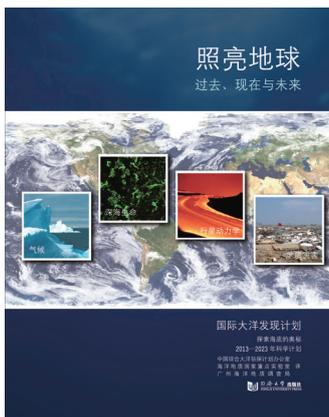
New Science Plan in Chinese to be Available



The science plan for the International Ocean Discovery Program (IODP, 2013–2023), “illuminating the Earth’s Past, Present, and Future”, now has the Chinese version. This Science Plan, originally published in English in June 2011, will guide multidisciplinary, international collaboration in scientific ocean drilling during the period 2013 to 2023.

To encourage more Chinese scientists to get involved in this international program and attract more attention from the public, the IODP-China Office has organized senior scientists to translate this Science Plan into Chinese. The translation will be published in early 2013.

“I sincerely hope and invite our Chinese colleagues to read this plan and propose bold new ideas and methods to advance our understanding of the Earth and participate in IODP expeditions of discoveries in the spirit of Zheng He”. Kiyoshi Suyehiro, the president of IODP-MI, offers his best wishes to Chinese scientists and writes the preface for the Chinese version of this science plan.



Start of a New Moroccan Middle and High Atlas Lake Drilling Program



In September 2012, new lake sediment cores were recovered from Lake Sidi Ali in the Middle Atlas mountains of Morocco. A German-British-Belgian team from Leipzig University and the universities of Potsdam, Osnabrück, Manchester and Ghent obtained a 20-m-long core from the 38-m-deep southwestern part of the lake and two parallel 9-m-long cores from the shallow northeastern sub-basin at 10 m water depth using a UWITEC coring device. Coring sites were selected following a detailed seismic sub-bottom sediment profiling survey.

Seismic surveys and short-core sampling were also conducted on lakes Tislit, Isli and Afourgagh in the High and Middle Atlas mountains to prepare further drilling campaigns in 2013. However, the 2012 campaign focused on Lake Sidi Ali which was previously investigated by Prof. Henry Lamb (University of Aberystwyth) and his team in the 1990s. They recovered a 6-m-long core from a third very shallow sub-basin of the lake and conducted pioneering work on the mid and late Holocene lake and regional climate history. The new study of sediment cores from Lake Sidi Ali seeks to address glacial and late glacial millennial-scale cooling events in the western Mediterranean-Saharan transition zone, Holocene Rapid Climate Changes, and the regional pastoral-



ism, forest clearance and fire activity history. Initial funding is provided to Christoph Zielhofer and Steffen Mischke by a grant from the Deutsche Forschungsgemeinschaft (DFG) and to William Fletcher by a grant from the Natural Environment Research Council (NERC).

First Phase of Scientific Drilling at Koyna, India

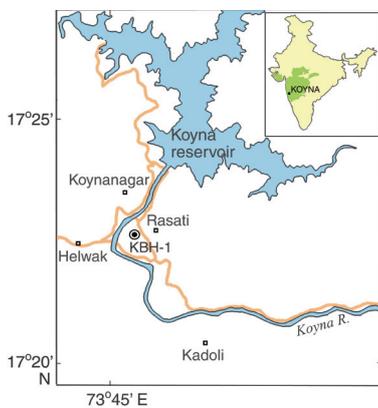
A major program including scientific drilling has been

launched to investigate reservoir-triggered earthquakes in the Konya area, located in the Deccan Flood Basalt Province of western India. As a prelude to setting up of a deep borehole observatory, drilling of a set of four exploratory boreholes surrounding the Koyna-Warna reservoir area (called Koyna) started in mid-December 2012. Each borehole is planned to a depth of about 1500 m, so that they penetrate the Deccan basaltic pile and go a few hundred meters in the underlying basement rocks. Measurements in the boreholes would help provide unprecedented information about the thickness and properties of the Deccan Traps in the area and the nature of the basement that has remained elusive so far. Scientific experiments to be carried out in the basement sections would enable precise subsurface imaging of the rock volume where earthquakes are occurring in Koyna.

