With Knowledge Comes Appreciation

September 13\textsuperscript{th}, 2013 at 7:30 pm

Pasadena City College
Geology Department, E-Building, Room 220
1570 E Colorado Blvd., Pasadena

Program: Exploring Michigan's Historic Copper Country:
Presented by Janet Gordon

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Don’t forget the vote on our revised documents is at this meeting!!

Remember: If you change your email or street address, you must let the MSSC Editor and Treasurer know or we cannot guarantee receipt of future Bulletins
About the Program: Exploring Michigan's Historic Copper Country
Presented by Janet Gordon

Michigan's Upper Peninsula is known to mineral collectors for its native copper specimens, spectacular agates, and the A. E. Seaman Mineral Museum. Among geologists, the area is known for exposures of rocks created during the formation of the 1.1 billion-year-old Mid-Continent Rift, an event that produced the copper deposits. Astute tourists know that the region is one of incredible beauty with scenic lakeshore cliffs and beaches, ample recreation opportunities, National Historical Parks recounting mining history, and pristine Isle Royale National Park lying offshore in Lake Superior. This talk will include an introduction to the geologic history of the Mid-Continent Rift, a review of its copper mining history and unusual native copper deposits, a geology-tourist's eye view of this spectacular area including Isle Royale and the Pictured Rocks National Lakeshore, and a report on the Seaman museum.

Dr. Janet Gordon became interested the Mid-Continent Rift years ago while doing research on rifting-related rocks of a similar age in California. On different occasions she had opportunities to study rift-related rocks on the north shore of Lake Superior in Canada and Minnesota, but never made it to Michigan's Keweenaw Peninsula where the famous copper-bearing basalt are exposed until this summer. She and her picture-taking husband, Paul, just spent a delightful couple of weeks getting to know the region and its rocks.

Janet is a Professor Emeritus from the Pasadena City College geology department where she taught mineralogy, petrology, and a variety of introductory and field trip classes. Her degrees in geology are from Occidental College (BA), California State University (MS), and the University of Southern California (PhD). She has been a member of MSSC since 1973.

From the Editor:
Wow, our 900th meeting has come and gone and in such style! The picnic/meeting was well attended and the venue was beautiful! One of the things present for our enjoyment were several albums of field trip photos and a small group of old club bulletins. While looking at the old bulletins, I saw the no-longer-used motto “With Knowledge Comes Appreciation”. Years ago, this motto really “rang” with both Fred and I as it summarizes why we enjoy the study of minerals. The more you understand about minerals the more you can appreciate them. Therefore, after talking briefly with Ann, I have reinstated this motto on our bulletin. My hope is that by putting this before our members every month, we will all be encouraged to seek knowledge about the minerals we enjoy and gain better appreciation for their variety.

MEANDERINGS FROM THE PRESIDENT: Ann Meister

“And a good time was had by all.” Thank you, thank you all for such a wonderfully successful 900th meeting-picnic-potluck-party! A special THANK YOU from all of us to Bruce and Kathy for the use of their perfect back yard! Also to Angie for providing the celebratory cake with the MSSC logo on it. What a fantastic afternoon. We enjoyed an abundant variety of delicious food and beverages – we have some inspired chefs in our midst! There were swap tables with lots of goodies. And more than 40 attendees, new friends and old, from MSSC, the Gem & Mineral Council, and the Fallbrook Gem and Mineral Society including Mike Evans, a past MSSC President who moved south with his job at the GIA.

But perhaps the most fun was calling the 900th official meeting of the Mineralogical Society of Southern California to order on August 10, 2013. We’ve come a long way in 82 years since the Society’s founding in 1931. For the program, Bruce asked some long-time members to share their memories of the Society with anecdotes from past field trips, shows, and other activities and about some of the people from the Society’s past. I enjoyed relating my early experiences with MSSC which started when I was about 8 years old – a field trip that included my first trip to Darwin, a sand storm, and my first collecting experience on Searles Lake. Then my dad Gus was elected President about a year after joining MSSC. I became President for the first time exactly 25 years after his term in office. Some members brought photograph albums (thank you Annette) and old bulletins from the ‘50’s, ‘60’s (thank myself) and ‘70’s (thank you Linda) which we enjoyed looking at.
and commenting on. All this inspired talk around the tables of good times (and bad) in the past and where the Society is going in the future. I hope everyone enjoyed themselves, I know I did. Thank you all again.

