



Bulletin of the Mineralogical Society of Southern California

Volume 87 Number 8 - August, 2014

The 912th meeting of the Mineralogical Society of Southern California

With Knowledge Comes Appreciation

MSSC Annual Picnic

Starts at Noon on Sunday, August 10, 2014

Where? Bruce & Kathy Carter's House

See Page 2 for Details

No Program this month! It's Picnic Time!!

In this Issue:

<i>TITLE</i>	<i>Page</i>
Annual MSSC Picnic Information....See you all there!	2
List of Upcoming MSSC Events	3
From the Editor: Linda Elsnau	3
Meanderings from the President: Ann Meister	3
Minutes of the July 11, 2014 Meeting	4
Three New Melanophlogite Pseudomorph Localities From Santa Monica Mountains, Southern California By Marek Chorazewicz	6
Ride Share Listing	9
Calendar of Events	10
2014 Officers	11
About MSSC	11

Remember: If you change your email or street address, you must let the MSSC Membership Chairman and the Bulletin Editor know or we cannot guarantee receipt of future Bulletins

It's Picnic Time!

2014 MSSC POT-LUCK / PICNIC / SWAP *CELEBRATING Our Favorite Programs and Speakers*

- When:** Sunday, August 10, 2014
Time: Noon to 5 pm (we'll eat at 1:00pm.)
Where: Home of Bruce and Kathy Carter,
Food: Potluck (see below)
Drinks: Water provided. Bring other beverages as you prefer.
RSVP: **Cheryl Lopez**
Please RSVP by August 7th

THE LOCATION

Street parking is available at Bruce and Kathy's home. They have a beautiful back yard with shade structures and an outdoor kitchen. If it is too hot, then we can easily move into the air conditioned house.

THE POTLUCK

MEAT: Rudy is bringing his outstanding, 5-star BBQ ribs & tri-tip! Pat Stevens is bringing hamburger patties and buns. Also, the gas BBQ grill is available.

SALADS, DESSERTS, OTHER: Leslie is bringing her Hawaiian Shave Ice machine and syrups. Jim and Angie are repeating last year's favorite: specialty and old-time soda pops from Galco's.

Please bring your own special potluck offering to share: a salad (homemade or from the deli), chili, chips and dip, salsa or guacamole, a veggie tray, grapes, fruit salad, a jar of pickles or a can of olives; cookies, pie or other dessert item, or anything edible. Let's see what delicacies turn up this year!

MSSC will supply plates, cups, napkins, knives, forks and spoons and will also supply water and ice. It is suggested you bring any serving utensils your contribution requires. Be sure to mark them and your serving dish with your name or initials so you're sure to get them back.

THE SWAP TABLES

Those of you who are so inclined may bring items to sell or trade that are related to our hobby – minerals, fossils, lapidary, gems/jewelry, geo-science books, and mining memorabilia.

THE PROGRAM: Meander Memory Lane with Your Favorite Programs and Speakers

Do you remember Dr Bruce Carter's program Giant Cannibalistic Andesine Crystals of the San Gabriel Mountains? What a catchy title for an interesting presentation! What is your favorite talk or program and/or speaker, at MSSC or elsewhere. How about Rock Currier on The Bolivian Death Switch? That was hair-raising. Or perhaps you particularly appreciate Paul Adam's or Alfredo Petrov's collecting exploits? or Wayne Leicht's glorious golds? We'll share our memories during Show'n'Tell. In addition, some old *Bulletins*, pictures and other items will be available for your perusal. Bring what you think others will enjoy.

Please RSVP at the email address or phone number listed above so we know how many are coming and how many tables and chairs we need. If you call, there is an answering machine so please CLEARLY IDENTIFY YOURSELF and HOW MANY ARE IN YOUR PARTY.

See ya'll there!

List of Upcoming MSSC Events : Mark your Calender!

