

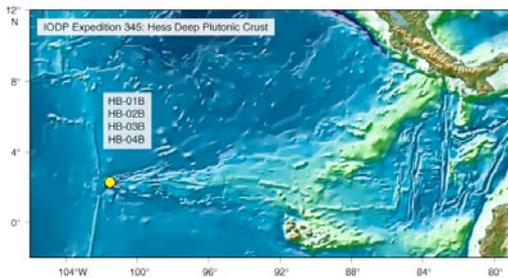


## CALL

### For scientists based in Europe and Canada **Hess Deep Plutonic Crust** (December 2012-February 2013) **DEADLINE December 15, 2011**

The European Consortium for Ocean Research Drilling (ECORD) offers you the unique possibility to sail in the framework of the Integrated Ocean Drilling Program (IODP), an international research program for drilling at sea.

**Scientific Aims** Based on IODP Proposals 551-Full and 551-Add, this expedition aims to



understand the nature of gabbroic rocks that formed at the fast-spreading East Pacific Rise (EPR) and test competing hypotheses of magmatic accretion and hydrothermal processes in the lower ocean crust. The scientific objectives will address (1) the architecture of the oceanic crust inferred from ophiolites and geophysical observations along modern fast-spreading ridges, and (2) the extent and nature of heat and mass fluxes between the asthenosphere, lithosphere, and hydrosphere reservoirs. This includes (1) how is

the lower ocean crust accreted at fast-spreading ridges, and how does this relate to the differentiation of mid-ocean ridge basalts; (2) where, when, and at what temperature do hydrothermal fluids penetrate into the lower oceanic crust, and what effect do these have on the heat and chemical budgets near the ridge axis; and (3) how quickly does the lower oceanic crust cool, what is the thermal structure at the ridge axis, and how do the magmatic and hydrothermal systems interact to determine the thermal regime.

**Scientific Background and Timing** The expedition schedule is available at [iodp.tamu.edu/scienceops](http://iodp.tamu.edu/scienceops) and the expedition web page at [http://iodp.tamu.edu/scienceops/expeditions/hess\\_deep.html](http://iodp.tamu.edu/scienceops/expeditions/hess_deep.html) provides the original IODP proposal and expedition planning information.

**Application Process** Scientists interested in participating please consult the ESSAC webpage <http://www.essac.ecord.org/index.php?mod=user>.

Required documents (PDF only) are:

**1)** a CV **2)** a letter of interest including your specific expertise, previous involvement in DSDP/ ODP/ IODP expeditions, research interest **3)** a publication list.

Young researchers must additionally provide a letter of support from their host institution including information on the post-cruise science support: How to achieve the proposed scientific objectives in the future (funding scheme and support from host institution).

Please send a copy of your application documents to your national office/delegate in order they can help to support your application (offices and delegates at ESSAC webpage, under "about ESSAC").

**For further information or questions please contact:**



#### **ESSAC Office**

ECORD Science Support & Advisory Committee  
Instituto Andaluz de Ciencias de la Tierra, IACT (CSIC-UGR)  
Avda. de Las Palmeras nº 4, 18100, Armilla, Granada, SPAIN  
tel: +34 958 23 00 00 + 190130/190219  
fax: +34 958 55 26 20

[iact\\_essac.office@iact.ugr-csic.es](mailto:iact_essac.office@iact.ugr-csic.es)

<http://www.essac.ecord.org/>

Sailing Applicant: <http://www.essac.ecord.org/index.php?mod=user>