



CALL FOR APPLICATIONS

for scientists based in ECORD Member Countries to participate in

IODP SOUTH CHINA SEA RIFTED MARGIN EXPEDITIONS 367 and 368

on board the *JOIDES* Resolution

(February-March 2017 and April-May 2017)

DEADLINE to apply: 15 January 2016

The European Consortium for Ocean Research Drilling (ECORD) offers you the unique opportunity to sail on Expeditions 367 and 368 onboard the *JOIDES* Resolution in the framework of the International Ocean Discovery Program (IODP), an international research program for drilling at sea.

Goals: The two South China Sea (SCS) Rifted Margin Expeditions (based on IODP Proposals 878-CPP and 878-Add) aim to understand the mechanisms of lithosphere extension during continental breakup at a non-volcanic rifted margin.

The SCS margin shows similarities to the hyper-extended Iberia-Newfoundland margins, possibly including exhumed and serpentized mantle within the Continent-Ocean-Transition (COT). However, modeling studies suggest that there can be mechanisms of plate weakening other than serpentization of sub-continental lithospheric mantle. Two competing models for plate rupture (in the absence of excessively hot asthenospheric mantle) have widely different predictions for development of the SCS margin.

To discriminate between these models, a series of deep-penetration sites will be drilled across a 150–200 km wide zone of highly extended seaward-thinning crust with a well-imaged COT zone. Coring and logging deep/basal sediments and the underlying basement is the primary objective.

The proposed drill sites determine the nature of crust within the COT and constrain (a) post-breakup crustal subsidence, (b) how soon after breakup igneous crust started to form, (c) timing of rifting, and (d) rate of extension. The science objectives can be effectively addressed at these drill sites because of the existing constraints on SCS formation and stratigraphy that include industry drilling, ODP Leg 184 and IODP Expedition 349 drilling, as well as due to the young (Paleogene) rifting of the margin and absence of excessively thick post-rift sediments.

Opportunities exist for researchers (including graduate students) in all specialties – including but not limited to sedimentologists, structural geologists, petrologists, paleontologists, biostratigraphers, paleomagnetists, petrophysicists, borehole geophysicists, microbiologists, and inorganic/organic geochemists. For shipboard scientist responsibilities see http://iodp.tamu.edu/participants/scientist_jobs.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.

Please note that these expeditions are subject to availability of funds.



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 367: http://www.essac.ecord.org/flyer/Apply_to_sail_webform_367.doc
- Form Expedition 368: http://www.essac.ecord.org/flyer/Apply_to_sail_webform_368.doc

Please, fill out all applicable fields and send it to the ESSAC office by email (essac.office@erdw.ethz.ch) with the following additional documents:

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.

If you are applying for both Expeditions, please make sure that you indicate this in your application form (you can use one form) and letter of Interest.

All applications should include 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:

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