



Jeroen Kenter

ECORD Science Support & Advisory Committee Updates



Julian Pearce

Following a series of very successful coring expeditions (*see table*), IODP is close to a temporarily pause in riserless activities. This interruption in scientific coring expeditions is a consequence of next year's planned overhaul of the

generate marine gas hydrate in accretionary prisms above subduction zones. It forms yet another step in our attempt to understand this potential valuable energy source and its effect on global climate change. The 'Superfast Spreading' expedition will investigate ocean crust formation and thermal and geochemical budgets in an area where spreading rates are in the order of 200m per 1000 years.

The IODP drilling schedule : mid to late 2005 Expeditions

expedition	dates	platform
307 - Porcupine Basin Carbonates Mounds	26 April-31 May	riserless
308 - Gulf of Mexico Overpressures	31 May-10 July	riserless
309 - Superfast Spreading Rate Crust 2	8 July-28 Aug.	riserless
310 - Tahiti Sea Level	6 Oct.-20-22 Nov.	MSP
311 - Cascadia Margin Gas Hydrates	28 Aug.-29 Oct.	riserless
312 - Superfast Spreading Rate Crust 3	29 Oct.-29 Dec.	riserless

more information on www.iodp.org

JOIDES Resolution, the riserless drill ship operated by the JOI Alliance. Because the Japanese riser vessel, the Chikyu (meaning "Earth"), is currently undergoing testing and will not make an active contribution to IODP science until 2007, drilling activities soon be restricted to those carried out on the Mission Specific Platforms (MSP) operated by ECORD.

The latest MSP enterprise, the Tahiti Sea Level expedition, has recently embarked from Papeete and will core Pleistocene to Holocene reef tracts around the island of Tahiti (*see photo below*). This expedition aims to obtain core that will enable participating scientists to quantify and precisely time the rise in sea level since the last glaciation and to determine the associated variations in seawater temperature. The expedition evolved from a mostly European proposal. It is of paramount importance to the global community as it will help us to understand climate variations in the recent past and so improve our ability to predict the consequences of future perturbations.

Additional, riserless expeditions that are sailing this Fall are Cascadian Margin Gas Hydrates and Superfast Spreading-rate Crust (*see table above*). The 'Hydrates' expedition targets the processes and models that

ECORD scientists have participated in high numbers in past ODP science and have contributed as much, or more, in the recent IODP expeditions (*see table page 5*). This contribution has not been restricted to the scientific discoveries and publications. ECORD scientists are also highly visible in the key panels that "drive" the IODP (*see table page 7*). They include a high proportion of young, and often female, scientists and it is these who will help carry and lead the program to a new phase in the future.

The "quiet" window, during which only MSP expeditions will sail, offers a unique opportunity to



Location of the Faa transect, site TAH 01A, close to the harbour at Papeete - Tahiti Sea Level Expedition 310 (photo Gilbert Camoin).

revisit scientific themes and generate new and innovative proposals. To facilitate this, two ESF Programs were initiated in 2005, one of which has been ratified and another will receive official approval very soon. The ESF Marine Coring Program, EuroMARC, is supported by a large number of the ECORD members and a Call for Proposals will be announced this Fall. EuroMARC will provide funds to nurture existing European coring science and help scientists to carry out pilot studies and collect essential data for future expeditions. The ESF Magellan Workshop Series (*see page 9*) will allow the science community to formulate and organize workshops for the development of new, innovative and high quality science proposals. Both programs will be announced officially on the ECORD website.



Valentina Zampetti, ESSAC science officer, has participated in the Expedition 308 located in the Gulf of Mexico.

Although the European science community needs support through the programs mentioned above, the development of highly complex drilling projects also requires a slim and efficient parent organization. A recent meeting in Frascati, Italy, by key members of the IODP science structure translated this requirement into a proposal for change - not a dramatic change, but a move further towards a program that takes corporate responsibility for global scientific challenges and addresses those through carefully managed 'Missions'. In addition, ideas were formulated to make IODP a more pro-active and efficient organization. The so-called "Frascati Report" is currently being reviewed by the broad IODP scientific community as well as outside experts, and a formal proposal is anticipated early this Fall.