A reminder that we will be voting on the new and improved Bylaws and Operating Procedures at the September meeting. You received them with the August Bulletin along with some explanations. I answered a few of your questions at the picnic. If you need additional information or have more questions, please contact me or one of the other Board members. We will have a brief discussion and answer questions at the meeting before we vote. I’ll see you in September.

MINUTES of the August 10, 2013 Picnic/Meeting

The 900th meeting of the Mineralogical Society of Southern California was held on Saturday, August 10, 2013. The meeting was in conjunction with the society’s annual fall picnic and to commemorate the landmark meeting. It was held at home of Dr. and Mrs. Bruce Carter. President Ann Meister brought the meeting to order at 2:10 p.m.

Regular Business was dispensed with and the 900th Membership Meeting was turned over to Bruce Carter.

Bruce Carter told a story about his introduction to this organization (the Mineralogical Society of Southern California, MSSC) in 1971. As a teacher at PCC (Pasadena City College), he learned about and became involved with the mineral show that PCC put on in the cafeteria. He recalled setting up multiple display cases and tables. The show introduced students to mineral collecting - he brought his students there where they had the opportunity to see aspects of mineralogy they would not have seen otherwise. Through these shows, he met Gus Meister, Bob Peterson, Bill Bessie and others involved in the shows. It was also through the shows that he learned of the history of the society, originating in the 30’s and 40’s. Many students associated with (PCC’s) Dana Club and MSSC went on to become professional mineralogists and geologists who had very nice careers in minerals and natural resources.

Bruce invited others to speak and talk about the society. Ann Meister mentioned that there are old bulleting and some photo albums available for viewing on the back table.

Ann Meister joined the society in 1956; she thinks she may be the longest serving member. Her parents joined in 1954. MSSC has the same issues with officers then as now. Her father became President in 1955 and served the customary 2 years. First recollection of an event was October 1953 or 1954 – a field trip to Darwin and Searle’s Lake. There was a huge sand storm and they sleep in the car. Dinner was full of grit and sand but it was memorable! At times, Ann and her sister would go out find rocks and bring them to their father and ask, “Daddy, what’s this?” And Daddy (Gus Meister) would want to find out and so he found MSSC and became very involved and for many years it became a major part of his life and the family life. Also, Ann recalled, there was a Junior Activity Group, the Thatcher’s were members of that group. Exactly 25 years after her father was President, Ann was elected President of MSSC and first woman president.

Next, Rock Currier recalled that he was introduced to MSSC by Earl Calvert, who was one of the founders back in 1932… “I was asked to come to a meeting at the public library, where the society used to hold its meetings before they went to other venues like Eaton Canyon Nature Center, Pasadena City College, and so on.” He gradually became more and more involved and served in almost every office/position, except Bulletin Editor. He said they took the show from the PCC to the Convention Center; the thought was to generate enough revenue so they wouldn’t have to do cake walks and things like that. “In truth, I think the society is interested in having cake walks and nice gatherings like this. I think they are more enjoyable and give people the chance...
to interact with one another and promote the longevity of the society.” Now the Gem and Mineral Council says they need to make some changes, they’re revising their membership to $1,000 per year/per person. Rock is still associated with Gem and Mineral Council as honorary member having been one of the original members of the Board of Directors, but he’s very involved in running his gem and mineral business.

The society seems to be going along, Rock said. Ann’s father, Gus Meister, was a long, long time member, who went on to become president of the California Federation, president of the American Federation and others. There were a group of young people who were always more active, Bruce Lee, Bob Peterson, Joe Sefkey, Bob Barch and more. Rock says he was introduced to underground collecting.

George Rossman, an instructor of mineralogy at Cal Tech has an academic background in chemistry and physics, not mineralogy. He heard about a guy who wanted zeolites so took him to Rock’s place and the man bought about $2,000 worth of zeolites from him. At that time, Rock introduced George to MSSC. Accompanied by his wife, George had great times on field trips collecting. MSSC became a great source for intellectual inspiration; contacts for getting resources to work on in the lab and just plain having a very good time. George had difficulty getting students at Cal Tech interested in joining the society, they were just too busy. Nonetheless, he has enjoyed the society and has now volunteered to be its current Vice President.

