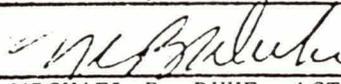


CURATORIAL NEWSLETTER	DATE: April 21, 1981	NO: 31
		
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LAPST AND REQUESTS FOR SAMPLES

The Lunar and Planetary Sample Team (LAPST) met March 14-16, 1981 and recommended the allocation of 96 samples to 9 Principle Investigators. The next meeting of LAPST will be held in mid-May. Sample requests received after May 9 will not be considered at this meeting. Due to a substantial workload of Apollo 16 sample requests stemming from the Highlands Project, it is desirable for investigators to carefully plan their sample requests and schedules so that we can provide the optimum response to each individual requestor.

COSMIC DUST PROGRAM

The first flight of the JSC cosmic dust collector system is scheduled for the first week of May. The system has been fabricated and collectors are now being cleaned in Don Brownlee's laboratory in anticipation of first flight. We hope to achieve 50-100 flight hours in May, flying over the mid-continent of the U.S. Another extended flight period will be undertaken this summer in Alaska. As the collector system provides significantly greater collecting area than was available previously, if everything goes well, by the end of the summer we might double the previously existing collection of dust particles.

It is time to begin considering specific needs of individual investigators. We would like to have letters of intent from all scientists who may be interested in receiving particles from the collection. In order to provide some guidelines, the following information may be useful.

1. Collection

The particles are collected on lucite plates, approximately 30cm², which are coated with a thin layer of high viscosity silicone oil. Particles impact the collectors and are imbedded in the oil. Investigators who are prepared to document their handling capability, document their treatment of the collectors, and protect those dust particles not required for their investigations for the possible use of others, may request entire collector surfaces for study.

2. Particle picking and characterization.

Collectors will be scanned in a class-100 laminar flow clean room. Particles large-enough to be characterized optically will be removed, washed and described. Some, or many, or all (yet undecided) particles above a certain size (yet undecided, but in the range 10-25µm) will be further characterized using scanning electron microscopy. You should indicate whether you want to study particles that have been characterized by SEM, or whether contamination/degradation from SEM study will occur for your investigations.

3. Small particles.

No firm plans have been developed for handling smaller particles. What are your requirements or ideas? Concentration of particles is a possibility, as is further particle picking and characterization.

We are anxious to know specific requirements so that they may be incorporated into laboratory procedures. Your inputs do not have to be in any particular format, but should be in writing. Further information can be obtained from Uel Clanton (713)483-5171 or Mike Duke (713)483-4464.

The LAPST has developed a scientific rationale document for the Cosmic Dust Program, which recommends increased collection efforts and increased levels of support for cosmic particle research. It is being provided to NASA Headquarters, where it will be used to argue for additional funding for the extraterrestrial materials analysis program. The Annual "Dear Colleague" letter should provide more information on the expectations of NASA Headquarters for future dust investigations.

If you are not now on the mailing list for the Curatorial Newsletter and wish to keep abreast of the Cosmic Dust Program, please send your name in for inclusion on the mailing list.

ANTARCTIC METEORITES

Approximately 100 specimens, mostly small, were collected in Antarctica during December and January. These have been transported to JSC and will undergo preliminary description in the May-June time frame.

CATALOGS AND REPORTS

The following catalogs or guidebooks are in preparation or planned:

<u>CATALOG</u>	<u>Schedule for Completion</u>
Apollo 17 Boulder Station 6 Guidebook (W. Phinney)	Complete
67016 Guidebook (M. Norman)	July 15, 1981
Lunar Soils Catalog Revision	Oct. 1, 1981
Apollo 16 Core Catalog Revision	Jan. 1, 1982
Apollo 16 2-4mm Coarse Fines Catalog	Spring 1982
Apollo 15 Highlands Rock Catalog	Spring 1982

The Apollo 17 Station 6 Boulder Guidebook is complete and may be ordered by writing to SN2/Curator, Johnson Space Center, Houston, TX 77058.

The LPI is completing the report on the Apollo 16 Lunar Highlands Workshop held in November. This is a particularly informative report. If you have not ordered one, please contact the Curator.

The Table of Sample Depths for Apollo 15, 16, and 17 Deep Drill Cores is available from the Curator's Office. This 68 page table lists sample depths linearly as centimeters-from-the-surface, and by weight of overburden (grams per cm²). Sample numbers, both for samples taken during dissection and for the potted butts from which thin sections are made, are included in the table. Therefore, the depths are related to the parent samples of P.I. samples.