



Geological Society of Nevada Southern Nevada Chapter Newsletter

November 2004

PRESIDENT

Amy L. Brock
UNLV Graduate Student
702.895.3583
alb@unlv.nevada.edu

VICE PRESIDENT/ NEWSLETTER EDITOR/ WEBMASTER

Robyn A. Howley
UNLV Graduate Student
702.895.5054
robynhowley@yahoo.com

TREASURER

R. Paul Bowen
R.P. Bowen Engineering, Inc.
702.247.7765
paulbowen@cox.net

SECRETARY/HOSTESS

Melissa Hicks
UNLV Graduate Student
702.895.1162
hicksm@unlv.nevada.edu

ADVERTISING

Jim O'Donnell
Geophysical Consultant
702.293.5664
jim_odonnell@cox.net

Meteorite, Cosmic Dust & Their Parent Bodies

DATE: Thursday, November 18, 2004

SPEAKER: Maxwell Blanchard
(CCSN, Astronomy Department)

LOCATION: Room 102 Lilly Fong Geoscience Bldg.

TIME: 6:00 p.m. Social *Half-Hour*
6:30 p.m. Presentation

Geological Society of Nevada, Southern Nevada Chapter
University of Nevada, Las Vegas
4505 Maryland Parkway, Box 4010, Las Vegas, NV 89154-4010
<http://geoscience.unlv.edu/GSN/gsnsc.htm>

We'll our October meeting went great. Thanks to Jim O'Donnell who presented some of his seismic work in the Las Vegas Valley. We were glad to see such a great turn out and such enthusiasm for the topic. Also, our new social *half-hour* worked great, it's much more efficient. November's meeting will be held one-week early, on Thursday November 18th, because the Thanksgiving holiday falls on our normal meeting date. Our speaker will be Max Blanchard and he will be talking about meteorites and cosmic dust and where they

originate. Visit our chapter website for a more detailed description of Max's talk. As usual, everyone is welcome to attend the meeting. The more the merrier!

Have a Happy Thanksgiving!

Sincerely, Robyn

MEMBERSHIP:

Remember to renew your membership or if you would like to become a member, download and mail a form into the GSN main chapter. Regular membership is \$30 and student membership is \$5 (chapter fee only).

ADS & SPONSORS:

GSN is a non-profit organization. If your business would like to sponsor social hour at a GSN southern Nevada chapter meeting or place a paid advertisement in this newsletter and on our website please contact Jim

O'Donnell at 702.293.5664 or jim_odonnell@cox.net. Please see our current advertisements at the end of this newsletter and support our sponsors.

PARKING:

For information on parking at UNLV and obtaining a permit please visit the UNLV parking services website at <http://www.unlv.edu/studentlife/parking/>.

This also includes maps of the campus and directions.

THIS MONTH'S SPEAKER
Meteorites, Cosmic Dust & Their Parent Bodies
MAXWELL BLANCHARD

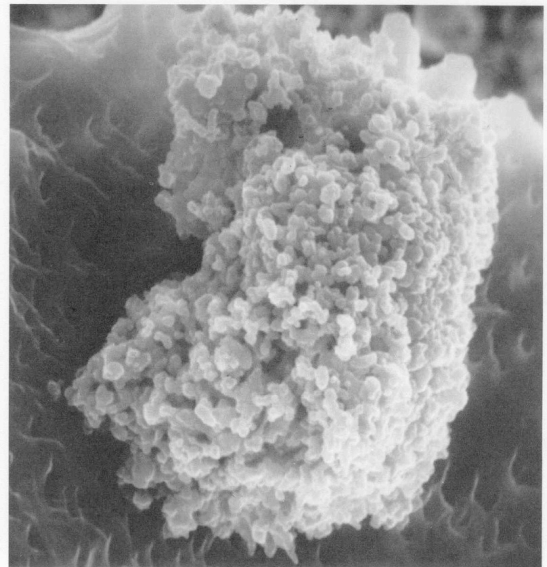
Mineralogical & geochemical analyses of meteorites & cosmic dust when combined with information gained from the many unmanned missions to asteroids & comets are yielding significant information about the early formation of our solar system. Most, if not all, of the meteorites found on Earth originate from asteroids, comets, moons & planets in our solar system. In contrast, the origin of cosmic dust includes: pre-solar nebula, stars beyond our own sun, comets, & C type asteroids.

Speaker's Background & Education

The author has published over 80 papers and abstracts in leading earth and planetary science journals and symposia proceedings. The range of subjects in these papers include: planetary geology, cosmic dust, meteorites, multi-spectral remote sensing, thermal infrared imaging, x-ray diffraction and fluorescence, electron microprobe and scanning electron microscopy, and mineralogy-petrology.

He currently teaches classes about the solar system in the astronomy department at CCSN. He has taught advanced mineralogy, x-ray analysis in geology using XRD, XRF & electron microprobe, photo-geology, and been a principal advisor for MS theses in planetary geology as an adjunct instructor in the Geology Department at San Jose State University. For over 32 years he was a research scientist with NASA & DOE. While with NASA-Ames Research Center his research focused on cosmic dust, meteorites, thermal infrared and

TITLE: METEORITES, COSMIC DUST & THEIR PARENT BODIES



UZ-SA(21)
Chondritic

Shown above is a cosmic dust aggregate collected from the atmosphere by a high altitude U-2 aircraft. The composition of this particle, in relative order of abundance, is: Si, S, Mg, Fe, Ni. In some aggregates, C was found to be present in a volatile organic form & ³He was found at a concentration greater than many gas rich meteorites. The He was implanted by the solar wind. Isotopic analysis indicated some components of these aggregates solidified in interstellar space long before our Sun formed. The scale bar is one micron.

multi-spectral remote sensing, and a project scientist for returned missions to the Moon and Mars. While at NASA-Johnson Space Center he was a curator of lunar rocks and cosmic dust. While with DOE he was in science management. Previously, he also worked as a design engineer for General Dynamics-Convair designing and building the Atlas & Centaur missiles

He received his Bachelors degree from San Diego State University in 1962, a Masters degree from San Jose State University in 1968, and did additional graduate work at Stanford University and University of Michigan. He holds a current Credential for teaching in California Community Colleges and is a current licensed consulting geologist in the State of California.

He has been a member of the following organizations: America Geophysical Union; Geological Society of America; Meteoritical Society, Society of Economic, Paleontologist & Mineralogists; and Division of Planetary Science in the American Astronomical Society.

PAID ADVERTISEMENTS

Jim O'Donnell <u>Geological/Geophysical Consultant</u>	
GEOTECHNICAL APPLICATIONS & ENGINEERING SEISMIC SURVEYS	
Refraction Microtremor & Refraction Downhole Velocity & Tomography	
702.293.5664 702.281.9081 cell	geophysics@mysite.com jim_odonnell@cox.net

R.P. BOWEN ENGINEERING INC.	
R.P. "Paul" Bowen Minerals Exploration Management	
6598 West Mesa Vista Ave. Las Vegas, NV 89118-1817 Phone: (702)247-7765 Fax: (702)876-0237	
Cell: (702)290-1255 E-Mail: paulbowen@cox.net	

<i>Nevada Mineral & Book Company</i> <i>A Unique Earth Science Bookstore & Natural History Gallery</i>	
New, Used, & Rare Books Minerals, Fossils, Meteorites, Decorator Items, Unique Gemstone Jewelry	
<i>Walter Lombardo - Geologist</i> <i>Sandy Anthony Lombardo - Gemologist</i>	
645 Pueblo Blvd., Henderson, NV 89015 702.568.9977 or minbooks@aol.com	