



## National Centre for Antarctic & Ocean Research

(Ministry of Earth Sciences, Govt. of India)

Headland Sada, Vasco-da-Gama, Goa - 403 804.



### **Invites Nominations from Scientists/Researchers for forthcoming IODP expeditions**

The Director, National Centre for Antarctic & Ocean Research (NCAOR), on behalf of IODP- India invites nominations in a prescribed format along with detailed bio-data and research/professional experience, from geoscientists/researchers working in established national institutions/organizations and universities, to participate in the forthcoming Integrated Ocean Discovery Program (IODP) expedition 376(BROTHER ARC FLUX EXPEDITION) and expedition 381 (CORINTH ACTIVE RIFT DEVELOPMENT ). NCAOR will provide the requisite financial support to the selected candidates towards their participation in the said expedition. However, it will be the responsibility of the candidates to obtain the necessary Visas / permissions from the countries of embarkation and disembarkation on their own. A scientific plan is mandatory for a successful nomination. Once nominated, candidates will have to submit a detailed science plan along with sample data request which may also form a basis for collaborative research programs between their host organization and NCAOR.

Further details including last date of nominations and format can be obtained at [www.ncaor.gov.in](http://www.ncaor.gov.in) or by email to [iodp.india@ncaor.gov.in](mailto:iodp.india@ncaor.gov.in)

For and on behalf of NCAOR  
Program Officer (IODP-India)

Complete nominations may kindly be emailed to [iodp.india@ncaor.gov.in](mailto:iodp.india@ncaor.gov.in)

Information on forthcoming IODP Expeditions:

#### **Exp. 376: Brother Arc Flux Expedition: 5 May to 5 July 2018**

Based on IODP proposal 818-Full2 the ultimate scientific goal of Expedition 376 is to discover the key processes that distinguish submarine arc-hosted hydrothermal systems from those linked to spreading centers, which results from the flux of magmatic fluid commonly being much higher in volcanic arcs

The primary objectives are to (1) Characterize the subsurface, magma-derived volatile phase for testing models predicting the existence of either a single-phase gas or a two-phase brine-vapor; (2) Explore the distribution of base and precious metals and metalloids at depth as well as the reactions that have taken place during their precipitation along fluid migration pathways to the seafloor; (3) Quantify the mechanisms and extent of fluid-rock interaction, and what this implies for the mass flux of metals and metalloids to the ocean as well as the role of magma-derived carbon and sulfur species in acting as agents for those fluxes; and (4) Assess the diversity, extent, and metabolic pathways of microbial life in an extreme, acidic, and metal-toxic (sub)volcanic environment.

#### **Exp. 381: Corinth Active Rift Development : October and November, 2017,**

Based on proposal **879-Full** this expedition aims to resolve at a high temporal and spatial resolution how faults evolve, how strain is (re-)distributed, and how the landscape responds within the first few Myrs in a non-volcanic continental rift, as modulated by Quaternary changes in sea level and climate. High horizontal spatial resolution (~1-3 km) is provided by a dense grid of seismic profiles offshore that have been recently fully integrated, complemented by extensive outcrops and fault analysis onshore. High temporal resolution (~20-50ka) will be provided by seismic stratigraphy tied to core and log data from three carefully located boreholes to sample the recent syn-rift sequence.

The expedition aims to drill, core, and log up to 750m-deep boreholes at three sites in the central and eastern Gulf of Corinth. The procurement process to contract platform and drilling services is currently being undertaken by ESO, and it is envisaged that the setup will involve a geotechnical vessel equipped with a coring rig, and outfitted with ESO's laboratory containers.

Important Notes:

1. For more information on the above expeditions please visit [www.iodp.org](http://www.iodp.org) and use the link [iodp.tamu.edu/scienceops/](http://iodp.tamu.edu/scienceops/)
2. Applications in prescribed format (available on the website [www.ncaor.gov.in](http://www.ncaor.gov.in)) shall be considered.
3. Last date by which NCAOR receives nominations **15<sup>th</sup> May, 2017.**
4. A scientific plan is mandatory for a successful nomination. Once nominated candidates will have to submit a detailed science plan along with sample data request which may also form a basis for collaborative research programs between their host organization and NCAOR.