Event	Date	Comments / Scheduled Program (if known)
Meeting Dates:	September 12, 2014	Stephen Mulqueen - Discovery of Oil Well Ojai #6 in 1867
	October 10, 2014	Justin Zyzzx - Minerals of Palos Verdes
	November 14, 2014	Dr. Sarah Milkovich - The Curiosity Rover at 1 year
	December 12, 2014	George Rossman - What makes gem of the year the color it is / Why Peridot is green
Annual Banquet	January 15, 2015	Denise Nelson - Giant Amethyst
Board Meeting	September 14, 2014	Bruce Carter's House.....Let him know if you plan to attend

Note: Dates and programs shown above are subject to change. Check your bulletins to confirm final information each month.

From the Editor:

The bulletin is pretty full this month so I'll be very short. A special thanks to Marek Chorazewicz, for his excellent article and pictures. It is members like Marek who help make our bulletin so interesting and informative for everyone else. I eagerly await contributions from you to help continue this wonderful sharing! Also, I promised to include in this issue the photo of the new mineral Kokinosite that was provided by Tony Kamph. I will have to save it for a later bulletin as there just is no space for it this month. Linda Elsnau

MEANDERINGS FROM THE PRESIDENT by Ann Meister

Oh boy, it's PICNIC / POTLUCK / SWAP month!!! Good food and camaraderie: a time to renew friendships with those who don't make it to our regular meetings and meet new members and guests. Our memory lane focus this year is favorite programs and speakers. I think one of my favorite programs was Bill Moller's talk on his Yukon Territory collecting trip. I remember a picture of Bill, Elizabeth and another collector in yellow rain slickers, wet and bedraggled. But they found great minerals! I look forward to seeing all of you at Bruce & Kathy's house on August 10. Details elsewhere in the *Bulletin*. Don't forget to RSVP to membership chairman, Cheryl Lopez. Reminder that Bruce requested some assistance with setup.

For those of you interested in "geology" elsewhere in our solar system, discover what's happening on **Mars** at The Von Kármán lecture at JPL/PCC on August 14 & 15. The lecture is titled: "Curiosity's Second Year: The Epic and Occasionally Bogus Journey to the Foothills of Mt Sharp." Last year's first anniversary was jam packed, so come early to secure a seat. The lecture starts at 7pm at either the von Karman auditorium at JPL on Thursday or the Vosloh Forum at PCC on Friday. For additional information on this lecture and the schedule of upcoming events, see http://www.jpl.nasa.gov/events/lectures_archive.php?year=2014&month=8. (Note: Our MSSC meeting in November will also be on Curiosity's discoveries.) The Von Kármán lecture on September 11 & 12 is about studying soil moisture from space, definitely topical in this drought.

Interesting "**Geology in the News**" in July included the discovery of the collapsed pingo found in Siberia on the Yamal Peninsula in an area known as "The End of the World." A pingo, also known as a hydrolaccolith, is an ice-cored hill, typically conically shaped, formed around a buried lump of ice in regions with frozen ground or permafrost. In this case, the ice has melted and left a oval-shaped hole about 100 ft by 200 ft. The area also contains the largest natural gas reservoir in Russia, so some wonder if that caused the buildup of pressure that forced an ice block to the surface, or alternately, methane gas from the defrosting permafrost tundra. The crater is around 300 ft deep and has an icy lake at the bottom with water cascading down the permafrost wall. The crater rim is 80% ice. In typical "pingo topography," you see an area spotted with round or oval lakes, so this hole will likely fill with water and become a lake. At this time, the scientists don't know when the pingo formed, only that it was discover during a helicopter over flight in July. Pingo hills are usually slow-forming, with growth in the inches per year range. Satellite mapping imagery is being used to discover this pingo's evolution, though it is thought to have formed within the past two years. Google "pingo Yamal Siberia" for articles with lots of interesting pictures and stay tuned for updates.

WOULD YOU LIKE TO SERVE AS AN OFFICER OR DIRECTOR OF MSSC?

