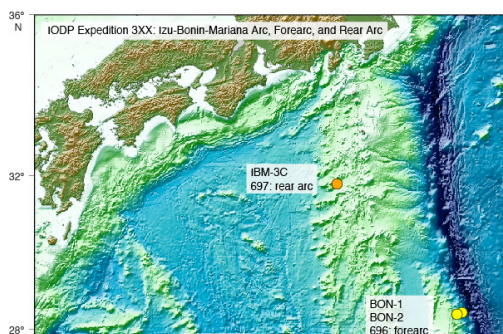




## CALL

For scientists based in Europe and Canada  
**352 IODP Expedition Izu Bonin Mariana: Forearc**  
(August – September 2014)  
**DEADLINE 1 May, 2013**

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.



This expedition, based on IODP Proposal 696-Full4, aims to examine early processes in magmatic evolution, chemostratigraphy and arc crustal accretion that are associated with subduction initiation at intra-oceanic convergence plate margins. The objectives will be achieved by coring through the sediment and into the volcanic stratigraphy at two sites on the outer Izu-Bonin-Mariana (IBM) forearc trench system, with total penetrations of  $\sim 1$  km in oceanic crust in water depths between 3.1 and 4.8 km.

**Goals:** Scientific objectives are to (1) obtain a high-fidelity record of magmatic evolution during subduction initiation by coring volcanic rocks down to underlying intrusive rocks, including obtaining radiometric and biostratigraphic ages; (2) understand the chemical gradients within the rock units and across their transitions, as well as their tectonic significance; and (3) provide empirical constraints for subduction initiation geodynamic models by examining how mantle melting processes evolve from early decompression melting of fertile asthenosphere to late flux melting of depleted mantle. Results from these objectives will help to test the hypotheses that (1) "forearc basalt" tholeiites lie beneath boninites; and (2) forearc lithosphere created during subduction initiation is the birthplace of suprasubduction zone ophiolites.

**More information:** The expedition schedule is available at <http://iodp.tamu.edu/scienceops/>. The expedition web page at [http://iodp.tamu.edu/scienceops/expeditions/izu\\_bonin\\_forearc.html](http://iodp.tamu.edu/scienceops/expeditions/izu_bonin_forearc.html) provides the original IODP proposals 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; and **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). In addition to the ESSAC application, please send a copy of your application documents to your national office/delegate in order they can help to support your application, see <http://www.essac.ecord.org/index.php?mod=about&page=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)

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