



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. N₂
 - 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 \(Excel\)](#). 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