



Bulletin of the Mineralogical Society of Southern California

Volume 88 Number 4 - April, 2015

The 920th meeting of the Mineralogical Society of Southern California

With Knowledge Comes Appreciation

**April 10, 2015 at 7:30 PM
Pasadena City College
Geology Department, E-Building, Room 220
1570 E Colorado Blvd., Pasadena**

***Program: Mineralogy of the Martian Surface: Aqueous Environments during
Mars' First Billion Years: Presented by: Bethany L. Ehlmann***

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

About the Program: Mineralogy of the Martian Surface: Aqueous Environments during Mars' First Billion Years: Presented by Bethany L. Ehlman

The last decade of Mars exploration with orbiters and rovers has revealed that liquid water was relatively widespread during the first billion years of the planet's history with diverse aqueous, potentially habitable environments varying in space and time. Results from select regions observed with the orbiting MRO/CRISM infrared imaging spectrometer will be presented and tied in with recent results from the Opportunity and Curiosity rovers.

Bethany L. Ehlmann is an Assistant Professor, California Institute of Technology; Research Scientist, Jet Propulsion Laboratory; Division of Geological and Planetary Sciences

From the Editor:

Wow, here we are coming into April! I hope everyone is up to speed and ready for the 15th. That's an event that it is always good to have behind us. So far, this has been a good year for MSSC and with the programs Rudy has lined up for the rest of the year, it should continue to be an interesting year.

As usual, I am asking for your help with article ideas for the bulletin. I have received a few good ideas and will use them as space allows. This can sometimes take a while so please don't be upset if what you sent to me doesn't get used right away. At least part of the delay is most likely waiting for me to track down the original authors and photographers for permission to use the articles. Sometimes, I never get permission so the article is not used! With that being said, have you been on any interesting field trips lately? Visited any really interesting museums? How about that special specimen in your collection, we'd love to hear about it. You can email me with any articles, ideas for articles or any other bulletin issue at msscbulletin@earthlink.net or bulletin@mineralsocal.org Linda Elsnau

MEANDERINGS FROM THE PRESIDENT by Ann Meister

As I write this, reservations are being taken by Rudy for Steve Mulqueen's field trip to the California Oil Museum in Santa Paula and the petroleum seeps to the north on highway 150. I hope the excursion had good weather and many attendees. A big Thank You to Rudy for taking on the additional responsibility of Field Trip Chairman. And thank you also for the delicious home-made strawberry, raspberry and apple pies at the February meeting!

At the MSSC Board meeting on March 1, we set the date of August 9 for the **Annual MSSC Picnic** at the home of Bruce and Kathy Carter. Details will be published in a future *Bulletin*. Rudy also announced January 9, 2016 for the **Annual MSSC INSTALLATION Banquet** at Coco's Oak Tree Room in Arcadia. Note the emphasis on installation – that means installing officers – and wouldn't it be extraordinary to have some NEW officers to install? We only need some volunteers. If you are hesitant to volunteer for an office, there are three Director positions that will be up for a 2-year term (2017-2018) that would allow you to get your feet wet, so to speak. Some of the current Directors may run for another term, but if not, this office is a good beginning. In addition, all MSSC members are always welcome to attend the quarterly Board meetings. The next one is June 7th at the home of Bruce Carter. In addition, to help us all out, we on the Board are creating a "how-to..." for each job since the Bylaws and Operating Rules only list what to do, not how to do it. With that, it will be easier to step into a job. At some time in the past, the Society had all this in a notebook, though that was in the pre-electronic age. If anyone still has a copy of the "original," I would love to borrow it.

"New" in our backyard (though it actually opened in January 2014) – the **UCLA Meteorite Gallery**. (See more at <http://meteorites.ucla.edu/>) According to the website, the collection is the largest on the West Coast, the fifth largest collection of meteorites in the US and the second largest housed at a university. It contains over 2400 samples from about 1500 different meteorites. About 100 of these are on exhibit in the Gallery which is open weekdays from 9 am to 4 pm in room 3697 in the Geology Building. If you are interested in a Field Trip to the Meteorite Gallery, let Rudy Lopez know. With special arrangements, we can go there on a Sunday. Did you

know that the study of meteorites and the processes that formed them is called Cosmo chemistry? Some of the high temperature/high pressure mineral samples are only found in meteorites.

