

# Guidelines for 2019 Laboratory Open Fund Project Application

The Laboratory Open Fund Project supports both domestic and overseas scientists to carry out fundamental researches in the main research areas of the Laboratory. All funded scientists are required to visit and work in the Laboratory for a short period of time, and the Laboratory will facilitate their accesses to laboratory devices and equipment, samples, and data.

### I Current Main Research Fields of the Laboratory

### 1. Paleoceanography and Paleoenvironment

This field focuses on tropical carbon cycle and western boundary currents in west Pacific marginal seas and the Warm Pool area, and explores the role of the seas in global evolution of climatic environment and its impact on China. Concurrent with studies of deep sea sedimentary records are attempts of modern process observation and numerical modeling of environmental changes.

# 2. Marine Biogeochemistry

Involved with the Integrated Ocean Drilling Program and the International Ocean Discovery Program (IODP), this field focuses on research areas about the tracing geochemical proxies in paleoceanography, the deep sea microorganism and their biogeochemical impacts, and exploring submarine geology and mineralization mechanism and issues related to carbon cycle and biological evolution.

## 3. Marine Sedimentology

Integrating marine science and geology, this field explores weathering and erosion, mass transport and the "source to sink" process of sedimentation. Other researches include observing and analyzing the sedimentary dynamic process and mechanism in the deep sea and exploring the coupling relationship among tectonic uplift, climate change, weathering- erosion process at the provenances.

#### 4. Oceanic Lithosphere Evolution

This field focuses on evolution of continental margin and oceanic lithosphere, marginal basin expansion and other related geological processes which play an extremely important role in the evolution of the earth. Through integrating geological, geophysical and geochemical methods, this field is dedicated to studying key issues on the continental margin structure, evolution of oceanic lithosphere and hydrothermal mineralization.

#### 5. Submarine Resources and Geophysics

This field targets on natural resources such as oil and gas and gas hydrate in deep seas and adjacent land areas, explores forward modeling and inversion theories and new techniques in geophysical surveys using marine seismic, gravimetric, magnetic and electromagnetic measurements, and carries out integrated geological and geophysical studies for exploring marine energy reserves.

The Laboratory also encourages applications in other multidisciplinary fields such as geodynamics, and ocean regulations, culture, and science outreaching.

## **II Open Fund Project Application**

- 1. Applicants can choose their own research topics within the current main research focuses of the Laboratory. Please fill in the application form carefully according to the Regulations of the Laboratory Open Fund Project Application (The latest revision, updated in November 2017). The Laboratory will only fund projects with innovative scientific significance, clear research objectives, and specific research plans.
- 2. Collaboration between the Laboratory researchers and applicants in the major scientific fields of the Laboratory is encouraged.
- 3. Funding priorities will be given to applicants who will work in the Laboratory as visiting researchers and utilize the scientific instruments and samples available in the Laboratory. The Laboratory owns various major instruments and devices for marine science and geophysical researches (visit the website of the Laboratory for details), and can provide certain technical and testing consultations.
- 4. All funded projects will have a two-year duration, with a total budget not exceeding 100,000 RMB.
- 5. PIs whose final reports were evaluated as excellent last year by the Laboratory will have the priority to get the fund. For PIs who didn't submit their final report, their applications and applications from their research affiliations won't be accepted.
- 6. The application deadline for 2019 is December 31, 2018. All funded projects will start from January, 2018. Applicants should submit application forms which stamped by the institutions to the contact person by email before the deadline.
- 7. Contact person: Ms. Zhaocy Zhang, State Key Laboratory of Marine Geology, Tongji University, 1239 Siping Road, Shanghai 200092, China. Tel: 86-21-65981558, Email: zhangzhao1209@tongji.edu.cn; http://mlab.tongji.edu.cn.

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November, 2018