**OSIRIS-REx Sample Request Form**

Please take these steps to ensure a smooth request process:

1) **Read** the instructions

2) **Look** at the example form

3) **Fill** out all relevant fields, especially if you have collaborators

4) **Delete** the instructions and sample form before saving your final version

4) **Return** the form (preferably as email attachment) to: nicole.g.lunning@nasa.gov

**Instructions**

Requests for OSIRIS-REx asteroid samples, flight witness plates, and contact pad particles will be reviewed by a panel of the Astromaterials Allocation Review Board (AARB) that reports to NASA. This panel makes every effort to support allocation of samples for scientific research and public display within the constraints of the OSIRIS-REx conservation plan while balancing the need to maintain the long-term availability of Bennu asteroid samples for future scientific studies. In reviewing requests, this panel needs certain basic information:

**Explanation**

1) **Name of requester**: We ask that one person be made responsible for the samples, even when several people work on a project. If the requester has not completed an undergraduate or graduate degree, they should also obtain the signature of their research advisor; the advisor will become responsible for the secure handling of the samples.

2) **Professional title**: Indicate here how you would like your mail to be addressed. Examples of professional titles are Mr., Ms., Dr., Prof.

8) **Name of sample or parent sample**: List the name(s) and catalog number(s) of the item(s) requested or the parent sample from which the requested sample should be separated.).

9) **Parent?**: If sample name listed in (8) is the parent sample from which the requested material should be separated, list a “Y” here.

10) **Sample type:** List the type of sample being requested (particle, aggregate, thick section, thin section, witness plate, etc.). This should be the sample type that the requestor would like to be allocated (not the sample type of the parent sample, if different).

11) **List the maximum amount of sample** you or your consortium members would like (ideally) for analysis or study.

12) **List the minimum amount of sample** you or your consortium members could use to complete a measurement for your study.

13) **Remarks and notes**: In this column

a) use the footnote 19 to indicate that special considerations apply to sample preparation and explain under item (19);

b) use the footnote 20 to indicate that the measurements are destructive or partially destructive and explain under item (20).

c) include any other information that you think the panel will need to process your request.

14) **Title of study**: Give a brief title of your study (in ten words or less).

15) **Purpose of study**: In a short paragraph, explain the purpose of your work. If you are requesting samples from NASA’s OSIRIS-REx collection for the first time, it would be helpful to include a line or two describing your background and to send along one reprint or other document relevant to the proposed work.

16) **Planned measurements**: Indicate the instrumental methods to be used (e.g., optical microscopy, electron microprobe, ion microprobe, SEM, TEM, spectroscopy, NMR, Mossbauer, XRF), who will do the analyses, and where the measurements will be made. If this is a consortium study, please make sure that any samples requested independently by your collaborators are for other distinct purposes (i.e., the panel will not suggest approval of samples for a consortium that have also been requested separately by consortium members).

17) **Reasons for choosing the particular samples requested**: For a significant fraction of requests, the panel may find that samples different from the ones requested would be better suited to the stated purposes of the investigator. When the investigator provides a detailed explanation of their sample selection criteria, the panel and collection curator are in a better position to use their detailed knowledge of the collection to fulfill the requests in a satisfactory way.

18) **Sample mass required**: Give a detailed explanation for the mass required for analysis by you or your consortium, and give a breakdown of the mass required for each technique being used. Any differences between amount needed and amount requested must be explained in detail.

19) **Special preparations**: Indicate any types of materials, non-standard section preparations, or special handling considerations curation personnel need to be aware of to provide material that will meet your analytical needs.

NOTE: In some cases, it is beyond the capabilities of the JSC curation team to provide specimens in highly specialized forms (e.g., crushed in agate without any history of contact with metal). When in doubt, please contact the curator in advance of submitting your request to determine feasibility of needed special preparations.

20) **Effects on samples**: Indicate how your work will affect the samples that you have requested. Some measurements destroy samples completely; others do not destroy samples completely but may alter them in significant ways. Examples of the latter type include laser and ion microprobing, heating, coating with gold, etching, mixing powders with diluents, removing material for TEM work.

21) **Would the proposed scientific study be potentially negatively impacted if the requested sample is subjected to X-ray computed tomography (XCT) prior to allocation?** For long-term documentation of the collection, curation may elect to XCT scan some samples prior to allocation. Answer should be yes or no. If yes, please provide a short explanation.

22) **If this request is for more than 20 % of sample that is allowable to be made non-pristine this year from the bulk or a recognized lithology, provide additional justification.** The OSIRIS-REx Collection Conservation Plan includes thresholds of how much sample may become non-pristine within a year based on the percentage of curation pristine material at the beginning of that year (Tables 2 and 3 in OSIRIS-REx Collection Conservation Plan). If a request is for more than 20 % of the sample mass available for that year for the entire community, the panel and approvers will subject that request to a higher level of scrutiny than requests for smaller quantities of sample. In addition, these thresholds apply to material designated as “special” as known as restricted access collection (RAC).

23) **Other remarks, notes or annotated images:** Include any other information you think the panel will need to consider your request. If a specific region for an aggregate sample or specific particle is requested from a bulk sample tray (triangular tray), please include an image of the tray with the requested particle marked with an open circle/box around it.

24) **Are OSIRIS-REx samples being requested for this project from JAXA and/or CSA?** If so, please justify why OSIRIS-REx samples are being requested from multiple collections.

**OSIRIS-REx Sample Request Form**

|  |  |  |  |
| --- | --- | --- | --- |
| 1a) Name of person requesting samples: |  | 1b) Signature: |  |
| 2) Professional Title: |  | 3) Date: |  |
| 4) Institution: |  | 5) Address |  |
| 6) Telephone: |  | 7) E-mail: |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| (8) | (9) | (10) | (11) | (12) | (13) |
| Name | Parent? | Type  | Mass/Size | Minimum mass/size | Remarks and notes |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

14) Title of Research (ten words or less)

15) Purpose of Study/Scientific rationale (brief paragraph)

16) Planned measurements and collaborators

|  |  |  |  |
| --- | --- | --- | --- |
| Collaborator | Institute | Method  | Mass required |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

17) Reason(s) for choosing the particular samples requested

18) Basis for estimating mass requested

19) Special preparations

20) Effects on samples of proposed work

21) Would the proposed scientific study potentially be negatively affected if the requested sample is XCT scanned prior to allocation?

22) If this request is for more than 20 % of sample that is allowable to be made non-pristine this year, provide additional justification.

23) Other remarks, notes or annotated images

24) Request to CSA or JAXA for the sample project?

25) Certification of research advisor (required only when requester has not yet received an undergraduate or graduate degree).

I certify that the student submitting this request has access to the laboratories required to complete the research.

|  |  |  |  |
| --- | --- | --- | --- |
| Name: |  | Signature: |  |
| Institution: |  | Address |  |
| Telephone: |  | E-mail: |  |