Minerals in the news: You've seen the headlines, "Scientists working to make solar power cheaper and more efficient;" but this one caught my eye: "*Researchers find new method to make thinner perovskite films for solar cells.*" Perovskite (CaTiO_3) is a "black ugly" (also dark brown, red-brown, or shades of yellow) metallic-looking orthorhombic crystal discovered in 1839 in Russia. What does that have to do with solar cells? Seems that the synthetic can be created in a room-temperature solvent bath that allows the crystals to form on virtually any substrate with accurate control over thickness (as thin as 20 nanometers) across areas of several centimeters square and without pinholes. Other methods require a blast of heat which prevents using flexible plastic substrates which are useful for window photovoltaics. Perovskite films are very good light absorbers, semi-transparent, can be made in different colors, and now have more than 20% efficiency (percentage of sunlight converted to electricity). They are cheaper to make than silicon wafers. Standard silicon cells have around 25% efficiency. (see <http://phys.org/news/2015-03-method-perovskite-solar-cells.html>) This research is being done at Padture Lab, Brown University.



irocks.com photo

Perovskite from the original locality, Zlatoust, Chelyabinsk Oblast', Southern Urals, Urals Region, Russia. The crystal is 3.6 x 3.1 x 2 cm in size. Perovskite is also found in California in the New Idria District, San Benito County

MINUTES of March 13, 2015 General Meeting

The **919th** meeting of the Mineralogical Society of Southern California (MSSC) was held Friday, March 13, 2015 at Pasadena City College, Geology Department. President Ann Meister brought the meeting to order at 7:30 p.m.

Business

Welcome guests: Michelle from Monrovia Rock Hounds and Tessy Smith, Angie Guzman's sister visiting from Muncie, Indiana. Everyone invited to stay for refreshments which will be served following the meeting.

Ann asked if there were any corrections or additions to the Minutes of the February 20, 2015 Membership Meeting as published in the March 2015 Bulletin. Hearing none, a motion was made by Rudy Lopez and seconded by JoAnna Ritchie to approve the minutes. The vote was taken and unanimously carried in favor to approve the Minutes as recorded.

Announcements

Ann announced the deadline for articles and other submissions for the Bulletin are set for March 23, 2015

Dues were late 1/31/15. Please see Cheryl Lopez (Membership Chair) if you need to submit your dues.

Field Trip Coordinator, Rudy Lopez, prepared a handout of other clubs/organizations' field trips for 2015. If you're interested in any of these trips, please let him know. Rudy will also do another follow up with Steve Mulqueen about the Oil Museum and seeps field trip. The Blue Bell Mine is a possible field trip to be included in the Pacific Micromount Conference event. If there are other placed to go for a field trip, please contact him by e-mail.

Ann announced that at the recent Board Meeting the following events were scheduled: (1) the annual Picnic will be on August 9, 2015 at the Carter's residence. Further details will be forthcoming. Monrovia Rock Hounds are invited to attend; (2) the annual Installation Banquet will be held January 9, 2016 at Coco's. Please mark your calendar!

Other Announcements

Pasadena Lapidary show is Saturday, 3/14 from 10 a.m. - 6 p.m. and Sunday, 3/15 from 10 a.m.–5 p.m. at the Masonic Hall on Huntington Drive in San Marino. Admission is free, parking is at a premium.

Sierra Madre Wisteria Festival will be held March 15, 2015.

Fallbrook club is having their “Rough, Cut and Carved” auction and sale of rough mineral material for lapidary and faceting projects, etc. The event will be March 21, 2015 starting with a silent auction beginning at 1 p.m.

The 66th annual South Bay Lapidary and Mineral show, “Nature’s Treasures”, will be held March 28 and 29, 2015 at the Torrance Recreational Center located at 3341 Torrance Blvd., Torrance, CA. Admission and parking are free. This is a really good show with lots of exhibits and dealers both in minerals and lapidary.