Janet Gordon sent a message with Bruce, a question: Do you remember who the speaker was for the 500th meeting of this organization? It was Clifford Frondel from Harvard. He was involved in the [examination] of the lunar samples, he discovered 48 new types of minerals and has 2 named after him: Cliffordite and Frondelite.

Next up was Fred Elsnau with his recollections of membership in MSSC 3 times and how he was convinced that he would be a part of MSSC. Now, Fred has been a member for quite a while (thanks to Linda!). He was a devoted attendee at the shows and was separated from his cash regularly, but enjoyed it and the people. Fred stated that this is the best group of members ever!.

Patrick Stevens spoke about his Crystal Ridge (Inyo Mountains) trip digging in quartz, using 6’ bar banging it against the 2’ thick vein of quartz. They recovered some crystals about 5” to 6” long with 2-3” around with limited amount of clarity. Mike Evans, Pete, Dave Lemar and others went. Dave was in a decomposed vein and we took out 3” smoky quartz ¾” round. Patrick brought a sample to show. Good collecting experience. Jim Schlegle may have lead the dig or could have been Mike Evans.

Bruce Carter says that there is nothing like a good collecting trip to get you interested in this group and that kind of activity.

Mike Evans went next and told about his experience as past president of MSSC but moved into San Diego County and is busily involved with Fallbrook Gem and Mineral Society. As for MSSC, he became a member in 1984. The Pasadena Show, for its time was one of the top 3 shows in the country! It attracted very important dealers and rock collectors. One name that should be mentioned is [Edwin] Van Amringe, one of the founders of MSSC back in ‘30’s, and, Stanton Hill, too. At one of the last shows, there was a Stanton Hill trophy awarded for the best display to honor him. Those are some important names from those years gone by – it was a lush and important tradition. The fact that the group is still going on is wonderful. MSSC and Fallbrook are like sister clubs. There were great field trips; Bill Moller was also an important member and if he were still around, I’m sure he would want to be here. I’m glad I’m here and a part of it.

Oh, we (the FGMS) have our show the first Sunday in October, the 6th. We close the street in front of our museum and have a great little show. Come on down.

Bruce reminded everyone that MSSC started at Pasadena City College, Van Amringe, who started the Geology Department at PCC and one of his earliest students, H. Stanton Hill who continued on in that tradition. Van Amringe and Stanton Hill were the tie between this group, MSSC, and Pasadena City College. It’s important to understand that history.
Bob Housley said that he became a member in 1985 or so, Fred DeVito was finishing up as president. While he was president he wrote something about local collecting (in the bulletin) almost every month. He was an expert mineralogist focusing on microminerals and was willing to share his knowledge. He was a big influence in Bob’s collecting minerals. Bob gave a brief history of his collecting with Fred, who identified Tungusite. The only other place Tungusite is found is Russia. Fred had a mineral named after him, Devitoite. Fred also collected with Bill Rador, who was our bulletin editor. Bill moved to Texas, continued his interest in minerals and fossils – he spent years there systematically collected fossils in the Glen Rose formation. He identified 30 new species of marine organisms! He’s still active.

Bob told how he thought Fred’s hobby time spent collecting all the minerals he could find in the Santa Monica Mountains was a little silly. A year later, Bob realized he needed more exercise and decided to collect minerals in the Santa Monica Mountains!

Later, Fred joined Bob in searches. They found little cubic crystals of silica, a chalcedony (check Bob’s Mindat article for more information). Editor’s note: That article is in this bulletin. Ultimately, that was what lead to the annual Micromount Conferences - the talks are of general interest.

Mike Evans mentioned that at the California State Mining and Mineral Museum, there is a wall case devoted to Fred DeVito; a Fallbrook member mentioned that Bob Housley has helped many folks identify minerals using his micro mineral equipment. He’s been a godsend to California rockhounds!

