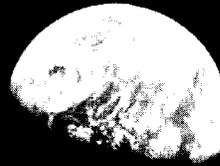


# LUNAR NEWS



## LUNAR EXPLORATION SCIENCE WORKING GROUP IS FORMED

Roger Phillips  
Southern Methodist University

The Lunar Exploration Science Working Group (LExSWG) was organized in the fall of 1988 at the behest of Code EL, NASA Headquarters. The group, chaired by Roger Phillips (Southern Methodist University), reports to Geoff Briggs, and is concerned with both unmanned and human exploration of the Moon. The working group has already met twice, in Washington in October and in La Jolla in January. The working group members, along with Bevan French (EL Lunar Program Scientist) and Carl Pilcher (Acting Director, Space Studies, Office of Exploration (Code Z)), after considerable discussion, have thrashed out a charter as follows:

### CHARTER

The Lunar Exploration Science Working Group (LExSWG) will develop strategies and priorities for scientific exploration of the Moon, including scientific enquiry about the origin, evolution, structure and composition of the Moon, as well as the application of

science knowledge relevant to human activities on the Moon.

(1) The LExSWG will address all aspects of lunar science. It will establish the science requirements and rationale for unmanned missions to the Moon, such as Lunar Observer. Additionally, LExSWG will

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develop a long-term exploration strategy for understanding the Moon.

(2) The LExSWG will address the lunar science aspects of human exploration of the Moon. It will assess the scientific information necessary to carry out specific human exploration scenarios. It will consider the precursor requirements, provide information on resource potential and material properties, and recommend scientific strategies associated with human presence on the Moon.

Early activities of the committee have included considering the relative scientific merits of the Lunar Observer mission versus the Lunar Prospector missions, consideration of the instrument payload on Lunar Observer, and providing information to Galileo team members on scientific opportunities of the Galileo lunar encounters. In future meetings, LExSWG will start to develop strategies for the long-term exploration of the Moon.

Members of LExSWG in addition to Phillips are: James Arnold (University of California, San Diego), W. David Carrier (Bromwell & Carrier, Inc.), Michael Drake (University of Arizona), Michael Duke (Johnson Space Center), Larry Haskin (Washington University), Lonnie Hood (University of Arizona), John Lewis (University of Arizona), Doug Nash (Jet Propulsion Laboratory Program Scientist), Carle Pieters (Brown University), Buck Sharpton (Lunar and Planetary Institute), Paul Spudis (U.S. Geological Survey), and Jeff Taylor (University of New Mexico).

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### LUNAR SIMULANT REPORT AVAILABLE

Jim Blacic  
Los Alamos National Laboratory

A survey on simulated lunar materials is now available. The survey, "Lunar Simulant Survey Report," was sponsored by the Space Studies Institute and prepared by the Department of Geology and Geological Engineering and the Energy and

Mineral Research Center of the University of North Dakota.

The report addresses the history of simulant use, considerations of chemical, mineralogical, textural, and geotechnical properties of proposed simulants (including lignite fly ash), and the current availability of simulant materials. The report also includes a bibliography with papers annotated specifically with regard to properties and uses of lunar simulants.

Anyone interested in purchasing a copy of the report for \$10.00 should contact:

Gregg E. Maryniak  
Executive Vice President  
Space Studies Institute  
P.O. Box 82  
Princeton, NJ 08542  
(609) 921-0377

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### DIETRICH NAMED LUNAR CURATOR

Dr. John W. Dietrich has been named Lunar Sample Curator. John has been the Associate Curator for Lunar Samples since 1981 and has been at JSC since 1968 when he came to work in the Lunar Exploration Program. Outgoing Curator, Doug Blanchard, has assumed new responsibilities as Chief of the Planetary Science Branch. John Dietrich is the Deputy Chief of that branch.

"Lunar News" is produced three times a year by the Planetary Science Branch of the Solar System Exploration Division, Johnson Space Center of the National Aeronautics and Space Administration. "Lunar News" is intended to be a forum of facts and opinions regarding lunar sample study, Lunar Geochemical Orbiter, and Lunar Base activities. It is sent free to a mailing list of more than 1200 individuals. To be included on the list, write to the address below. Your contributions to "Lunar News" on topics relating to the study, exploration and utilization of the Moon, and comments about "Lunar News" and materials appearing here should be sent to:

Doug Blanchard  
Code SN2, NASA JSC  
Houston TX 77058

CURATOR'S COMMENTS

John Dietrich  
Lunar Sample Curator  
Johnson Space Center

**Lunar Sample Activity**

The Lunar and Planetary Sample Team (LAPST) reviewed 22 requests for lunar samples at its November 17-18, 1988, meeting at the Lunar and Planetary Institute. LAPST recommended allocating 75 samples (weighing 48.2 grams) and 83 thin sections to 16 investigators in response to 20 of the requests. LAPST also recommended approval of the request from an established lunar sample scientist to use an educational thin section package during a foreign tour. He used the thin section set to support lectures on lunar science presented in the earth science departments of several universities in Japan and the People's Republic of China.