13th Annual Sinkankis Symposium will be held in Carlsbad, CA on April 18 2015. The registration is \$105.00 and seating is limited. The featured gem is opal. Dr. George Rossman, CalTech Professor of Mineralogy and MSSC Vice President, will speak with Dr. Eloise Gaillou of the L A County Natural History Museum on the topic: *Color in Opal*. Check on-line for further details at www.sinkankassymposium.net.

Show and Tell

Tomorrow is Pi day, 3.1415. In honor of Pi day, Ann printed some fun math problems about Pi and the Mars rover, which has been operational for 11 years! For example, Opportunity has already reached the driving record of 39 kilometers and is approaching a marathon distance of 42.95 kilometers. When it reaches the marathon distance, how many times will its 3.25 cm (diameter) wheels have rotated? WOW! This is recommended for 4th, 5th graders!

Rudy says the Rover spotted weird rocks on Mars. It’s shuffling along and showing signs of advanced age, memory loss and it has an arthritic arm. It has the same problems we do, but, they’ll slow it down, fix the arm, boost the memory and it’ll go on. He printed out flyers and made them available for anyone who wants to take one. You can also check on-line for more information about opportunity and Pi. And, in honor of Pi day, Rudy baked three pies for our refreshment segment, Yum!

Editor Linda Elsnau confirmed that the deadline for the Bulletin is March 23, 2015.

Angie Guzman shared that she, Rudy, Cheryl and Tessy met up with Keith Krzywiec from West Covina Fossil Paleontology and experienced fossil hunting! It was fun finding sardine scale fossils and a complete sardine fossil in the San Jose Hills, Puente Formation slate accessible by the side of the road!

Program

Ann turned the meeting over to Program Chair, Rudy Lopez. Rudy announced that our information with the Federation is still incorrect and wanted to know if anyone knew the correct contact number or e-mail for Mr. Dave. Rudy is continuing to network for speakers. He was contacted by Chuck Hauser who wants to give us a presentation. Rudy is flexible with his presentation schedule and can re-arrange if needed. We have speakers/presenters through March of 2016. He is looking for information on the La Brea Tar Pits and for Wayne and Dona Leicht, experts in gold for collecting. MSSC is well liked, people want to present to us.

Rudy introduced this evening’s presenter, Denise Nelson, who is back with us again. Tonight we are going to look at museums in Europe.

Denise began her presentation *European Museum Collections*. She took us on a travel journey to Vienna, Austria (where she grew up) and Germany to “see” collections in Trier, Erbach Im Odenwald (Black Forest), Burg Eltz, Munich and Freiberg.

In Vienna, the Habsburg Empire, the Kunsthistorische is the Natural History Museum, Art History Museum and the Treasury. Built in 1891 it houses major works of art by Raphael, Vermeer, Rembrandt and Rubens, to name a few. It also contains Egyptian and Near Eastern fascinating treasures.

One such attraction is the little gem and jewel flower bouquet especially crafted for Empress Maria Theresia which she gave to her future husband.

The portraits in the museum show jewels and gems worn by the royals such as stars fashioned for hair adornment made from diamonds.

The Leopold Museum is a more modern art museum. On exhibit at the Leopold Art Museum are Art Nouveau items from the early 1900's. There are pieces made with enamel on gold, quality carnelian carvings, pearls and enamel on gold with carnelian. These were crafted by local artisans and, even Tiffany's was influenced by this movement. In the Viennese workshops, the trend was more arts and crafts type: forged metal works with art deco geometric patterns using jasper and agate. This period was 1910 to the 1930's

The Dorotheum ("Aunt Dorothy"), est 1707, is the world's oldest auction house, a pawn shop still operational today. There one will find collections of Empress Elisabeth of Austria (Sisi) art: horses, coral carved crosses, much of this art work are of carved faces and metal work (forging).

Denise went on to explain relative recent finds: 1992 in an old underground train station, up on a rafter was a black beaded necklace having a crescent moon that dates back to the 1st to the 4th century, Roman. And, in 1879 a Roman brooch was found in the Sigmund Freud Jewish district. The brooch dates back to 150 A.D!

The Roman settlement was called *Vindobona*, a Celtic area. The museum exhibits a reflection of the art influence during that time. The impressive double eagle coat of arms dates from 1465 to 1925!

