

## **POLICY AND RULES FOR JAXA EXTRATERRESTRIAL SAMPLE CURATION CENTER ACTIVITY.**

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**Introduction:** Extraterrestrial Curation Center has been established in JAXA as an inter-university research facility to treat and care about the samples in extraterrestrial origin or returned by spacecraft. Currently only samples treated in the center are those returned from asteroid 25143 Itokawa by Hayabusa. In the future, other samples recovered by space missions such as Hayabusa2 and OSIRES-Rex will be treated there. Other kinds of extraterrestrial materials including meteorites or interstellar dust particles would be managed there to make research more active. In addition, the center will promote the researchers to utilize its facility for their own work. There are lessons learned as the first facility for samples returned from space without contamination, so that we start investigation to make the policy and rules for its activity to be defined for more advanced future operation.

**Policy:** The curation center has its characteristics in sample curation and analysis for noble samples retrieved by spacecraft free from contamination of terrestrial atmosphere and materials. And the center should not only promote and encourage researchers for the new sample analysis but organize the research program with the samples as well to construct the big picture of solar system origin and evolution. In view of the continuous work to realize such advantages, the center now starts establishment of the rules for its activity in such items: 1) sample pick-up, storage and delivery, 2) research promotion such as holding international AO, symposium, and special issues, 3) contamination control, 4) development and maintenance of facility and device, 5) Database and archive, 6) inter-university and public relation.

**Rules:** Most of curation activity must be followed on the procedures previously experienced and determined, because the precise and traceable work is required to keep quality of samples and reliability of research. But some rules exist to make the activity more flexible but credible. For the sample pick-up processes, the materials of tools, devices, and holders which contact the samples directly are limited definitely (aluminum, stainless steel, gold, Teflon, and silica), only after special cleaning of them. The environmental atmosphere where samples are exposed are also controlled (ultra-pure nitrogen or vacuum). All the works should be conducted in the clean rooms where the particular contamination is kept at a low level and temperature and humidity is controlled. The goods and materials to be entered into the room is constrained. Number of people working there is limited. Responsibility of AO winners are also defined and described in detail such as duration of their work, timing and method of return of samples, report in the symposium as well as in the sheet, and publication policy, from the viewpoint of more productive outputs from them. The samples should be enough reliable and traceable. These investigations have just begun and further details will be reported in the presentation.