Short story from Fred Elsnau: at a MSSC show in the PCC cafeteria late ‘60’s. One of the major museums was setting up their display. In one of their cases was a 10” morganite crystal, absolutely a gem. Dave Wilbur saw it and wanted to show it to someone, so he just picks it up and walks off with it. A few minutes later the curator shows up, looked at the case and started rearranging things to make the display look nice. Next thing, Dave shows up with the morganite crystal and gives it to the surprised curator…

Rock told of this gem necklace confection with a dangling piece of big emeralds, diamonds. The necklace, about $1 million, was sent in a package to his house. Time for the show, he takes the box to the show and unpacks it. Can’t find the little dangling part – missing! Scrambling around and found it! Bruce remembers it that that necklace around the neck of a young woman in a tee-shirt who was trying it on. Annie says that’s when insurance came into the picture. A couple other Dave Wilbur stories were told.

Thanks to Bruce and Cathy Carter for allowing us to meet at their lovely home. Bruce says that these kinds of informal gatherings are great for MSSC. Ann thanked everyone for attending the 900th Membership Meeting of Mineralogical Society of Southern California.

Official 900th Membership Meeting was adjourned at 2:57 p.m. by Ann Meister, President.

Respectfully submitted by Angie Guzman, Secretary. DISCLAIMER: Misspelling of names is purely unintentional and, with my apologies.
July Featured Mineral: **Cinnabar**

**Formula:** HgS  
**Crystal System:** Trigonal  
**Name:** From Persian "zinjifrah"; original meaning lost (dragon's blood?)  
**Polymorph of:** Hypercinnabar, Metacinnabar  
**Trimorphous** with metacinnabar and hypercinnabar.

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**Eleven New Melanophlogite Pseudomorph Occurrences in Southern California**

By Robert Housley

**Introduction.** Since the original description of melanophlogite from the Sicilian sulfur mines (VON LASAULX, 1876) it has remained a rare and enigmatic mineral. Unaltered material is still only known from less than a dozen localities worldwide. Even from the classic localities it is frequently altered to chalcedony or quartz pseudomorphs, with little change in outward appearance, and also frequently contains included material. These characteristics complicated early efforts at analysis and characterization. (Friedel, 1890) as reported in (SKINNER and APPLEMAN, 1963). Several localities are known only from chalcedony pseudomorphs (DUNNING and COOPER, 2002).

A breakthrough in understanding the structure and paragenesis of melanophlogite occurred when (KAMB, 1965) using the x-ray powder diffraction data of Skinner and Appleman recognized that it was isostructural with one of the then known methane hydrate phases. Subsequent single crystal structure analysis (GIES and LIEBAU, 1981) confirmed this insight. Mass spectroscopic identification of the trapped gases, and subsequent successful synthesis efforts (GIES et al., 1982), at 150 bars pressure led then to suggest that it could form under ocean bottom conditions. At about 125 bars the density of atoms in an ideal gas is about equal to the density of gas atoms in the clathrate.

The suggestion of ocean bottom formation was dramatically confirmed (KOHLER et al., 1999) when a sample was dredged up from the Cascadia subduction zone off the Oregon coast.

Until recently melanophlogite was the only known silica clathrate. However, two new ones have recently been discovered in Japan bringing the total now to three (MOMMA et al., 2011).
Before melanophlogite was described a number of occurrences of chalcedony cubes were known, but were reported as “pseudomorphs after fluorite”. Since melanophlogite is rare and not widely known, this still occurs sometimes up to the present, which complicates efforts to know how widespread melanophlogite really is.

In any case it is the purpose of this note to report eleven new occurrences in Southern California. The coordinates and key characteristics of these deposits are listed in Table 1. All but one are in the Santa Monica Mountains. More detailed accounts of each occurrence then follow. Five occurrence in Northern California were earlier described (DUNNING and COOPER, 2002).