Our first stop in Germany is Trier (Treves) a large city that lies on the Moselle River. The famous Black Gate to the regional Roman Empire city is so known due to the discoloration of the stone used in the city gates. Here is where a Roman ceiling fell directly on its floor and each was preserved for many years. When discovered, the jewels shown on the fresco reveal lapis, pearls and others. Also at the museum are interesting ivory carving collections and a carved amber collection.

Erbach Im Odenwald is a treasure trove Ivory museum containing exquisite ivory carvings. These ivory carvings have unbelievable detail portraying hunt scenes and Spanish dancers. Included in the collection is a spectacular ivory carved enameled, jeweled gold and silver statuette of St. George and the Dragon. Incredible, to say the least!

Burg Eltz is a private collection museum located on the Moselle River. This is Duke Karl's private collection, housed in a castle at the bottom of a valley. There is an Armory and a Treasury here. The museum has paintings showing the pieces of crafted and carved agate on display. This situation makes the items all the more interesting and valuable. There are many cameo pieces of jewelry. There are many intricate carvings of beakers and the "mood" ring with interchangeable face parts.

In Munich, the Residenz is where Bavarian kings lived. The Ornate Chapel's walls and floors are scagliola, a faux marble. The ceiling is lapis and gold while the windows are stained glass. Relics, among other valuable items, are kept in the chapel.

The Treasury here displays the oldest (1370) British crown. At the time, an English king was married to a Bavarian and that's why the crown is at the Treasury. It is an exquisite and beautiful creation having light blue India sapphires, pearls, diamonds and precious metals. Other items in the collection are carved coral, jade, ivory and coral and ivory together.

The Treasury masterpiece is made from gemstones and jewels. It was made to contain a relic of St George, a gift from Archbishop Ernst in 1586. The depiction is of St. George on his horse. This piece is spectacular, there are agate, opal, pearl, diamond, ruby, emerald gems and jewels. There is a beautiful crystal sword and upon opening the movable boxwood visor, the detailed work inside shows the likeness of Duke Wilhem V, brother of the Archbishop. The work is intricate, masterful and exquisite.

Denise continued on to Freiberg Mineral Museum that has the largest collection of minerals in the world. There are over 3,500 minerals, gems and meteorites housed in a 500 year old castle – it even has a moat! There are several floors with each floor representing a different continent. This museum is in the former East German sector and is now accessible to all. Namibia was a German colony and there are huge amounts of mineral specimens from there. There are so many minerals housed, there are too many to list here.

In conclusion, Denise touched on some ancient jewelry craft areas. In England (York), the Middleham Jewel (North Yorkshire) is an excellent example of medieval craftsmanship. It is a diamond shaped pendant with a large sapphire and has intricate detail engraving of the Holy Trinity on the front and inscriptions of women's issues on the back. This may have been used as an amulet. Moving on, the ancient Romans used jet (lignite), a black mineral for beads and arm bands. In fact, jet was used as hair curlers by the women! They crafted other jewelry, as well. Finally, the Vikings used bone to make combs, they used gold as rewards, crafted clasps for their clothing and used amber beads.

What a wealth of treasures! "May you find treasures wherever you go!" A special thanks to Denise for this fabulous presentation.

Drawing Leslie Ogg won the drawing. Congrats, Leslie!

Adjournment: There being no other business, the meeting was adjourned at 8:55 p.m.

Refreshments were served after the meeting.

Respectfully submitted by Angie Guzman, MSSC Secretary

Secretary's note: If you would like to experience these wonderful informative programs for yourself with full details, we invite you to attend Mineralogical Society of Southern California meetings.

List of Upcoming MSSC Events : Mark your Calender!

