THE 759th MEETING
OF
THE MINERALOGICAL SOCIETY
OF SOUTHERN CALIFORNIA

7:30 p.m., Friday April 13, 2001

Geology Building E Lecture Hall
Pasadena City College
Pasadena, California

Featuring a Talk
by
Robert Verish

"METEORITES OR METEOR-WRONGS?"

"Calling All Meteorites!!"

APRIL PROGRAM

This month's special guest lecturer is Robert Verish of Sunland, California, who will be presenting a program on the identification of meteorites. Mr. Verish, who works as a contractor for JPL's Deep Space Network (DSN), is one of the few people who has found, and eventually identified, a rock from another planet - two pieces of a meteorite - composed of a type of rock from Mars known as a shergottitic basalt.

While traveling home from his work site at NASA's Goldstone Tracking Station in the Mojave, Bob would take side trips to do some rockhounding. Over the past 20 years he has amassed a large collection. On one of these side trips, Bob picked up and took home some odd-looking, glassy rocks. At least 18 years would pass until he would see these rocks again while cleaning out his rock collection. In the intervening years Bob had earned a degree in geology from Cal State University at Los Angeles and developed an interest in the space sciences. Upon recognizing the rocks as being possible meteorites, he took samples of them to the Cosmochemistry Lab at UCLA, where their analysis eventually would show that these rocks had come from MARS!

Bob, also known on the Internet as "Bolide*chaser", has recently appeared in a segment of "Hunt For Amazing Treasures" on The Learning Channel. This video segment is a mini-documentary about his recent pursuits to try and find the original location and more of the Mars rock meteorite that he found while rockhounding. Although Bob hasn't found any more Mars rocks, his efforts have resulted in several other new, stony meteorite finds for California and Nevada. Currently in his spare time, Bob is the Principal Field Investigator for the Meteorite Recovery Foundation.

Bob has offered to inspect any and all suspect meteorites. So come to the next meeting and bring your 'space rocks' with you.

COLLECTOR'S NOTES

The Trouble with Manganese

by Walt Margerum

If you're like me, the black manganese oxides in your collection are listed as pyrolusite, manganite, wad, psilomelane, or are unlabeled in a box. All show little or no crystal structure, and vary in hardness from 1 to 7. I recently decided to identify the Manganese minerals I collected from the Arlington mine near Blythe.

One of the first problems I encountered is that even the experts have had difficulty in sorting out these minerals, as can be seen in a quick review of the last three issues of Dana's System of Mineralogy. Psilomelane was considered a species in the sixth edition, and wad was a variety of psilomelane. The seventh edition still had psilomelane as a species, but wad was considered a field name for unidentified hydrous manganese oxides. The eighth edition omits the term wad entirely, and lists psilomelane as a discredited species, and replaces it with romanechite. Unfortunately not all minerals called psilomelane automatically become romanechite. The seventh edition of Dana lists 18 species. The eighth lists 35. Various articles in my possession list 15 minerals as being found in the deserts of California and the adjacent areas of Arizona.

Here is a synopsis of the minerals listed in the eighth edition of Dana:

Akhtenskite	**Asbolane**	**Aurorite**	Birnessite
Bixbyite	Cesarolite	**Chalcophanite**	**Coronadite**
Crednerite	**Cryptomeline**	Ecandrewsite	Ernienickelite
Feitknechtite	**Groutite**	Hausmannite	**Hetaerolite**
Hollandite	**Hydrohetaerolite**	Iwakiite	Jacobsite
Janggunite	Jianshuiite	Lithiophorite	**Manganite**
Nsutite	**Pyochroite**	**Pyrolusite**	Quenselite
Ramsdellite	Rancieite	**Romanechite**	Takanelite
Todorokite	Vernadite	Woodruffite	

The items in **Bold** are those identified from the desert areas.

I then created a database listing hardness, color, streak luster, density, crystal form, and formula for each of the minerals. This was a subset of my ever evolving mineral identification database created using Filemaker Pro®, an easy to use relational database.

I selected one of my Arlington mine psilomelane samples to determine if I could come up with a reasonable identification. It had a hardness between 5 and 7, a black streak, and a grayish color. The hardness varied due to the slight botroidal banding in the specimen. Consulting my database I came up with four possibilities: cryptomelene, hollandite, pyrolusite, and romanechite. Two of these contain barium: hollandite, and romanechite, so I decided to perform a simple chemical test for barium. I dissolved a small portion of the specimen in HCl. I noted a slight effervescence, so I suspected the possibility of minor inclusions of calcite. I filtered the solute, added at least 5 times the amount of water, and then added a small amount of H2SO4. A white precipitate, BaSO4, was obtained. The added water prevented any calcium from precipitating out as CaSO4. Its luster was sub metallic to dull. This narrowed the choice down to romanechite. Therefore I have listed this mineral as such in my collection.

