



# Call for Proposals: Asian Try Zero-G 2017-2018

February 9, 2017

**Kibo-ABC** invites your idea of experiment to be conducted in the International Space Station (ISS)/Kibo, as “Asian Try Zero-G” program. **JAXA Astronaut Norishige Kanai** will be assigned for this mission for the Japanese experiment module “Kibo” during his stay.



JAXA astronaut  
Norishige Kanai (Credit: JAXA)

## **1. Important Notice**

We expect unique, novel and/or informative ideas that have never been done in ISS/Kibo. Applicants shall have citizenship of those countries which have [Kibo-ABC member agency](#).

### **< Category 1; under 18 years old >**

- a) Please be aware that ideas realized in the past experiments will be excluded. See the following website.  
<http://iss.jaxa.jp/en/kuoa/tryzeroq/index.html>
- b) Experiment will be conducted in Kibo.
- c) It is necessary that the experiment is visually apparent.
- d) Experiment needs to be done with no tools or with items scheduled to be available onboard ISS.
- e) **Available items** are:
  - Office supplies (paper, pen, scissors, ruler, binder clip, ziploc bag, etc.)
  - Tools (driver, wrench, tweezers, inspection mirror, etc.)
  - Designated items (See Attachment-1, Available onboard items)

\* Some items may not be available depending on work schedule/situation.
- f) The time required to complete the experiment should be less than **10 minutes** and the instructions should be easy enough for children to understand and follow.
- g) The activity will be recorded with a high-definition video camera. The high-definition image data will be downlinked to the ground and sent to each space agency afterwards.
- h) Please do not submit proposals that financially profit a specific organization or agency.
- i) Group application is acceptable. Adult/teacher can be involved as a supervisor or guardian of the group, but not as an applicant.
- j) Depending on the mission schedule and operational situation of ISS, another astronaut may take his place.

### **< Category 2; young scientists and engineers up to 27 years old >**

- a) In addition to above, describe mathematical and theoretical assumption regarding your idea in the Application Form.
- b) Writing a paper about the observation after the experiment is highly recommended.
- c) Group application is not acceptable. **One idea from one person.**



### **POINTS of CONSIDERATION**

- Following points are considered as unsafe in ISS/Kibo
  - Usage of dangerous material/objects
  - Sprinkling a large amount of water (1 liter or more) into Kibo cabin
  - Releasing a certain amount of gaseous, especially the one ISS doesn't have capability of elimination. e.g. N<sub>2</sub>
  - Scattering tiny articles such as bolts and nuts, pieces of paper
  - Usage of high speed spinning objects with large mass
  - Items which have sharp edges
  
- Following points are considered as impractical in ISS/Kibo
  - Two crew tasks
  - Long duration of crew time
  - Sacrificing crew's rights, privacies
  - Requires to terminate air flow in cabin for a long duration of time
  - Blocks crew's emergency evacuation path. e.g. closing hatches

## **2. Proposal of Launch items**

Applicant shall prefer onboard items shown as Attachment-1, though applicant can propose launch items which fulfil following conditions;

- Mass: less than about 950 g
- Dimensions: within about 35 x 30 x 10 centimeters, when folded
- Specifications: non flammability, no sharp edges, not included any motive power (electric, magnetic), no living thing, no chemicals

NOTE: The mass/dimensions indicated above are the total values which is allocated to Asian Try Zero-G 2017-2018. Therefore, an individual item is preferred small and light. The proposed items may not be used for the experiments with various reasons. Also, launch items are not returned to the ground.

## **3. Application Format**

Applicant shall describe following items in the Application Format (See Attachment-2. For your reference, Attachment-3 shows samples.).

- (1) Applicant Information
- (2) Activity Title
- (3) Hypothesis and Theory
  - a) Hypothesis
  - b) Schematic Model
  - c) Mathematical Assumption (**For Category 2 only**)
- (4) Verification method and Requirement
- (5) Tool, Item (including the proposed launch items)

## **4. Application Method**

Please ask your side of agency.



## **5. Deadline**

**April 21, 2017 (JST 17:00)**

PLEASE submit the application to your country's [Kibo-ABC member agency](#).

## **6. Announcement of Results**

**Announcement date of Selection Result: July - August, 2017**

The selection result will be announced on JAXA website (<http://iss.jaxa.jp/en/kuoa/>).

Notification to the selected applicants will be given by the applicant's country agency.

**Announcement date of Space Activity Result: November, 2017 - April, 2018**

The result of Astronaut Kanai's space activity will be announced after completion of his performance. The video clips will be available on the JAXA website (<http://iss.jaxa.jp/en/kuoa/>).

\* The schedule is subject to change.

## **7. Conditions**

Applicants must agree with all of the items below:

### (1) Management of Submitted Proposal

- a) JAXA has the right to modify the idea, conduct the activity in space, and apply the result to public and educational purposes.
- b) Images and pictures in the submitted proposal will be open to the public via JAXA's website. The images/pictures may be utilized for public/educational purposes.
- c) JAXA may use the submitted proposal for public/educational purposes even if the idea is not conducted in space.
- d) If any of the requirements are violated, even after the idea is accepted as a proposed experiment, the acceptance can be withdrawn.

### (2) Responsibility of Applicant and Exemption Clause of JAXA

Applicant must guarantee that the submitted proposal does not violate any legal rights, such as intellectual property rights. If a legal problem related to the submitted proposal arises, the applicant will take full responsibility and must solve the problem.

### (3) Privacy Policy

The personal information collected through this application will be used only for informing the applicant of the selection result, publication, and events related to this project.

## **8. General contact point**

Kibo-ABC secretariat

E-mail : [kibo-abc@aprsaf.org](mailto:kibo-abc@aprsaf.org)