Event	Date	Comments / Scheduled Program (if known)
Meeting Dates:	May 15, 2015	Gabriel Masosson: African Opals, Welo Opals from Ethiopia NOTE, this meeting date has been changed to avoid graduation events at PCC
	June 12, 2015	Justin Zzyzx: Palos Verdes, Barite, Mines and History
	July 10, 2015	Forestry Service: Monument Program
AnnuaPicnic	August 9, 2015	At Bruce & Kathy Carter's home
Board Meeting	June 7, 2015	Board Meeting at Bruce Carter's house
Annual Banquet	January 9, 2016	At The Oak Tree Room, CoCo's Restaurant, Arcadia

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

Minutes of the MSSC BOARD MEETING MINUTES of March 1, 2015

1. Call To Order: President Ann Meister called the Board meeting to order at 1:08p.m. Board roll call: Ann Meister, George Rossman, Jim Kusely, Angie Guzman, Bruce Carter, Jo Anna Ritchey, Geoffrey Caplette, Pat Caplette, Leslie Ogg, Pat Stevens, Linda Elsnau, Rudy Lopez, Al Wilkins were present. Excused were Cheryl Lopez and Bob Housley. Thank you to Bruce and Kathy Carter for hosting the meeting.

2. Minutes:

There was a **MOTION** from the floor by George Rossman and seconded by Bruce Carter to approve the Board Meeting Minutes of November 16, 2014 as published in the March 2015 Bulletin. The motion was voted on and passed unanimously.

3. Old Business

3.1 President's Report and associated questions: (a) According to Board Meeting Minutes, we need to adhere to procedure regarding fiscal issues. Any financial issues are to be acted on by motion, vote and included in the Bulletin. We also need a real budget. Ann made a suggested budget spreadsheet and separate accounting for Pacific Micromount Conference. Ann can furnish copies of spreadsheet and budget via e-mail. Discussion regarding initials to use for Pacific Micromount Conference: PMC Vs PMMC; (b) Each board member to prepare a Policy and Procedure Manual, a "how to" for your position to include retention manual; (c) Ron Smart is selling his collection. Jim will do follow up to find out more; (d) Rudy will follow up with Steve Mulqueen on oil seeps field trip; (e) Angie asked if Ann had her father's old manuals. Ann will check.

3.2 Treasurer's Report and associated questions: (a) Jim Kusely passed around and discussed MSSC's financial reports and transactions from January 1, 2015 to today; (b) Mineral collections for sale; (c) Merrill

Lynch report as of End of the Year (2014) shows balance of \$22,439; (d) Al would like to see PMC sales, silent auction, etc. broken down on the financials. Discussion regarding problem with PMC money handling, return checks (dues, banquet) and other matters. Regarding return checks, Pat Stevens advised Jim to contact Merrill Lynch to only deposit 1x, no redeposit and waive fees.

3.3 Federation Director report: Jo Anna Ritchey (a) announced this year's show will be in Lodi, CA at the new Conference Center mid-June 2015. A question arose about how Jo Anna is reimbursed for the conference. After considerable Board discussion the following **MOTION** was made by Pat Stevens and seconded by Bruce Carter: Mineralogical Society of Southern California is to reimburse Federation Director for agreed percent of the expenses for Director's meeting and banquet to include mileage, accommodations, incidental expenses, entrance fees and other reasonable related conference expenses. The motion was seconded by Bruce Carter. The vote was called and was approved with none opposed; (b) If the Board has any questions we want answered by the Federation we can present them to Jo Anna before the conference.

3.4 Membership Chair report: Cheryl Lopez was excused so her report was presented by Rudy Lopez: (a) We have 73 members in 2015 and had 85 in 2014; (b) Cheryl's question is: Since scan/E-mail is legal why can't we send the roster over e-mail like we do with the Bulletin? Jim stated that the roster *will* be mailed per By Laws and Operating Rules. Ann says we send snail mail to protect our members' privacy. Further Board discussion ensued. Ann said to table this discussion until the June 2015 meeting in order to research old notes and Minutes to be sure; (c) Linda mentioned she sent an e-mail with a membership form (copy to Cheryl and Ann) to all the members that did not renew this year and told them she sent the March Bulletin but could not send them theirs because they did not renew. If they have renewed and feel the records are incorrect, they should contact Cheryl. (d) George Rossman asked why the membership decreased: younger, any under 40 years old, any PCC or CalTech students? This is an item of concern! Bruce added there are no PCC students because there is no faculty involved with MSSC. Board discussion continued regarding recruitment for members including co-club field trips: Oceanview, Trona and PMC, as examples.