I have to admit that I chose one of the easier specimens to identify. I am in the process of trying to identify the other minerals collected from the Arlington mine. If I have any luck I will report it in a later article.

MINUTES OF THE MARCH 2001 MEETING

The March meeting was called to order at 7:35 by president Dave Smith, who then turned the podium over to me to introduce the evening's speaker. We were thrilled to have our own Sugar White talking on "Arsenate Minerals of the Great Basin". Collecting, documenting, and photographing these minerals has been a major project of hers for many years. We got to see the mines and frequently the exact exposures where the minerals had been collected. The mineral photographs themselves were beautiful. For the most part the talk focused on Gold Hill and the Centennial Eureka mine in Utah, Majuba Hill and the San Rafael Mine in Nevada and the Mohawk Mine here in California. Of these all but the Centennial Eureka are still accessible for collecting.

The talk was based on one that Sugar has presented nationally at least twice recently. The first time was when she was being inducted into the "Micromounters Hall of Fame" last Fall. That is really a big honor since at most one or two people a year are chosen. We can feel really happy that one of our members was so honored. The second time was at a major mineralogy symposium sponsored by the Cleveland Museum of Natural History.

The minerals shown were striking in both form and color. They spanned the rainbow in color ranging from bright red carminite through yellows and orange and green to bright blue cornubite. Sugar mentioned several arsenate minerals that were first found at one of these mines, but unfortunately were first described and named from somewhere else. Finally however one found at Gold Hill by Juanita Curtis, another of our members, was described by Tony Kampf and Bill Wise and named juanitaite in her honor. For those who missed this talk I can only say I hope you get another chance sometime to hear it.

Following the program we discussed a couple of items of business. We all endorsed a suggestion made by Bob Griffis that it would be a good idea to write up job descriptions for the various committee chairs so that people thinking of volunteering would know what would be expected. We also agreed that these should be published in the Bulletin and posted on our website. Initially Dave

did not assign any tasks, but requested that experienced members voluntarily write up and contribute these descriptions. As far as motivation for any of you have served in the past helping with this might forestall being asked to serve in the same capacity again.

Janet Gordon informed us that the room at PCC that we have been using is scheduled to be remodeled. We may have to use a different room in the same building in April so come prepared to look around. Carolyn Seitz told us that preparations for the Show in December are coming along well.

The meeting was adjourned about 9 pm for conversation and refreshments.

Respectfully submitted by Bob Housley, Secretary

FROM THE EDITOR'S DESK

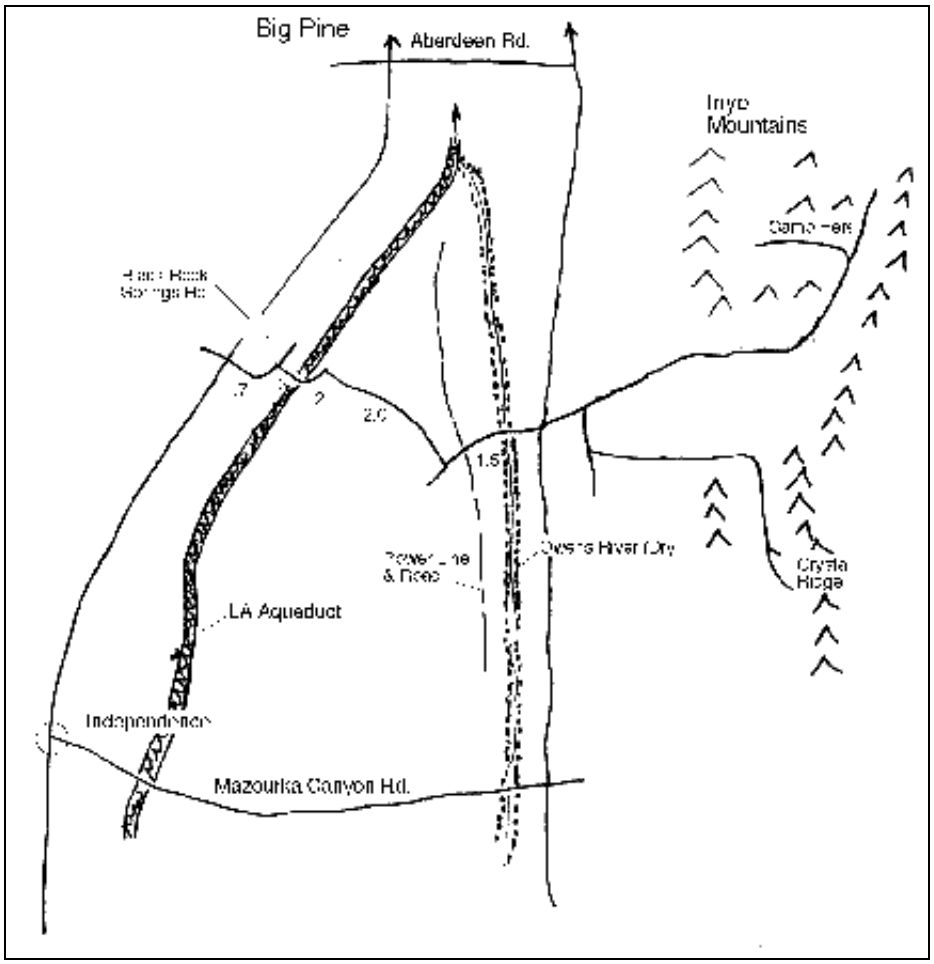
John Sinkankas has recently been elected an Honorary Member of the Society. For those who live in a cave and have not heard of him, here is a very short biography. John's interest in minerals began at the age of 7 when he started collecting in Patterson New Jersey. He is a Graduate Gemologist, of the "Gemological Institute of America", and a Fellow of the "Mineralogical Society of America." Since retiring with the rank of Captain from the Navy he has authored many books, among them the classic "Mineralogy."