LAPST recommended denial of one request reviewed at the November meeting. After thorough discussion, the team concluded that scientific rationale accompanying the request was not adequate to justify the allocation of lunar samples.

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COMPUTER ACCESS TO CURATORIAL  
DATA BASES

Steve Waltz  
Lockheed Engineering and Science Company  
Johnson Space Center

Lunar, Antarctic Meteorite, Cosmic Dust, Solar Max, and Data Library databases are on-line and computer-accessible in one of two ways:

- (1) If you are on the SPAN network, you can type the command,  
SET HOST SN or  
SET HOST/LOG=filename.log SN  
followed by the username,  
PMPUBLIC at log-in.

- (2) If you call in by modem to (713) 483-2500, then respond with:  
SN\_VAX at the number prompt, and  
RETURN followed by the username,  
PMPUBLIC at log-in, then you can communicate at 300 or 1200 baud. The session is "captive" and menu-driven. Each user is required to name a subdirectory to hold files that are created during the session.

Trouble? Call Steve Waltz at (713) 483-5764

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Curatorial phone numbers:

- Curator's Office .....713-483-3274  
Betty Eaton, Secretary
- Lunar Samples  
John Dietrich.....713-483-5134
- Antarctic Meteorites  
Marilyn Lindstrom .....713-483-5135
- Cosmic Dust  
Mike Zolensky.....713-483-5128
- Thin Sections, Educational Thin Sections  
Chuck Meyer.....713-483-5133
- Grants and Loan Agreements  
Dale Browne .....713-483-5132
- Facilities  
Jim Townsend.....713-483-5331

Mailing address remains:

SN2 Curator's Office  
NASA Johnson Space Center  
Houston, TX 77058

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### PRELIMINARY PROGRAM 20<sup>TH</sup> LUNAR AND PLANETARY SCIENCE CONFERENCE

The Twentieth Lunar and Planetary Science Conference will be held March 13-17, 1989, at the Johnson Space Center, Houston, Texas. In observance of the twentieth anniversary of this conference and the return of samples from the Moon, special activities have been added to the week of the conference, including a plenary session on lunar science on Wednesday afternoon and a reunion banquet that evening.

The Conference is open to all interested individuals. Registration information can be obtained from Lunar and Planetary Institute Project Office, 713-486-2143. International guests are reminded that, if they plan to visit the analytical or curatorial laboratories during the conference, they must secure approval from the International Affairs Division of NASA Headquarters. Anyone needing to make these arrangements should contact their embassy in Washington, D.C. This procedure is NOT required for attendance of the scientific sessions at the conference.

#### **Monday, March 13, 1989**

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##### MORNING SESSION 8:30 AM

1. Mars Remote Sensing
2. Chondrules and Ordinary Chondrites
3. Cosmic Dust I

##### AFTERNOON SESSION 1:30 PM

4. Mars Remote Sensing/Volcanism
5. Carbonaceous Chondrites
6. Shock Metamorphism and Terrestrial Craters
7. Planetary Differentiation

#### **Tuesday, March 14, 1989**

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##### MORNING SESSION 8:30 AM

1. Mars Geology
2. Bholghati and Angrite Consortia Plus Pallasites
3. Cosmic Dust II

##### MORNING SESSION 10:15 AM

4. Interstellar Grains/Dust

##### AFTERNOON SESSION 1:30 PM

5. Mars: Water, Canyons, and Life
6. Ureilites, Ungrouped Chondrites & Nebular Processes
7. Lunar Geology, Processes and Resources

##### EVENING SESSION 8:00 PM

8. Opportunities in Solar System Exploration

#### **Wednesday, March 15, 1989**

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##### MORNING SESSION 8:30 AM

1. Venus Geophysics
2. CAIs
3. Nature and Effects of Impact Cratering

##### AFTERNOON SESSION 1:30 PM

4. 20th Anniversary Plenary Review

#### **Thursday, March 16, 1989**

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##### MORNING SESSION 8:30 AM

1. Venus Geology
2. SNCs, HEDs and Fellow Travelers
3. Regoliths

##### MORNING SESSION 10:15 AM

4. Cosmic Rays

##### AFTERNOON SESSION 1:30 PM

5. Origin and Crystallization of Mare Basalts
6. Chemical and Isotopic Characteristics of Solar System Material
7. Planetary Physics

##### AFTERNOON SESSION 3:00 PM

8. Asteroids and Small Bodies

#### **Friday, March 17, 1989**

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##### MORNING SESSION 8:30 AM

1. Magma Evolution in the Lunar Highlands
2. Planetary Accretion
3. Outer Solar System