3.5 Programs: Chair, Rudy Lopez reported that he (a) contacted 6 speakers so we're good through the end of the year, and (b) needs help getting in touch with Dona Leicht, Gold for Collectors book author for banquet presentation; (b) the banquet will be 2nd week in January 2016 at Coco's; (c) Forest Service may give presentation about the Monument; (d) Keith does fossil field trips; (e) Rudy's sister involved with the Boy Scouts; (f) need help with contact for La Brea Tar Pits presentation (George may be able to help); (g) out of area speakers may be covered in budget; (h) can move speakers back and forth if necessary. Discussion regarding speakers and field trips followed Rudy's report.

3.6 Bulletin Editor: Linda Elsnau reports (a) cost of printing has increased slightly but only printed 15 copies x 14 pages and we paid postage for 10 we mailed; (b) Followed up on the logo with Pat LaRue – done!; (c) Rudy mentioned brochures are color copies at \$0.70/side and he has 40 in stock. Cheaper to buy the ink rather than have Kinko's do the copies.

3.7 Webmaster report: Leslie Ogg reports (a) 22 "Likes" on Facebook, 1500-1600 unique visitors and 10,000-11,000 general visits. Jim mentioned the website renewal is the 25th of March and it increased by \$6 to \$171 per year. Ann states Bill Besse is the official owner of the website but she is trying to transfer it over.

3.8 PMC Chair report: Al Wilkins reports (a) the power outage lasted 42 minutes at the conference; (b) overall the talks were really good; (c) confusion as to speaker honorarium for speaker Paul Adams. Bob Housley rule out of town honorarium \$250 whereas locals is \$200. Paul Adams was excellent and his sales table donations are gracious. So Al paid an extra \$50 out of pocket. **MOTION** by Angie Guzman and seconded by Jo Anna Ritchey to reimburse Al Wilkins \$50 for his out of pocket expense paid to Paul Adams. Vote called and passed with no one opposing; (d) Al proposes to get rid of the distinction in honorariums and pay speakers equally. **MOTION** by Ann Meister and seconded by Pat Stevens to pay \$250 for all Pacific Micromount Conference speakers for the 3 main invited speakers (1 on Friday and 2 on Saturday), not to include contributed talk speakers, until further notice. Vote called and passed with no one opposing.

Board discussion regarding PMC issues: (a) microscopes (38) for attendees (61); (b) need for a pre-conference committee to create an advance plan for the conference (i.e., table layout, fire marshal requirements, etc.); tables and chairs. Ann wants to set up the pre-conference committee meeting in September. Al wants to include more contributed talks in the Friday night segment; (c) Al will look into the fire regulations for the museum, conference layout, power strips and check San Bernardino Valley College for possible venue; (d) a look at how the conference makes money and what we can do to make it more profitable for MSSC; (e) general items discussed included laptop projector, auctioneer (Tim Rose is great!) and the cash box procedures.

NEW BUSINESS

4.1 May 2015 Membership meeting: Change from May 8 to May 15, 2015 because of the PCC graduation.

4.2 Planning for August 2015 Picnic: Bruce Carter agreed to host the picnic on August 9, 2015. Thank you!

4.3 Activity proposals: None at this time. Jo Anna Ritchey mentioned that Janie (MoRocks) has a museum in her basement (it's labeled) and she is entrusted to award badges to cub scouts. Jim Kusley asked about the PCC scholarship and wanted to know when it is awarded.

Next Meeting: June 7, 2015 at Bruce's house, 1pm.

Adjournment: The meeting was adjourned at 3:50pm

Note: Action Items

- PMC pre-conference committee meeting
- Policy and Procedure booklets
- Al Wilkens check on fire regulations and will report to Ann by e-mail
- Roster: E-mail or snail mail?
- Who can we get to be in charge of Field Trips?....Rudy Lopez will take it on! Thanks

Respectfully submitted, Angie Guzman, Secretary

From our Program Chair:

I have completed my first year as MSSC Programs & Education Coordinator. It's been fun and interesting finding speakers. We have had great speakers and topics and I try to have a variety of presentations. Our club members are very knowledgeable of minerals and have contributed and given great presentations. I will continue to look for interesting topics and speakers. If anyone wants to give a presentation or knows of someone to present, please contact me.

I am very grateful for all the help I have received from our club members, which made my job a lot easier.

At the present time I do have December 2015 open and I am currently working on 2016. Again, I really want to thank everyone for their help and support.

