

Checklist for Requestors of Stardust Samples for Research

Requests for research samples from the NASA Stardust sample collection are carefully reviewed before allocation decisions are made. However, neither the Stardust Sample Curator, nor the Curator's advisory committee, the Curation and Analysis Planning Team for Extraterrestrial Materials (CAPTEM), has access to detailed research proposals that might have been submitted separately by the requestor to other parts of NASA or to other agencies. Therefore, to be successful, each Stardust sample request must be as informative and self-contained as possible. Before submitting your sample request, be sure it contains all of the elements on the following checklist:

1. Letter or e-mail from the Principal Investigator (PI) who will be responsible for the loan of any Stardust samples.
2. Description of the scientific goals and objectives of the proposed work. Scientific hypotheses to be tested or technical utilization to be demonstrated.
 - A. Value of new analyses or tests relative to previous work on the same subject.
 - B. Explanation of any time constraints (such as schedules for instrument time at complex facilities).
3. Specification of the samples requested for research.
 - A. General types of samples: microtomed sections, grains, tracks, etc.
 - B. Special requirements (for example, location in parent aerogel sample).
 - C. Specific Stardust sample numbers (if known). Published sample numbers sometimes include unofficial designations, given by individual PIs, that may differ from the official designations maintained by the Stardust Sample Curator. The Curator must be able to unambiguously identify the sample.
 - D. Sizes of samples requested, where appropriate.
 - E. Specification of whether returned (previously studied) Stardust samples are acceptable.
 - F. Details of the sample preparation to be performed by the Curator. Note that special sample substrates, if required, must be provided by the requestor.
4. List of Stardust samples already in the possession of the PI.
5. Description of the analytical techniques to be applied. Specific identification of methods and facilities.
 - A. Do not say "probe" analysis; specify electron-, ion-, proton-, or other microbeam method.
 - B. Make clear the intended uses of the proposed methods.
 - C. Identify which Co-I and facility will perform each analysis.

For new investigators or new techniques additional information should be provided, as follows:

6. PI/Co-I team's previous experience with the proposed techniques, including reprints of peer-reviewed journal articles on Stardust samples or a closely related subject.

A. Sensitivity, accuracy, and precision that demonstrate feasibility for successful analysis of the requested samples.

B. Background of new proposing PI/Co-I team (first-time sample requestors only).

7. Resume (curriculum vitae) of PI and each Co-I.

A. Reprints of peer-reviewed journal articles that demonstrate experience applicable to Stardust sample research.

A well-written sample request that is responsive to this checklist should be achievable in about 500-1000 words plus attachments (if applicable). Please refer any questions about Stardust sample requests as follows:

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