### Table 1: Melanophlogite pseudomorph discovery and location information

<table>
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<tr>
<th>Name</th>
<th>Discoverer</th>
<th>Latitude</th>
<th>Longitude</th>
<th>Accuracy</th>
<th>Size</th>
<th>Host Rock</th>
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<tr>
<td>Encino</td>
<td>Murdoch</td>
<td>34.14389</td>
<td>-118.49314</td>
<td>General</td>
<td>8 mm</td>
<td>Sandstone</td>
</tr>
<tr>
<td>Head Higgins Canyon</td>
<td>Murdoch</td>
<td>34.11385</td>
<td>-118.41746</td>
<td>General</td>
<td>6 mm</td>
<td>Limestone</td>
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<tr>
<td>Lewis Road</td>
<td>DeVito</td>
<td>34.13735</td>
<td>-118.74381</td>
<td>Exact</td>
<td>4 mm</td>
<td>Andesitic Breccia</td>
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<tr>
<td>Lost Hills Road</td>
<td>Housley</td>
<td>34.13072</td>
<td>-118.71038</td>
<td>Close</td>
<td>0.1 mm</td>
<td>Septaria Nodules</td>
</tr>
<tr>
<td>Mountain View</td>
<td>Rader</td>
<td>34.15350</td>
<td>-118.68019</td>
<td>Close</td>
<td>1 mm</td>
<td>Shale</td>
</tr>
<tr>
<td>Teal Terrace</td>
<td>Rader</td>
<td>34.02818</td>
<td>-118.79765</td>
<td>Close</td>
<td>0.5 mm</td>
<td>Shale</td>
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<tr>
<td>Ladyface 1</td>
<td>Badgely</td>
<td>34.13382</td>
<td>-118.76415</td>
<td>Exact</td>
<td>3 mm</td>
<td>Scoria</td>
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<td>Ladyface 2</td>
<td>Badgely</td>
<td>34.13842</td>
<td>-118.76789</td>
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<td>Tuff</td>
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<td>Housley</td>
<td>34.12722</td>
<td>-118.78194</td>
<td>Exact</td>
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<td>Volcanic</td>
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<tr>
<td>Lobo Canyon</td>
<td>Badgely</td>
<td>34.12084</td>
<td>-118.80905</td>
<td>Close</td>
<td>1 mm</td>
<td>Volcanic</td>
</tr>
<tr>
<td>Reef Point Drive</td>
<td>Anderson</td>
<td>33.56880</td>
<td>-117.82878</td>
<td>Close</td>
<td>1 mm</td>
<td>Shale</td>
</tr>
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</table>

**Encino.** In 1936 Murdoch (MURDOCH, 1936) described what he thought were chalcedony pseudomorphs after fluorite from 5 locations in Encino, and one 4 miles east near the head of Higgins Canyon. However, he only identified the locations with the letters A through F without any more detailed position information. He identified the host rocks as sediments of the Topanga or Modello Formations. Murdoch also gives some references to earlier reported occurrences of chalcedony after fluorite. A later listing of mineral localities in Los Angeles County, (SHARP, 1959) mentions chalcedony after fluorite, as occurring near the end of Harclare Lane in Encino. The Los Angeles County Museum of Natural History has on display a sample donated in 1965 by Virgil Ketner and listed as coming from Oldham Street in Encino. It appears to be about 12 mm on an edge and might be evidence of the biggest melanophlogite crystal known. Harclare Lane and Oldham Street are close together and probably roughly define the area where Murdoch’s Encino localities were. The area is built up now so no possibility exists to study the material in place any longer.

**Higgins Canyon.** The location near the head of Higgins Canyon above Beverly Hills was mentioned again (NEUERBURG, 1951), but it also is totally developed and offers no chance for study now.

**Lewis Road.** This locality in Agoura was probably discovered in the late 1980s or early 1990s by Fred DeVito and Bill Rader. I first went there in January of 1995. The locality is accessible and easy to reach by following a graded dirt extension of Lewis Road past a gate to a water reservoir, and the following the ridge west for a short distance. The pseudomorphs occur in narrow chalcedony seams in an andesitic breccia unit of the Conejo Volcanics. Many flats of material have been collected here. An outcrop near the brush line north of the ridge has been most productive and still shows pseudomorphs in place. Also just north of a high point on the ridge is a wider vein of marcasite agate in very hard rock. Several samples from here checked by Raman spectroscopy have all proven to be pseudomorphs.

**Lost Hills Road.** This area, near Calabasas, was an old landslide in the Upper Topanga Formation that was excavated and repacked in about 1995. It contained a number of large septaria nodules, rarely less than two feet in diameter. Most contained little besides calcite, pyrite, and gypsum, but a few contained mostly silica minerals in a variety of odd forms. Only a small amount of cubic silica pseudomorph material was saved. The area is completely developed and totally inaccessible now.