Welcome to the Society.

CRYSTAL RIDGE

On April 28/29, I will be returning to one of my favorite collecting spots, the hills just north of Crystal Ridge. This is not an official field trip nor will it be "hosted" by me, however I will be there and you are welcome to join me. I will be there from some time Friday afternoon till Sunday noon or so. To get there, follow the directions on the map included in this bulletin. Independence is about 4 hours from L.A. and the campsite is about another hour from there. Bring your own water and firewood (I expect it will be cold this year), and join the fun. I will bring samples of what you might find to the April meeting.

Jim Schlegel



CALENDAR OF EVENTS

APRIL

March 25 - April 1 The CFMS Spring Earth Sciences Seminar will we held at Soda Springs (ZZYZX), which is 8 miles East of Baker. The workshops will include bead stringing, silversmithing, sculpting, wire-wrap, cabochons and perhaps others. There will also be field trips and speakers. Registration is limited to 60, and the fee is $220.00 per person. For more information call Cal Clason at (661) 589-4189 or Ray Meisenheimer at (805) 642-3115, or visit the CFMS website at www.cfmsinc.org.

March 31 -April 1 The North Orange County Gem and Mineral Society show will be held at the La Habra Clubhouse 200 W. Greenwood, La Habra, Ca. The hours are: Sat 10-5 Sun 10-4. Contact Susan Hansen (562) 865-2040 (sunkaysen@aol.com), or Don Ogden (909) 598-2456 (donogden@aol.com).

7-8 The Mojave Mineralogical Society, Inc. show will be held at the Boron High School - Multipurpose Room - Prospect Street, Boron, Ca. The hours are: Sat 9-6 Sun 9-4. Contact David Eyre (760) 762-6575 or Roy Eyre (760) 762-6555.

7-8 The Puente Hills Gem and Mineral show will be held at Steinmetz Park 1545 S. Stimson Ave. Hacienda Heights, Ca. The hours are:10-5 both days. Contact: Don Warthen, Don@Ofeliawarthen.com

28-29 The Antelope Valley and Palmdale Gem and Mineral Clubs show will be held at the Antelope Valley Fairgrounds, Challenger Memorial Hall, Lancaster, Ca. The hours are: 9-5 both days.

MAY

4-5 The Kern County Mineral Society show will be held at the Kern County Fairgrounds, Bakersfield, Ca. Hours: 10-5 both days. Contact Manuel Fernnnaandez (661) 323-0353

5-6 The Searchers Gem & Mineral Society, Inc. show will be held at the Brookhurst Community Center, 2271 W. Crescent Ave. Anaheim, Ca. The Hours are: Sat. 10-7 Sun. 10 - 4. Contact Connie Van Kampen (714) 993-2827.

19-20 The Yucaipa Valley Gem and Mineral Society show will be held at the Schere Community Center, First and Avenue B, Yucaipa, Ca. Hours: Sat. 10 - 6; Sun. 10 - 5. Contact Richard Crockett (909) 790-3958, or Publicity Linda Nichols (909) 790-1190.