



CALL FOR APPLICATIONS

for scientists based in ECORD Member Countries to participate in

IODP EXPEDITION 374: Ross Sea West Antarctic Ice Sheet History

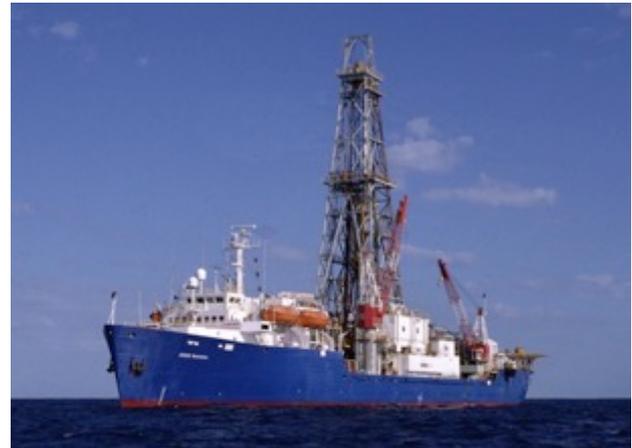
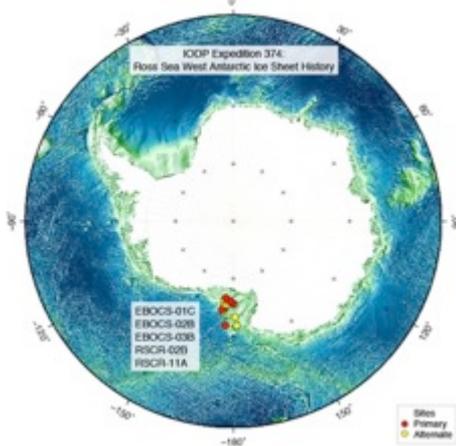
on board the *JOIDES Resolution*

DEADLINE to apply: 15 August 2016

The European Consortium for Ocean Research Drilling (ECORD) offers you the unique opportunity to sail on Expedition 374 onboard the *JOIDES Resolution* in the framework of the International Ocean Discovery Program (IODP), an international research program for drilling at sea.

Ross Sea West Antarctic Ice Sheet History (374)

Jan-Feb 2018



The Ross Sea West Antarctic Ice Sheet (WAIS) History Expedition (based on IODP Proposals 751-Full12, 751-Add, & 751-Add2) will investigate the relationship between climatic/oceanic change and WAIS evolution through the Neogene and Quaternary. Numerical models indicate that this region is highly sensitive to changes in ocean heat flux and sea level, making it a key target to understand past ice sheet variability under a range of climatic forcings. The proposed drilling is designed to optimize data-model integration for improved understanding of Antarctic Ice Sheet mass balance during climates warmer than present. Core and log data from a transect of six sites from the outer continental shelf to rise in the eastern Ross Sea will be used to: (1) evaluate WAIS contribution to far-field ice volume and sea level estimates; (2) reconstruct ice proximal atmospheric and oceanic temperatures to identify periods of past polar amplification and assess forcings/feedbacks; (3) assess the role of oceanic forcing (e.g., sea level, temperature) on WAIS instability; (4) document WAIS sensitivity to Earth's orbital configuration under varying climate boundary conditions; and (5) reconstruct eastern Ross Sea bathymetry to examine relationships among seafloor geometry, ice sheet instability, and global climate.

http://iodp.tamu.edu/scienceops/expeditions/ross_sea_ice_sheet_history.html

For more information about the *JOIDES RESOLUTION* Expedition Schedule and the expedition science objectives see <http://iodp.tamu.edu/scienceops/> - this includes links to the individual expedition web pages that provide the original IODP proposal and expedition planning information.



Who should apply: Opportunities exist for researchers (including graduate students) in all specialties – including but not limited to sedimentologists, petrologists, structural geologists, paleontologists, biostratigraphers, paleomagnetists, petrophysicists, borehole geophysicists, microbiologists, and inorganic/organic geochemists.

The Application Process is open to scientists in all ECORD member countries. Please download the *Apply to Sail* general application forms from the ESSAC webpage:

- Form Expedition 374: http://www.essac.ecord.org/flyer/Apply_to_sail_webform_374.doc

Please, fill out all applicable fields and send it to the ESSAC office by email (essac@geomar.de) with the following additional documents until **15 August 2015**:

1. **A letter of interest** outlining your specific expertise, previous involvement in DSDP/ ODP/ IODP expeditions, research interests, primary research goals of your proposed participation.
2. **CV and publication list.**
3. **Young researchers** must additionally provide a **letter of support** from their host institution, including information on post-cruise science support.

All applications should state how you intend to achieve the proposed scientific objectives, with information on the funding scheme and support from your institution or national funding agencies. More information can be found under: http://www.essac.ecord.org/flyer/Guidelines_for%20Applying_to_sail.pdf

In addition to the ESSAC application, all applicants *must inform their national office or national delegate* and send a copy of the application documents. The national offices or national delegates can also provide information regarding travel support, post-cruise funding opportunities, etc.

See <http://www.essac.ecord.org/index.php?mod=about&page=ESSAC> for a list of the national contact persons.

For further information or questions, please contact the ESSAC Office:

ECORD Science Support & Advisory Committee
Jan Behrmann (ESSAC Chair)
Hanno Kinkel (ESSAC Science Coordinator)
GEOMAR Helmholtz Centre for Ocean Research Kiel
Email: essac@geomar.de <http://www.essac.ecord.org/>
Wischhofstr. 1-3
D-24148 Kiel, Germany
Tel: +49 431 600 2418
Fax: +49 431 600 2922
<http://www.essac.ecord.org>