**Mountain View.** In this area near Calabasas, pseudomorphs were found by Bill Rader in a single rock, probably from the Modello Formation, exposed along Mountain View Drive just north of its intersection with Mureau Road during construction. Nothing can be seen there now.
Teal Terrace. Pseudomorphs were found by Bill Rader in a single rock, probably from the Monterey Formation, behind Teal Terrace, near Point Dume, during construction. Nothing can be seen there now.

Ladyface 1. I first visited this area on Ladyface Mountain off of Kanan Road, which is composed largely of andesites and basalts of the Conejo Volcanics, with Jason Badgely in 2005. The most direct route there would leave Kanan Road south on a ridge above a graded area just before the first big turn to the right. This is also just before a cut exposing sand and alluvial rocks on the right hand side. The melanophlogite is found in an area at the base of the lower of two big red scoria outcrops that can be seen from a distance. This is about one half mile up in the draw to the left of the ridge. There is what appears to be a basalt dike running vertically along the left side of the scoria. The melanophlogite is found in narrow chalcedony seams in both the basalt and in the red scoria. There is also calcite in the area. More material could be found here, but it will require hard rock breaking.

Ladyface 2. This is a small pit on a grassy slope, sampling a vein in an andesite breccia of the Conejo Volcanics, where Jason was collecting plume and marcasite agate and angel wing chalcedony. The melanophlogite pseudomorphs occur on the chalcedony including some of the angel wing. They are small and a few checked by Raman spectroscopy have been completely altered to chalcedony. Probably more material could be dug up here. This area is just south of a large outcrop on the ridge that shows volcanic bombs in welded tuff.

Ladyface 3. In the Spring of 2009 I parked at the first road on the right after coming over the first hill on Kanan Road, south of the 101 Freeway. I walked over a little crest in the road and down the canyon to a fork. I took the right fork and started up the west bank of a ridge, a route I had taken several times before, all in Conejo Volcanics. Soon I notice that the rock was highly altered and contained much fine grained calcite. Although I had passed here before, this time I dug around a little and when I came to the some chalcedony I noticed sparkly crystals and took a few samples home to check. These all turned out to be nice melanophlogite pseudomorphs. I checked several using Raman spectroscopy. More material could easily be found here.

Lobo Canyon. This area is off of Lobo Canyon Road, and on a brushy slope across the creek, and near some new residential development is also in the Conejo Volcanics. The melanophlogite pseudomorphs are in loose rocks exposed by a small drainage across a gently sloping area. Several checked by Raman spectroscopy have all proven to be pseudomorphs. The crystals are small and are sparsely distributed in narrow seams. I collected some micro zeolites in situ not too far above the area, and Jason found a big quartz geode.

Reef Point. I first collected at Reef Point Drive in Newport Beach in the Spring of 2003. I learned about Even Anderson’s “melanophlogite” find there through Fen Cooper who put me in touch with Evan. I then visited Evan and confirmed the identity and significance of his material and learned the exact location where he had found it. I made 2 or 3 trips to the area. I think on the first trip I only found one piece of chalcedony with the pseudomorphs on the graded section of Reef Point Drive where Evan said it should be. On a second trip I looked along a several block long section of graded hillside north of Reef Point Drive and found about a dozen more pieces with melanophlogite pseudomorphs. Typical examples are shown below.

On these trips I did not see any of the sedimentary rock in place. Evan has written this area up in Mineral News (ANDERSON, 2003). He identifies the host rocks as belonging to the Monterey Formation. In the article he mentions one samples he believes to be unaltered melanophlogite, but that has not yet been confirmed. Although the known collecting spots here are built up and inaccessible, is seems likely that other spots might be found nearby.

Discussion. At first glance it may seem very odd that melanophlogite would be fairly concentrated in this limited geographic area, even though it occurs in a wide variety of rock types. There is however one unifying feature. The Conejo Volcanics, which occur throughout the area, were all erupted onto, or intruded into a thick sequence of marine sediments (DIBBLEE and EHRENSPECK, 1993), (FRITSCHE et al., 1993). Bitumen is widespread in the veins of secondary minerals throughout both Chalcedony after melanophlogite Field of view 700 micrometers and Chalcedony after melanophlogite Field of view 350 micrometers.
the volcanics and the sedimentary rocks. In fact there are active hydrocarbon seeps out of the volcanics in several places.