It's that time of year when we start searching for new blood for officers and board members. If you are interested and available to serve the Society, please contact Ann Meister at president@mineralsocal.org.

MINUTES of the July 11, 2014 Meeting

The 911th meeting of the Mineralogical Society of Southern California was held on Friday, July 11, 2014, at Pasadena City College, Geology Building. President Ann Meister brought the meeting to order at 7:35pm.

Regular Business:

Welcome to all in attendance at tonight's meeting. President Ann Meister asked for a **motion** to approve the Minutes of the last Membership Meeting as listed in the July Bulletin. *Minutes of June 13, 2014 meeting were approved* by motion from Dee Trent, seconded by Joanna Ritchie and carried by membership vote.

Announcements:

- We have a lot of guests this evening. Thanks for coming. The guests are some of the people who joined with Cathy and Bruce Carter on their recent trip to Greenland. Everyone is from Friends of Griffith Observatory;
- For those who need a printed Bulletin, please see Cheryl Lopez, Membership Chair;
- Bulletin deadline for submissions is July 25, 2014 per Linda Elsna;
- Ann Meister has the parking tags for anyone who needs one. She will bring them next time. Bruce Carter indicated that they are reminders to the college police not write parking violation citations;
- The next Board meeting will be September 14, 2014 at the Carter's residence;
- The annual Picnic and Swap will be August 10, 2014 at the Carter's residence. Check the Bulletin for more information (address, time, etc.) Rudy Lopez will bring meats; still need salads, desserts, etc. Please notify MoRocks and Fallbrook that they are invited;
- Upcoming shows: Valley Springs Pow Wow in October; Victor Valley Gem and Mineral Club show November, American Opal Society show November and Gem Faire (Costa Mesa) August, Napomo show first week in August;
- Steve announced that the Pompeii exhibit at the California Science Center (Los Angeles County Museum) including artifacts is very dramatic. Also, he has a 3 volume set of mineralogy books for sale, if anyone is interested;
- New door prizes: books brought by Linda and Fred Elsna from the Jim and Dawn Minette collection and *carbonized corn* from Witchwell, AZ.;
- Linda Elsna announced that Tony Kampf (Natural History Museum of Los Angeles County, Curator Emeritus) sent her a photo of *Kokinosite*, featured in the last Bulletin. No photo was available at the time of publication. Linda will publish it in the Bulletin's next issue.

Show and Tell:

- Dan Kranitz brought in *Fulgurite* samples from Fort Irwin Road. Fulgurites are formed when a cloud-to-ground lightning bolt penetrates the soil, usually sandy soil. Fulgurite resembles a root system. The pieces Dan brought are very fragile and exhibit a porous or permeable glassy structure.

Program:

The President turned the meeting over to Program Chair, Rudy Lopez. Rudy thanked everyone who has referred a speaker. He reports that we are set through July 2015!

Rudy introduced long-time member Bruce Carter, our presenter this evening. Bruce's presentation was entitled, "Greenland: Minerals under the Northern Lights". [Note: Dr Bruce Carter, Ph.D., a petrologist, taught at Pasadena City College since 1971 until his retirement as Natural Sciences Division Dean in 2005. His long standing membership with Mineralogical Society of Southern California and tenure with PCC have benefited members and students alike.] And tonight, Bruce Carter treats us to, "*Greenland: Minerals under the Northern Lights*".

Bruce and other Friends of Griffith Observatory took this trip primarily to see the Northern Lights in Greenland. There were, however, a variety of other perks to the trip. The group landed in Greenland, via Copenhagen, (about 11 hours from Los Angeles) at an airstrip in southern Greenland that was built by the USA in World War II, Kangerlussuaq Airport. Off in the background distance is a quicksand sea – glacial "fallout", melt water off the glacier that saturates the area; it is unsafe to walk on! The area is growing and there are now hotels and a conference center in the town. [Note: *Greenland's population is approximately 57,000; whereas Kangerlussuaq's population is 512 (as of 2013)*].

