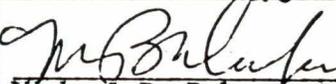


CURATORIAL
NEWSLETTER

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No. 3


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Sample Allocations

At the recent meeting of the Lunar Sample Analysis Planning Team (LSAPT), all outstanding sample requests were reviewed and recommendations were made for most of them. Although the quality of information contained in sample requests is improving, some requests still are being delayed because the investigator has not provided adequate definition of his sample request. Please review your sample request carefully before you submit it; it frequently will save time to discuss your request with a member of the Curator's staff before you formulate your request. Contact Pat Butler, Bob Laughon, John Annexsta or me.

Reexamination of Apollo 11 (we need some help)

We have embarked on a comprehensive review of the Apollo 11 sample collection and a general program of completing the data base for previously undescribed samples. It is anticipated that some samples will be allocated for basic characterization studies as a result of these reviews. A comprehensive catalog for each mission, which will include basic sample descriptions and a limited amount of chemical, isotopic and other data, will be produced. We will contact many investigators for information as this project proceeds.

One area of concern in the basic characterization is that of the soils. Grant Heiken reviewed the status of soil descriptions and has pointed out a great number of samples in which essentially no mineralogical-petrological data are available. Description of the 90-150 micrometer size fraction of soils seems to be a good standard method for comparing soils. If you have an interest in preparing a number of min-pet descriptions of soils to help complete the basic characterization, please write to me.

Consortium Review

We are requesting a status report from each consortium leader on the progress and plans for the consortium. In general, the consortium work seems to drift on at a low level of interest, but ties up a great deal of sample material that might be useful to others. We wish to encourage the consortia to continue their in-depth description and analysis of their samples, but also to terminate those studies when they no longer are productive. The consortium report will be due on August 1; it is the consortium leader's responsibility to coordinate the report, but it is expected that all consortium members will participate to some extent in this review.

Luna 20

We have heard from the Soviet Union that they will provide us with two small rock fragments from their Luna 20 mission, which may be useful for obtaining better age data for that part of the Moon. A preliminary examination will be carried out to determine their suitability for isotopic analysis. As the fragments weigh approximately 40 milligrams each, every effort will be made to extract information from the smallest amount of material necessary.

Surface Sampler

LSAPT has recommended the allocation of a portion of the loose dust from the Apollo velvet cloth surface sampler, to take the next step in the characterization of those samples. Photomosaics at about 11X magnification have been prepared, to serve as basis for future sampling and description of the material. At present, the methods that will be used to extract material from the cloths and gasket materials have not been determined.

Core Progress

A first-round dissection of drive tube 60009 revealed more detail than seen in any previous core sample. A preliminary distribution of samples from 60009 will be carried out in June, primarily to obtain a more detailed characterization of the radiation history of the core. A second dissection will be carried out, to obtain a larger quantity of samples for allocation. In July, it is intended to initiate the dissection of 60010, the upper section of the double drive tube combination (60009-60010). Material from both sections will then be available for comprehensive study.

The dissection of 70009 has been completed and a report is in preparation. The upper 10 cm of material apparently was disturbed when the upper plug inserted on the Moon loosened and failed to retain the soil. A set of samples will be studied by γ -spectrometry to attempt to evaluate the mixing of the upper material.

Sample Distribution

Good progress is being made filling sample allocations recommended by LSAPT. Most new allocations are being distributed within 60 days of approval. Samples from all missions are being prepared and distributed. We are attempting to use samples returned by investigators to the largest extent possible to conserve samples and to speed our response. For those cases that require preparation of new material, we are including the investigators in the review of the preparation plans. Please return your review promptly, so we can provide you the best possible sample.

Sample Requests

The last date for which sample requests will be received for consideration at the next meeting of the LSAPT is June 13.