ECORD scientists on IODP Expeditions (307-310)

Expedition - 307:

Porcupine Basin Carbonates Mounds

Timothy Ferdelman (co-chief), Germany

Morten Bjerager, Denmark

Barry A. Crabb, UK

Ben De Mol, Spain

Anneleen Foubert, Belgium

Veerle Ann Ida Huvenne, UK

Philippe Léonide, France

Kay Mangelsdorf, Germany

Jurgen Titschack, Germany

observers:

Xavier Monteys, Ireland

Boris Dorschel, Ireland

Expedition - 308:

Gulf of Mexico Overpressures

Jan H. Behrmann (co-chief), Germany

Neil Da Silva, Canada

Tommy Edeskär, Sweden

Christine Franke, Germany

Aurélien Gay, UK

Julia Gutierrez-Pastor, Spain

Julia Schneider, Germany

Roger Urgeles, Spain

Valentina Zampetti, The Netherlands

Expedition - 309:

Superfast Spreading Rate Crust 2

Damon A. H. Teagle (co-chief), UK

Carole Cordier, France

Laura Crispini, Italy

Laura Galli, Italy

Jörg Geldmacher, Germany

Christine Laverne, France

Christopher E. Smith-Duque, UK

Paola Tartarotti, Italy

Expedition - 310:

Tahiti Sea Level

Gilbert Camoin (co-chief), France

Guy Cabioch, France

Pierre Deschamps, France

Thomas Felis, Germany

Alexander Thomas, UK

Alexander Tudhope, UK

Crisogono de Olivera Vasconcelos, Switzerland

Klass Verweer, The Netherlands

Hildegard Westphal, Germany

That the European ocean drilling community is actively pursuing solidification and expansion of not only its science base is demonstrated by the recent EU Article 169 initiative “Deep Sea Floor Frontier” or DEEP-SF. This initiative, supported by representatives of all major European marine science programs, aims to coordinate science activities and funding for deep sea floor science, including the development of observatories, construction of research platforms and new technologies. Developing knowledge and understanding of the oceans and their margins is of paramount importance to society as these form the



From left to right, Julian Pearce, Valentina Zampetti, Federica Lenci and Chris MacLeod outside Cardiff University.

terrains for energy exploration and carry records of the geological hazards and the ecological and climate changes that threaten the world's population.

Finally, change is also underway at the ESSAC Office. The office will be moving from Amsterdam to Cardiff on October 1st this year. The office will be headed by Chris MacLeod, the new ESSAC Chair, and Julian Pearce, who will be acting Chair for an initial period. Federica Lenci, from La Sapienza University in Rome, has recently accepted the position as Science Coordinator and so will maintain the ‘international flavour’ of the office (*see photo above*). Gilbert Camoin, from CEREGE in Aix en Provence, has been nominated and appointed as the new Vice-Chair. One of the challenges of the new office will be to extend outreach both to more ECORD scientists

and to scientists from the new EU member states. Another will be to manage and coordinate the new ESF Programs in an efficient manner to maximize the participation and scientific impact of European scientists in the Program. Work is already underway to develop the ESSAC web site to help meet these challenges.

With the transition to a new, more efficient and theme-oriented IODP and a strong science support program through the European Science Foundation, ESSAC is entering a phase of opportunities and challenging new and innovative science that will be headed by a similarly “fresh” ESSAC Office in Cardiff.

Jeroen Kenter and Julian Pearce, ESSAC chairs

Submit a proposal ?

Visit the IODP proposal submission page at:

www.iodp.org/drilling-proposals/

next submission deadline:

April 1, 2006

How to Apply?

Application procedures are available on ESSAC webpage at:

www.ecord.org

Further information on ESSAC at:

www.ecord.org