There is an area with observation huts where one can view the Northern Lights without much interference. It is cold out there and, it's scenic. The sun rose up about 20° above the horizon at the time of the trip. The meals at the hotel were good...the only thing was, the food was served on slabs of rock! As a geologist, Bruce felt a little disrespectful!

Going up to the ice cap was a great opportunity. The road was about a 30 mile dirt road, lots of melt water, rubble and mud. The ice melts and bulldozes the rubble ahead of it. Before getting to the Russell Glacier, you can see bare rock with a tiny little coating of soil with some vegetation on it. Musk ox was out in force [Note: *Musk ox is an Arctic mammal that emits a musk odor during mating season*]. Mostly, the glacier is rock and ice, rubble, including boulders, and melt water.

The road was built 10 years ago, although it has to be rebuilt every year because of the melt water. Volkswagen opened the road because they had a driving facility on the ice. The story is they would get the vehicles there and drive them up on the ice [Note: *VW was performing car endurance experiments*].

On the glacier, there are crevasse and caves where the melt water flows. It's dangerous because the cap is slippery and constantly moving.

On an excursion, the group went to a little satellite community of 58 people whose houses are built on solid rock. It's a fishing village. They fish and dredge shrimp out of the bay. There are more dogs in each of these communities than there are people. The puppies run free but the mature dogs are kept on chain otherwise they will be shot. Rabies is common and a very real danger to people. The dogs are fed frozen fish parts. However, there are incredibly aggressive ravens who sometimes take the frozen fish away from the dogs.

The group was served a good fish soup in one of the houses. The town has one restroom/shower house for the whole community. There is no running water in the houses, it would freeze anyway. The houses are built on stilts above the ground so there is no foundation to freeze and there is no insulation in the roofs. However, it was a nice place.

Another place they visited was about 50 north of the Arctic Circle, to the radar array. There, aurora borealis, the northern lights, is studied.

Aurora borealis is produced by solar particles brought in by solar wind into our upper atmosphere and by the magnetic force to the north where these high energy particles will knock electrons out of oxygen and nitrogen shells. When the shells are filled again, they emit light: red and green are two different energies from oxygen and blue is from nitrogen.

In spite of not being an astronomer, spending hours at a time, in the Arctic Circle, as winter is coming on and looking up. It was pretty miserable but it was quite an experience and well worth doing a few times. The group was successful in seeing the Northern Lights.

In 1818 was the first discovery of native iron that had been worked by the Inuit, in Northern Greenland. Bruce showed a photo of a meteor iron that had been cold worked to a bone harpoon [Note: *cold worked is forging by stamping and hammering.*] In 1894, after 5 expeditions of searching for the meteorite, Admiral Perry found the 34-ton meteorite, constructed a railroad to the coast and shipped it to New York.

In southwest Greenland, south of Ilulissat, where the group was, in the last 2 years, the discovery of the oldest meteorite impact on Earth as evidenced by nickel, platinum, shocked mineral grains and a variety of things, was discovered. Prior to this recent discovery, large meteor impacts were: (1) 1.8 billion years ago (bya) in Canada, (2) 2 bya impact, a 20 kilometers in diameter impact in South Africa, (3) the 65 million years ago (mya) 10 kilometer impact in southern Mexico and now this one, in Greenland was a 30 kilometer (62 miles wide) impact. The rocks seen on the surface today are from 25 kilometers (approx. 15 miles) below the impact. This crater is 3 billion years old!

Ilulissat has an ice fjord glacier that used to extend down to the ocean at one time. That is until mid to late 1800's it began to catastrophically melt back over the next 100 years, until now. The ice falls into the ocean and floats down the ice fjord and there are great masses of iceberg crowding out near the mouth of the fjord. The ice bergs are heavily fractured, blue in color and they sometimes roll over to show their smooth undersides. Some of the icebergs are up to 1,000 feet high and they move down the fjord about 20 meters a day. They get grounded out where they hit the ocean – out in the moraine, all the rubble that accumulated there.