Koyna Borehole-1 (KBH-1) is located ~2.5 km SSW of the Koyna Dam and is in close vicinity to the epicenter of the 1967 M6.3 Koyna earthquake (See the map on the next page). Starting on 17 December 2012, KBH-1 reached the granitic basement at a depth of 933 m on 17 January 2013. It went through several lava flows and inter-trappean red bole horizons. The thickness of the Deccan Traps is consistent with the inference from recent broadband seismic monitoring in the area that shows a conspicuous absence of earthquakes in the top ~1 km. Cores recovered from the borehole have revealed a flood basalt pile com-

prising a number of lava flows of variable thicknesses, with each flow characterized by a vesicular and/or amygdaloidal layer underlain by fine-grained massive basalt. Intertrappean red bole beds up to several tens of centimeters in thickness have been observed at multiple depths. This borehole has provided answers to two important questions. The thickness of lava pile in this area is 933 m, and there are no sediments between the thick lava pile and the granitic basement.

The work is being carried out by the CSIR-National Geophysical Research Institute, Hyderabad, India, with support from the Ministry of Earth Sciences (MoES), Government of India. The results, although preliminary, mark a significant progress on the action plan that emerged after the MoES- and ICDP-supported "International Workshop on Scientific Deep Drilling in the Koyna Region" held at Hyderabad and Koyna during March 2011.



The map shows the location of KBH-1 in the Deccan Traps of India.

Southwest Pacific IODP Workshop

8–11 October 2012, Sydney, Australia



Recent geophysical surveys and geological studies in the Southwest Pacific have helped to crystallize new research goals. In the current phase of IODP there have been five regional expeditions: 317, 318, 325, 329 and 330.

Of six current IODP proposals in this region, four are ready to drill. In order to initiate compelling new drilling proposals, a workshop was organized at the University of Sydney with a diverse group of 80 scientists. The likely presence of *JOIDES Resolution* in the region in 2015–2016 helped generate a sense of urgency.

The workshop covered all fields of geoscience, and drilling targets that extended from the Equator to Antarctica. High-quality contributions and a positive and cooperative atmosphere ensured its success. The four science themes of the new IODP Science Plan were addressed. An additional resource-oriented theme considered possible co-investment opportunities involving IODP vessels.

Various potential new full and additional proposals were identified:

Climate and Ocean Change: marine Paleogene proposals, namely Lord Howe Rise and Campbell Plateau; and a Wilkes Land continental shelf Neogene proposal.

Deep Biosphere: biosphere in organic-rich Gulf of Papua sediments; and several ancillary proposals.

Earth Connections: formation of the Greater Ontong Java large igneous province; initiation of subduction and origin of sedimentary basins in the Lord Howe Rise region; and structure and dynamics of mantle flow in the northern Australian-Antarctic Discordance.

Earth in Motion: the active Brothers Volcano system in the Kermadec Arc; active volcanic systems in the Manus Basin; the nature of the Tuaheni Landslides off northeast New Zealand; and near-trench-axis comparative drilling around the Pacific Ocean.

Marine Resources: the nature and resource potential of gas hydrates off northeast New Zealand; and deep stratigraphic drilling on the Lord Howe Rise related to both petroleum potential and research.

Many proposals are broad and multidisciplinary: those related to active volcanic systems in the Brothers Volcano and Manus Basin; the Cretaceous-Paleocene paleoenvironment, tectonic history, and petroleum

potential of the Lord Howe Rise region; and slow-slip subduction, fluid flow, landslides and gas hydrate potential of the Hikurangi Subduction Margin.

The workshop was hosted by the Australian and New Zealand IODP Consortium (ANZIC) and the University of Sydney, with additional funding from IODP-MI, USSSP and J-DESC. Abstracts and program are available on <http://www.iodp.org.au>. The workshop results will be published in detail on the IODP Web site in early 2013 and later in *Scientific Drilling*.

ICDP Training Course on Lake Drilling

icdp



The 2012 ICDP Training Course was carried out 15–19

October in Minneapolis in close cooperation with the National Lacustrine Core Facility (LacCore) from the University of Minnesota and focused on soft and lacustrine sediments from lake drilling. Thirty participants from 19 countries attended the training course. Ten international experts gave lectures on lake drilling engineering, downhole logging basics, application of downhole logging data, pre-site surveys, drill core sampling, handling, storage and analysis, data management, application strategies, and project planning and management. Reports were also presented from completed and currently planned ICDP lake drilling projects (Lake Van, Lake Ohrid). A visit of the LacCore facilities delivered valuable insights into state-of-the-art lacustrine core handling, analysis and storage.



Practical exercises at LacCore help the participants to internalize the acquired knowledge.