Rudy Lopez: MSSC Programs & Education Coordinator

From our new Field Trip Chair: Rudy Lopez:

We have a chance to team up with other local clubs and go on some enjoyable field trips.

Below is a list of Field Trips for 2015 for some area clubs. If you want to participate in some of these trips please let me know at programs@mineralsocal.org and I will contact the host clubs and make arrangements.

We do have MSSC members that have already presented ideas for field trips and I am looking into them. Also, if anyone knows of other locations we could go to, please let me know and I will see if it can be set up.

2015 MULTI-CLUB FIELD TRIP SCHEDULE Expanded and current information for these collecting opportunities will be published in the various newsletters for the particular month. As always, you should contact the field trip leader ahead of time because: 1). Sometimes field trips are canceled or changed for various

reasons including inclement weather or areas being closed. And, 2). If we don't know you are coming we won't wait for you and you may not find out the planned camp site was moved until too late.

APR 24-26: Kramer Junction - Collecting dendritic agates, jasper, bloodstone, white opal, petrified bog, twigs and grasses and opalite, mineral collecting at the Borax Mine. Optional Petroglyph viewing.

MAY 9-10: Primm, NV - Magma Chamber minerals, pyrites, visit to the Copper World Mine.

JUNE 20: Tourmaline Dig - Pala area. Mine location to be determined.

JULY 18: Palos Verdes -: Glaucophane, barite and agate minerals.

AUG 2: Los Olivos to collect Soap Stone and Serpentine, the California State Rock.

SEPT 19-20: Greenhorn Mountains - Kernville Rose Quartz, Epidote, Garnet

OCT 10-11: Searles Lake Show & Field Trips: Pink halite crystals & borax minerals.

NOV 7-8: Whittier Claim Area - Barstow for honey onyx, agate, jasper, palm root.

NOV 27-29: Thanksgiving Trip - Owens Valley or Afton Canyon.

DEC 12: Salton Sea - Yuha Fossil Beds, Tour Geothermal Power Plant, Mud Volcano Field.

Jan 24-25: QUARTZSITE ARIZONA

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. 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	

Calendar of Upcoming CFMS Events:

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

APRIL 2015

April 18 - 19: THOUSAND OAKS, CA

Conejo Gem & Mineral Club
Borchard Park Community Center
190 Reino Road at Borchard Road
Hours: 10 - 5 daily
Website: www.cgamc.org

April 10 - 12: VISTA, CA

Vista Gem & Mineral Society
Antique Gas & Steam Engine Museum
2040 North Santa Fe Avenue
Hours: 9 - 5 daily
Website: www.vistarocks.org

April 25 - 26: LANCASTER, CA

Antelope Valley Gem & Mineral Society
Lancaster High School
44701 - 32nd Street West
Hours: 10 - 5 daily
Website: www.avgem.weebly.com

MAY 2015

May 1 - 3: LA HABRA, CA

North Orange County Gem & Mineral Society
La Habra Community Center
101 W. La Habra Blvd.
Hours: Fri 4 - 8; Sat & Sun 10 - 5
Website: www.nocgms.com

May 2 - 3: ANAHEIM, CA

Searchers Gem & Mineral Society
Brookhurst Community Center
2271 W. Crescent Avenue
Hours: Sat 10 - 5; Sun 10 - 4
Website: www.searchersrocks.org

May 9 - 10: ESCONDIDO, CA

Palomar Gem & Mineral Club
California Center for the Arts
340 N. Escondido Blvd.
Hours: Sat 10 - 5; Sun 10 - 4
Website: www.palomargem.org

May 2 - 3: YUCAIPA, CA

Yucaipa Valley Gem & Mineral Society
New Location:
Adams St. & Yucaipa Blvd. - Tent in street
Hours: Sat 11 - 7, Sun. 12 - 4
Website: www.yvgms.org

WEST COAST ~ SPRING GEM & MINERAL SHOW

MAY 15 - 17, 2015

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*Cobaltian Calcite- Morocco
Photo by Joe Budd©*

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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, except February and August, 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.,

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E-mail: treasurer@mineralsocal.org

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

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3630 Encinal Ave.
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To:



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