

“Subseafloor Fluid Flow and Gas Hydrates”

September 12 – 23, 2011

at the Center for Marine Environmental Sciences (MARUM), University of Bremen, Germany

Taking advantage of the **unique and integrated facilities offered by the IODP Bremen Core Repository (BCR) and the MARUM Laboratories** this summer school will combine lab exercises on IODP-style “shipboard” methodologies as well as lectures and interactive discussions on scientific drilling in fluid flow and gas hydrate environments.

The Aim

By hosting one of only three IODP core repositories in the world – the only one in Europe – the MARUM in Bremen offers a unique possibility to bring especially European PhD students and young Postdocs in touch with IODP at an early stage of their career, inform them about the actual research within this thrilling international scientific program, and to prepare them for **future participations in IODP expeditions**. Such training will be achieved by taking the summer school participants on a “**virtual ship**” where they get familiarized with a wide spectrum of state-of-the-art analytical technologies and core description methods including core logging/scanning according to the high standards on IODP expeditions.



This comprehensive approach – **combining scientific lectures with practicals on IODP-style “shipboard” measurements** – is the blueprint for a series of summer schools to be held once per year within the ECORD summer school program, each one lasting for 12 days. It is planned to address the three major topics of the IODP Initial Science Plan in a recurring three year cycle, thereby **exploiting the unique facilities in Bremen** where about 50 scientists work on the whole width of IODP-related topics, not just as (I)ODP and DSDP have been proven to be the most successful internationally collaborative research programs in the history of Earth sciences. Following Earth History topics in 2007 and 2010 (ECORD Summer Schools on “Paleoceanography” and “Dynamics of Past Climate Changes”), a Deep Biosphere topic in 2008 (“The Deep Subseafloor Biosphere”), and a Solid Earth Cycles and Geodynamics topic in 2009 (“Geodynamics of Mid-Ocean Ridges”), **we now propose a Summer School on “Subseafloor fluid flow and gas hydrates”**.

The Topic

Water and fluids are present throughout Earth's crust and act as a primary medium of exchange between Earth's interior, lithosphere, hydrosphere and atmosphere. Several projects in marine research conducted by the Ocean Drilling Program and the Integrated Ocean Drilling Program documented a massive and dynamic plumbing system which cycles the entire volume of the ocean through the seafloor every 1-2 million years.



The Structure

The focus of the first week of the 12 day summer school is on scientific lectures (incl. some topic-related lab exercises) and discussions. "The Virtual Ship" exercise during the second week will introduce the participants to life as a shipboard scientist, introducing shipboard scientific methods and work flow during a drilling cruise investigating fluid flow and gas hydrates.

Sponsors



Organizers

Ulla Röhl, Dierk Hebbeln, Gerhard Bohrmann, Heinrich Villinger

Registration

To apply, please send your application (letter of motivation, CV, registration form and one letter of support) **combined into one single pdf-document** per email to Jutta Bülden in the GLOMAR office (buelden@marum.de). The registration form can be found on the webpage (see footer)

Deadline for registration: **15 April 2011**

Scholarships

ECORD offers scholarships for participation in this summer school. Deadline for scholarship application is **25 March 2011**

IODP-Canada will be offering **scholarships** for **Canadian students** to attend the summer school.

Deadline for scholarship application is **31 March 2011**