The basic situation is: there is an ice cap, under the ice cap there is slurry of mud and water, until you get to the edge where streams of water collect, they fall out through fractures and come out the ice caves to the ocean. This area was a valley before it got covered with ice. The glacier scooped out the valley and eroded it well below sea level. But, the glacier was grounded on rubble where it joins the ocean. Great masses break loose until the big ones get trapped in the shallow water. It was told, the Inuit would go to the top of the glacier and lower their hooks into the water that was flowing there, and they'd leave them there for a few days then go back and pull up all the caught halibut that lived on the bottom of the fjord. The Ilulissat fjord generates more ice than any other fjord in the northern hemisphere. The thought is that a giant berg from here was likely one that collided with the Titanic. The group was able to take a flight over the ice fjords and it was quite spectacular.

Also in Greenland, the rocks are prominent. There is little vegetation. The rocks have been squeezed, folded, deformed, recrystallized and through the mill. Most rocks are 3 billion years old, extremely ancient rocks. The geology shows only a strip of Greenland that has actual rock exposed. The rest is under ice. There are offshore basins that have possible potential for hydrocarbons, something people are excited about. There also a variety of mineral deposits, zinc-lead, platinum and others.

The Isua deposit is one of the great iron deposits of the world, it has 70% pure iron, meaning it can be mined directly and shipped. It does not have to be processed on-site. Bruce provided background on the Australian Banded Iron of 2 billion years ago and explained how microbes, through photosynthesis built who we are today thanks to iron. Greenland also has rubies, the Skaergaard Intrusion, a famous geologic body. Kakortokite, a rare volcanic stone, called "Lopar's Blood" and others are also found there.

Bruce went on to explain how water is a most precious mineral. Ice crystals form starting with a speck of dust and droplet of water. As they freeze they form a hexagonal formation that branch out and branch out again and again in their seemingly symmetrical forms. These crystals are growing! A close look, however, reveals that the forms are not totally symmetrical but slightly imperfect. Continued crystallizing built on top of others then weight and pressure compressed the crystals, over and over again creating a few feet of ice. The mass flows or meets up with other ice and results in glaciers or bergs.

An excellent presentation filled with interesting facts and sprinkled with humor. There was a brief Q & A following the presentation. Thanks to Bruce for a great look into and above Greenland...burrrr.

Door Prize: The initial drawing was won by member Rebecca Schiffman, who deferred to another draw, since she had recently won. The 2nd draw was won by Joanne Miyamoto. Congratulations!

Adjournment: There being no further business, the 911th Membership Meeting was adjourned at 8:45 p.m. by President Ann Meister.

Respectfully submitted by Angie Guzman, MSSC Secretary. *Apologies in advance for any misspelled names/Angie.*

Three New Melanophlogite Pseudomorph Localities From Santa Monica Mountains, Southern California