Acknowledgements. I especially want to thank the people, Bill Rader, Jason Badgely, and Evan Anderson, who have spent the time and effort to show me localities that I was otherwise unaware of. I also want to thank Alyssa Morgan for providing the information concerning the sample in the LA County museum. For the Raman spectroscopy I am fortunate to be able to use the equipment in George Rossman’s laboratory at Caltech under his expert guidance.

References

Editor’s Note: Our thanks to Bob Housley for his generous permission for the use of his article, originally posted in mindat.com at: http://www.mindat.org/article.php/1772/Eleven+New+Melanophlogite+Pseudomorph+Occurrences+in+Southern+California

Ride Share Listing
Can You Provide A Ride?
Would You Like Company On The Drive To Meetings?
We have heard from several of our members that they would like to ride-share with someone to the meetings. We will list the names, general location and either a phone number or an email address of anyone who would like to connect for a ride-share. If you would like to catch a ride or would like company for the trip, let me know at msscbulletin@earthlink.net and I’ll put the information in this section of the bulletin. After that, any final arrangements made are up to you. Also, If you make a connection that works for you, let me know so that I can remove your information from the bulletin.

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<th>Looking for</th>
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<th>Where</th>
<th>Contact at</th>
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<td>A ride</td>
<td>Richard Stambert</td>
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<td>714-524-3577</td>
</tr>
<tr>
<td>A ride</td>
<td>Catherine Govaller</td>
<td>San Bernardino, CA</td>
<td><a href="mailto:cgovaller@msn.com">cgovaller@msn.com</a></td>
</tr>
</tbody>
</table>
MSSC Advertisement Policy:
Mineral-related ads are allowable in the MSSC bulletin. Below is the price per month:

<table>
<thead>
<tr>
<th>Type</th>
<th>Price</th>
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<tbody>
<tr>
<td>Business Card</td>
<td>$5.00</td>
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<tr>
<td>1/3 page</td>
<td>$10.00</td>
</tr>
<tr>
<td>1/2 page</td>
<td>$20.00</td>
</tr>
<tr>
<td>Full Page</td>
<td>$35.00</td>
</tr>
</tbody>
</table>

In addition, any advertiser who purchases 12 months of space in advance will receive a discount of 12 months for the price of 10 months. The copy for the ads should be mailed to the editor at bulletin@mineralsocal.org and the payment should be sent to the MSSC Treasurer 1855 Idlewood Road, Glendale, CA 91202.

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Calendar of Events:

Only local area shows are listed here. Other CFMS Club shows can be found at: http://www.cfmsinc.org/

SEPTEMBER 2013

September 7 - 8: DOWNEY, CA
Delvers Gem & Mineral Society
Women's Club of Downey
9813 Paramount Blvd.
Hours: Sat 9 - 5; Sun 10 - 4

OCTOBER 2013

October 2 - 6: JOSHUA TREE, CA
Hi-Desert Rockhounds of Morongo Valley, Yucca Valley
Sportsman's Club of Joshua Tree
6225 Sunburst Street
Hours: 9 - 6 daily
Website: http://www.jitsportsmansclub.com/gem.html

October 5 - 6: BORON, CA
Mojave Mineralogical Society
Boron Community Building
South End of Boron Avenue
Hours: Sat 9 - 5; Sat, Sun 9 - 4

October 6: FALLBROOK, CA
Fallbrook Gem & Mineral Facility
123 West Alvarado Street
Hours: 10 - 4
Website: www.fgms.org

October 19 - 20: WHITTIER, CA
Whittier Gem & Mineral Society
Whittier Community Center
7630 Washington Blvd (corner of Mar Vista & Washington)
Hours: 10 - 5 daily

NOVEMBER 2013

November 2 - 3: RIDGECREST, CA
Indian Wells Gem & Mineral Society
Desert Empire Fairgrounds
520 West Richmond Road
Hours: 9 - 5 daily
Website: www.indianwells.weebly.com

November 16 - 17: OXNARD, CA
Oxnard Gem & Mineral Society
Oxnard Performing Arts Center
164 Seaspray Way
Hours: Sat. 9 - 5; Sun. 10 - 4
Website: www.oxnardgem.com
2013 MSSC Officers:

<table>
<thead>
<tr>
<th>OFFICERS</th>
<th>President</th>
<th>Ann Meister</th>
<th><a href="mailto:president@mineralsocal.org">president@mineralsocal.org</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice President</td>
<td>George Rossman</td>
<td><a href="mailto:programs@mineralsocal.org">programs@mineralsocal.org</a></td>
<td></td>
</tr>
<tr>
<td>Secretary</td>
<td>Angie Guzman</td>
<td><a href="mailto:secretary@mineralsocal.org">secretary@mineralsocal.org</a></td>
<td></td>
</tr>
<tr>
<td>Treasurer*</td>
<td>Jim Kusely *</td>
<td><a href="mailto:treasurer@mineralsocal.org">treasurer@mineralsocal.org</a></td>
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</tr>
<tr>
<td>CFMS Director</td>
<td>Jo Anna Ritchey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Past Pres.</td>
<td>Geoffrey Caplette</td>
<td></td>
<td></td>
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</tbody>
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DIRECTORS

<table>
<thead>
<tr>
<th></th>
<th>2013-</th>
<th>Geoffrey Caplette</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leslie Ogg</td>
<td>Pat Caplette</td>
<td>Bruce Carter</td>
</tr>
<tr>
<td>Pat Stevens</td>
<td>Bob Housley</td>
<td></td>
</tr>
</tbody>
</table>

COMMITTEE CHAIRS

<table>
<thead>
<tr>
<th></th>
<th>Linda Elsnau</th>
<th><a href="mailto:bulletin@mineralsocal.org">bulletin@mineralsocal.org</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Jim Kusely</td>
<td>Bruce Carter</td>
<td></td>
</tr>
<tr>
<td>Leslie Ogg</td>
<td><a href="mailto:webmaster@mineralsocal.org">webmaster@mineralsocal.org</a></td>
<td></td>
</tr>
<tr>
<td>Linda Elsnau</td>
<td><a href="mailto:bulletin@mineralsocal.org">bulletin@mineralsocal.org</a></td>
<td></td>
</tr>
<tr>
<td>Al Wilkins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Treasurer</td>
<td>Jim Kusely –proviso due to surgery, mid 2013, Ahni Dodge and Laura Davis to assist while Jim convalesces</td>
<td></td>
</tr>
</tbody>
</table>

About the Mineralogical Society of Southern California

Organized in 1931, the Mineralogical Society of Southern California, Inc. is the oldest mineralogical society in the western United States. The MSSC is a member of the California Federation of Mineralogical Societies, and is dedicated to the dissemination of general knowledge of the mineralogical and related earth sciences through the study of mineral specimens. The MSSC is a scientific non-profit organization that actively supports the geology department at Pasadena City College, Pasadena, California. Support is also given to the Los Angeles and San Bernardino County Museums of Natural History. The Bulletin of the Mineralogical Society of Southern California is the official publication of the Mineralogical Society of Southern California, Inc.

The MSSC meetings are usually held the second Friday of each month, January, February and August excepted, at 7:30 p.m. in Building E, Room 220, Pasadena City College, 1570 E Colorado Boulevard, Pasadena, California. The annual Installation Banquet is held in January, and the annual Picnic and Swap Meeting is held in August Due to PCC holidays, meetings may vary. Check the Society website for details.

The Society also sponsors the annual Pacific Micro mount Symposium held at the San Bernardino County Natural History Museum during the last weekend of January.

Annual Membership dues for the MSSC are $20.00 for an individual membership, $30.00 for a family membership. The Society's contact information:

Mineralogical Society of Southern California
1855 Idlewood Rd.,
Glendale, CA 91202-1053
E-mail: treasurer@mineralsocal.org

Web: http://wwwmineralsocal.org The Mineralogical Society of California, Inc.

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DISCLAIMER: The Mineralogical Society of Southern California, Inc. is not responsible, cannot be held responsible or liable for any person's injuries, damages or loss of property at or traveling to or from any general meeting, board meeting, open house, field trip, annual show or any other MSSC event

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Your MSSC Bulletin Is Here!

With Knowledge Comes Appreciation

MSSC Bulletin Editor
3630 Encinal Ave.
Glendale, CA 91214-2415

To: