

**3<sup>rd</sup> Circular**



**IODP**  
INTEGRATED OCEAN  
DRILLING PROGRAM

Circular for the Scientific Planning Conference

**IODP New Ventures**  
in Exploring  
Scientific Targets –  
**INVEST**



Bremen, Germany  
September 23–25, 2009

# **INVEST Conference**

## **(IODP New Ventures in Exploring Scientific Targets)**

### **3<sup>rd</sup> Circular**

University of Bremen, Germany, September 23-25 2009

INVEST is being organized as a large, multidisciplinary, international community meeting, whose focus is to define the scientific research goals of a new ocean drilling program, expected to replace IODP late in 2013. INVEST will feature invited keynote lectures, and plenary and working group sessions. These discussion and planning sessions are open to all interested scientists from both academia and industry as the principal opportunity to help shape the future of scientific ocean drilling beyond the current IODP.

INVEST is expected to draw a very wide audience in both number and disciplines. Working groups will provide the opportunity for participants to directly impact the scope of science for the new program, and to promote new and emerging fields of science. Special poster programs will focus on: (1) ocean drilling related capabilities (e.g., surveying, shallow coring, observatories) by major oceanographic institutions; and (2) presentations by students and early career scientists.

A science plan, based on the outcome of INVEST, will be written by scientific community representatives selected shortly after INVEST. This science plan, to be drafted in 2010, will form one of the principal documents justifying the new drilling program. The unanimous support by a large number of your trusted colleagues to present keynote talks and chair working groups during the INVEST meeting testifies to the widely held appreciation of the unique and critical research opportunities offered by ocean drilling. However, establishing a new program will take the full support and active engagement by the broader community, including representatives of new and emerging fields.

#### **Conference Themes and structure of INVEST**

##### **Main Conference Themes**

- Co-evolution of Life and Planet
- Earth's Interior, Crust and Surface Interactions
- Climate Change – Records of the Past, Lessons for the Future
- Earth System Dynamics, Reservoirs and Fluxes
- Earth-Human-Earth Interactions
- Science Implementation

Each of the six Conference Themes will be discussed during a number of working group sessions addressing specific subthemes. The list of working groups, their topic and their session chairs can be found at the INVEST home page [http://www.marum.de/INVEST\\_ct\\_wg.html](http://www.marum.de/INVEST_ct_wg.html).

## **Outline of the Program**

### **Tuesday, September 22**

Registration opens 15:00 (open until 11 a.m. on September 24)

Ice breaker 18:00

### **Wednesday, September 23**

Opening address

Keynote lectures

Working Groups

Conference dinner

### **Thursday, September 24**

Keynote lectures

Working Groups

Plenum sessions on Conference Themes

A detailed program will be posted by mid-August at

<http://www.marum.de/iodp-invest.html>

### **Friday, September 25**

Working Groups

Plenum sessions on Conference Themes

Concluding remarks (Plenum)

## **Presentations and Posters**

Oral presentations are limited to invited keynote talks that will be presented between working group sessions and plenum sessions with working group reports.

Posters by individual researchers are invited from, and restricted to, graduate students and junior post docs (maximum 3 years post doc experience). INVEST also invites oceanographic institutions, and off-shore industry to present posters on coring, survey and borehole observatory technology. Funding agencies and/or institutions are encouraged to present posters with their plans for supporting drilling capability to a new scientific ocean drilling program post 2013. The poster exhibition will serve as a venue for describing technology, and provide an informal venue for discussing of a future program with representatives from major funding agencies.

## **Travel support**

Participants may be able to obtain travel support from national IODP offices. For information on these offices, see [http://www.marum.de/iodp-invest.html](#).

Up to 20 travel stipends are available from IODP for graduate students and junior post docs presenting posters. Support is limited to US\$800 for participants outside Europe. Within Europe: US\$300. Applications will be reviewed on a first come first served basis. Please send applications to: <[science@iodp-mi-sapporo.org](mailto:science@iodp-mi-sapporo.org)>. Applications must document eligibility, and sources of supplementary funding. Note that inexpensive accommodations options are offered at the INVEST website <http://www.marum.de/iodp-invest.html>.

## **Accommodation and registration**

See <http://www.marum.de/iodp-invest.html>

Pre-meeting registration ends: August 3<sup>rd</sup>, 2009

# Keynote Speaker Program

## September 23

- Vincent Courtillot** Ocean Drilling: A 21<sup>st</sup> Century Endeavor to Understand the Earth System
- Hans Christian Larsen** Opportunities and Format of a New Ocean Drilling Program
- Dave Hodell** Paleoclimate Opportunities to Constrain Abrupt and Rapid Climate Change
- Tori Hoehler** The View from Space: What Ocean Drilling can Tell us About Habitability, Life's Limits, and the Possibilities for Life Beyond Earth
- Terry Plank** Down and Back Again: Cycles and Growth at Convergent Margins
- Jim Zachos** The Potential and Promise of Studies of Past Warm Worlds
- Kiyoshi Suyehiro** Ocean Borehole Observatories: Scanning and Sounding the Earth in Motion

## September 24

- Bo Barker Jørgensen** Microbial Life in the Deep Seabed - the Starving Majority
- Doug Toomey** Outstanding Questions of Crust-Mantle Interaction Below the Ocean Basins: What can Deep Earth Sampling Tell us?
- Nao Ohkouchi** Future Directions in Probing Global Biogeochemical Cycles
- Greg Myers** Engineering to Support Transformative Science in Ocean Drilling
- Andy Fisher** Achievements and Challenges in Subseafloor Hydrogeology during Scientific Ocean Drilling
- Jeff Kiehl** Paleoceanography: Providing Critical Knowledge to Improve Climate Model Predictions