By Marek Chorazewicz, Simi Valley, Southern California

Introduction

The prolific little Southern California transverse range called the Santa Monica Mountains has provided many new mineral localities for researchers and rockhounds alike in the last 70 years. Fifteen zeolite species have been found in the range, including ferrierite-K first described from here. Numerous other minerals were found here in the last century's '70's and '80's by Fred DeVito and Bill Rader on the mountain ridges and in the canyons, including quartz, agate, chalcedony, calcite, aragonite, dolomite, sphalerite, pyrite, gypsum, wulfenite, apatite, zircon, celestine and pseudobrookite. Some of the chalcedony found was showing cubic or rather pseudocubical shapes and crystals. These silica cubes were first reported from Encino by Murdoch in 1936, then later by Sharp, as pseudomorphs after fluorite, although, fluorite have never been found in the Santa Monica Mountains. Since 1936 science became more familiar with the mineral called melanophlogite, the tetragonal/cubical form of a silica clathrate with chemical formula of $46\text{SiO}_2 \cdot 6(\text{N}_2, \text{CO}_2) \cdot (\text{CH}_4, \text{N}_2)$. Thanks to the recent research the cubes are now considered as chalcedony pseudomorphs after melanophlogite instead of fluorite. Similar research suggests that the Romanian blue chalcedony pseudomorphs from Trestia/Kötelesmező (<http://www.mindat.org/loc-108365.html>) are also after melanophlogite, not fluorite. Possibly the same situation applies to Namibian blue lace chalcedony pseudomorphs from Blinkpan/Ysterputs Farm 254 (<http://www.mindat.org/loc-159631.html>) as the crystal forms show very close resemblance to the Romanian and Santa Monica Mountain samples.



Fig 1 Kanan Quarry melanophlogite pseudomorphs with eroded dolomite and bitumen

Last year Dr. Housley of California Institute of Technology published an article describing eleven melanophlogite pseudomorph localities in Southern California. Ten of those localities were found in Santa Monica Mountains. In this article I'd like to add three more occurrences to the list.

Dr. Housley's article inspired me to look closer at the chalcedony I was finding already during my walks in the Agoura Hills and Calabasas area of the central Santa Monica Mountains. I was already on a lookout for zeolites before, now I decided to check out the chalcedony as well. I've visited a few of the described localities, found some pseudomorphs and got hooked. During 2013 and 2014 I've discovered some cubical forms at three previously unreported localities.

Properties

So far no actual melanophlogite has been found in the Santa Monica Mountains. It is always found as chalcedony pseudomorph crystals. Based on Dr. Housley's Raman spectroscopy analysis the chalcedony samples contain varying amounts of mogánite and crystalline quartz, and the ratio in the melanophlogite pseudomorphs is always similar to that in the adjacent chalcedony. That means the melanophlogite crystal structure has fully collapsed into the higher density quartz varieties.

Localities

All the new localities are within one mile of each other around Lady Face Mountain in Agoura Hills, Los Angeles County, California.

Name	Latitude	Longitude	Size	Host Rock
Kanan Quarry Ridge	34.1271926	-118.7717348	1.5 mm	Volcanic Breccia
Kanan Quarry	34.129	-118.77152	1.8 mm	Andesitic Breccia
Cornell Rd	34.1382857	-118.7628337	6.0 mm	Andesite

Table 1. Melanophlogite pseudomorph location information

Kanan Quarry Ridge

I stumbled upon this location in November 2013 on one of my hikes through the Santa Monica Mountains when I picked up a rock with some sparkly quartz. One side of the rock had some druzy quartz points inside a small chalcedony vein, however the opposite site harbored some cubical crystals, which I recognized from the description in the Mindat article.

The host rock is a hydrothermally altered volcanic breccia, ranging in color from white, light grey, and yellow to dark orange. Milky to translucent chalcedony penetrated most of the spaces between rock constituents, in some specimens there is more chalcedony cementing the pieces together than the host rock itself. Complex intergrown mm-size pseudomorph crystals completely cover the chalcedony veins, however there are a few pieces showing the transition from botryoidal chalcedony to cubical crystals. Some veins have thin layers of crystalline calcite overlaying chalcedony.

The largest pseudomorph measured was 1.5 mm. I've found about ten pieces within a 3 meters radius of the original discovery, and I believe there is definitely more laying around.

The pseudomorphs from this location exhibit milky white fluorescence under both the short-wave and long-wave UV lamp.

Kanan Quarry

Several weeks after visiting the ridge above I've focused on the quarry proper below. I thought I could find some similar pieces that weathered out of the ridge and tumbled down the slope. The abandoned Kanan Quarry is world famous as the co-locality for a very rare zeolite – ferrierite-K. Among other minerals the quarry has yielded clinoptilolite, sphalerite, quartz, calcite, dolomite, chalcedony, barite and agate to collectors over the years.

After some rummaging on the dumps I found some pseudomorph specimens, but their morphology is completely different compared to the ones from the ridge. The crystals are light milky gray in color and show complex spiral intergrowth with multiple faces twisted at small angles. This is very similar to Borges Quarry morphology observed by Dunning and Cooper, and similar crystals were observed in Encino samples by Murdoch, who described them as the "platy" type. The underlying chalcedony layer covers a thick vein of banded gray, honey and brown calcite. This calcite fluoresces nicely under the UV light. On top of the pseudomorphs sub-millimeter eroded crystals of tan dolomite can be found occasionally. In places where dolomite eroded completely the chalcedony has greatly increased luster from waxy to almost vitreous. A few cubical crystals are covered by small hemispheres of chalcedony.

Later on I've found here some simple cubical crystals on a gray botryoidal chalcedony. The crystals were scarce and isolated far apart from each other. This was found on a rock on the quarry floor, farther away from the main quarry dumps.

The largest pseudomorph found in the quarry measured 1.8 mm.

Cornell Road

I've found this location in April 2014 while looking for some calcite geodes. In the area higher up the slope and to the East one can find calcite geodes up to 4-5 inches across with rhomboidal calcite crystals up to 1cm, occasionally covered with super sharp and completely clear, single and double-terminated quartz crystals up to 5mm. There is some blue chalcedony with tiny stalactites several mm long in addition to the agate as well.

The location is a red rock outcrop just above Cornell Rd, 250m SE from the Cornell Rd and Cornell Way intersection. I've found several specimens within a 30 meters radius of the outcrop. The area is also associated with ticks, poison oak, but also nice *Dudleya pulverulenta* plants and I've seen a nice night snake too (*Hypsiglena torquata*).

The host rock is a dark gray dense glass-rich slightly brecciated basaltic andesite belonging to Conejo Volcanics. The rock looks heavily eroded on the outside and resembles red scoria, but just a few millimeters under the weathered layer it is dark and hard. Botryoidal chalcedony veins cover the seams in the rock. Some of the chalcedony was covered with a thin layer of dried out tar, very hard to clean even with naphthalene. Some chalcedony is almost glassy clear; it superficially resembles hyalite opal, but the UV fluorescence is dark orange instead of green.

The largest pseudomorph crystal from here measured 6 mm. I've found only one crystal of this size, but also found several in the 4-5mm range. Those large crystals are mostly simple cubes, with one or two very thin extra parallel faces. About half of the larger crystals exhibit beveled edges, which I've identified as the tetrahedral "e" form {012} that was previously reported from the Mount Hamilton location by Dunning and Cooper. Some crystals are also covered by small isolated hemispheres of chalcedony.

The pseudomorphs fluoresce milky white, dark yellow and dark orange under SW and LW UV. Same response was shown by the botryoidal chalcedony as well.

One of the pieces contained globular accretions of reddish black goethite. Under magnification the globule showed as being fully composed out of square faces, so it is likely a goethite pseudomorph after pyrite. The crystals in the aforementioned sample show complex spiral intergrowths like Kanan Quarry crystals but are much larger, up to 2.5 mm.

Acknowledgements

I'd like to thank Dr. Housley for his contagious enthusiasm about the Santa Monica Mountains and continuous inspiration to look for new locations and minerals in the area, and, in addition, for analyzing the samples, and for the effort of verifying locations in person. I'd like to thank the Southern California Chapter of the Friends of Mineralogy for hosting its Fall 2005 Mineralogy *Symposium* on Minerals of the Santa Monica Mountains. That symposium was an eye-opener about the little mountain range in my own backyard. I'd like to thank the editors current and past of the Bulletin of the Mineralogical Society of Southern California for great work in providing the members and non-members alike with great mineralogical content throughout the years and keeping track of the local mineral news. Last but not least the Santa Monica Mountains field collecting leaders from the past, Fred DeVito and Bill Rader, should get the honorable mention for their fieldwork in the 1970's and 1980's.



Fig 2 Kanan Quarry melanophlogite pseudomorphs with eroded dolomite and bitumen



Fig 3 Cornell Road melanophlogite pseudomorphs with goethite pseudomorphs



Fig 4 Cornell Road melanophlogite pseudomorphs with chalcedony



Fig 5 Cornell Road large melanophlogite pseudomorphs with tetrahedral modifications

All Photographs provided by Marek Chorazewicz, Field of View for all photos is 11mm

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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 mssbulletin@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. The Editor

Looking for	Who	Where	Contact at
A ride	Richard Stamberg	North Orange County, near Cal State Fullerton	
A ride	Catherine Govaller	San Bernardino, CA	

WEST COAST GEM & MINERAL SHOW

NOV. 7 - 9, 2014

SANTA ANA, CA

Holiday Inn - Orange County Airport
2726 S. Grand Ave.
(take 55 Fwy exit for Dyer Rd. to S. Grand Ave.)

75 Top Quality Dealers

Minerals ★ Fossils ★ Gemstones ★ Jewelry
Beads ★ Decorator Pieces ★ Meteorites
Lapidary ★ Metaphysical

FREE ADMISSION ★ FREE PARKING ★ WHOLESALE ★ RETAIL

Show Hours: Fri. & Sat. 10 - 6 ★ Sun. 10 - 5

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Fluorite - Anglaize Quarry, OH
Photo by Joe Budd©

MSSC Advertisement Policy:			
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	Business Card	\$5.00	
	1/3 page	\$10.00	
	1/2 page	\$20.00	
	Full Page	\$35.00	
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			

Calendar of Events:

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

AUGUST 2014

August 1 - 3: NIPOMO, CA

Orcutt Mineral Society, Santa Maria
Nipomo High School
525 North Thompson Avenue
Hours: Fri/Sat 10 - 5; Sun 10 - 4
Website: www.omsinc.org

August 16 - 17: TEHACHAPI, CA

Tehachapi Valley Gem & Mineral Society
St. Malachy's Catholic Church
407 West E Street
Hours: Sat 10 - 6; Sun 10 - 5
Website: www.tvgms.org

SEPTEMBER 2014

No Southern California Shows

2014 MSSC Officers:

OFFICERS		
President	Ann Meister	president@mineralsocal.org
Vice President	George Rossman	vicepresident@mineralsocal.org
Secretary	Angie Guzman	secretary@mineralsocal.org
Treasurer	Jim Kusely	treasurer@mineralsocal.org
CFMS Director	Jo Anna Ritchey	
Past President	Geoffrey Caplette	
DIRECTORS		
2013--2014	Bruce Carter	
2013--2014	Bob Housley	
2013--2014	Leslie Ogg	
2014-2015	Pat Caplette	
2014-2015	Pat Stevens	
COMMITTEE CHAIRS		
Bulletin Editor	Linda Elsnaу	bulletin@mineralsocal.org
Hospitality	Laura Davis	
Membership	Cheryl Lopez	membership@mineralsocal.org
Micro Mount Conf. Chairman	Al Wilkins	
Program and Education	Rudy Lopez	programs@mineralsocal.org
Publicity	Linda Elsnaу	bulletin@mineralsocal.org
Webmaster	Leslie Ogg	webmaster@mineralsocal.org

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. Bulletins are delivered by email, there is an additional annual \$20.00 fee if you prefer paper bulletins mailed to your address. The Society's contact information:

Mineralogical Society of Southern California

1855 Idlewood Rd.,

Glendale, CA 91202-1053

E-mail: treasurer@mineralsocal.org

Website: www.mineralsocal.org The Mineralogical Society of California, Inc.

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

To:



With Knowledge Comes Appreciation

It's MSSC Picnic Time!

See You There!