



Bulletin of the Mineralogical Society of Southern California

Volume 90 Number 9 - September, 2017

The 948th meeting of the Mineralogical Society of Southern California

With Knowledge Comes Appreciation

September 8th, 2017 at 7:30 P.M.

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

Program: A Visit to the Arkansas Quartz Mines Presented by George Rossman

In this Issue:

<i>TITLE</i>	<i>Page</i>
Program: A Visit to the Arkansas Quartz Mines Presented by George Rossman	2
From the Editor: Linda Elsnau	2
Meanderings from the President: Ann Meister	3
Minutes of the August 6th, 2017 Picnic/ Meeting	4
List of Upcoming MSSC Events	6
Picnic Report: Rudy Lopez	6
September Featured Mineral: Erytherite	8
Ride Share Listing	9
Calendar of Events	10
2017 Officers	11
About MSSC	11

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: A Visit to the Arkansas Quartz Mines

George R. Rossman: California Institute of Technology

The quartz crystal mines in the Ouachita Mountains of Arkansas are among the most productive in the world. For many years, these deposits have provided quartz for optical and electronic technologies as well as crystals for collectors and for jewelry.

Last August, the owner of the mines invited George to visit the mines, to see the specimens collected for displays in major museums, and to collect samples. There, high-grade, clear crystals are mined in steeply dipping fractures in sandstones.

We will hear of some of the history and geology of these important mines and visit the workshop where crystals are processed after mining. Spectacular specimens of quartz were in abundance in the shop. The various mines are somewhat less

glamorous than one might imagine, with heavy machinery and, after rain, a lot of mud. We will also see a nearby locality where the aluminum phosphate minerals, planerite, variscite and wavellite, occur.



MSSC's Vice President, Dr. George R. Rossman is Professor of Mineralogy at the California Institute of Technology where has worked since receiving his Ph.D. in inorganic chemistry there in 1971. His work addresses problems relating to mineral identification, the origin of color in gems and minerals, and the global repository of water in rocks and minerals. His mineralogical travels have taken him to the jungles of Brazil, Bolivia, and Myanmar. He was an invited participant in the White House conference on conflict diamonds and has been a keynote speaker at several international mineralogical and gemological symposiums. He is a Fellow of the Mineralogical Society of America, the recipient of their inaugural Dana Medal, the recipient of the Richard P. Feynman Prize for Excellence in Teaching at Caltech, and the Friedrich-Becke Medal of

the Austrian Mineralogical Society. He was honored by having a new gem mineral of the tourmaline family named after him. He is author or co-author of more than 320 publications in the mineralogical and chemical sciences.

From the Editor:

I am so pleased that we will have a second chance to see the program that was cancelled when the February meeting was cancelled during our wonderfully wet season. As a fan of George's programs and a quartz-a-holic, this is one program I'm not wanting to miss!

As some know, our much loved fur-baby died suddenly in early July. While she was a small 8 pounds, the hole we had in our lives after Sookie was huge. As of last week, we have a new "Baby" to love. We are the very happy parents of a 22 oz. long haired Chihuahua. Fred hasn't smiled so much since Snookie passed away. Now we get to deal with puppy antics and laugh a lot. As I work on this bulletin, she is asleep on my keyboard shelf with my mouse as her pillow!

As Ann mentions in her Meanderings, it looks like there may be some changes in MSSC's officers for 2018. You may want to try to attend the September 10th Board meeting to be on top of the action. Officer elections will be here before we know it! Where can you help MSSC stay vibrant and interesting? Linda Elsnau

With Knowledge Comes Appreciation!

MEANDERINGS FROM THE PRESIDENT by Ann Meister

What a great day for a picnic! The weather was not-too-hot. The 20-something people who gathered had a great time, good conversation, delicious food (Rudy's heavenly barbeque, Danielle's corn bread, Leslie's shave ice), and interesting items at the silent auction which brought a healthy boost to the MSSC treasury. We all seem to love minerals because they are beautiful and interesting. Bruce showed how they tell stories of their formation, using a chrysanthemum stone and a stromatolite. I want to extend a heart-felt THANK YOU to Bruce and Kathy Carter (and Sadie, their delightful labradoodle) for again hosting the picnic in their backyard.

At the picnic, Jo Anna Ritchey, our Federation Director, presented the MSSC with a swirling glass trophy (with the plaque shown to the right) from the CFMS that she received at the Federation meeting in Ventura. This is in commemoration of the founding of the California Federation of Mineralogical Societies 81 years ago. MSSC was instrumental in making that happen.

Mineral clubs began forming in the 1880's as a general interest in natural history and the Earth sciences increased. (James Dwight Dana's *Manual of Mineralogy* was first published in 1848. Charles Lyell's multi-volume *Principles of Geology* was published from 1830 to 1833.) The Mineralogical Club of the New York Academy of Science (now the New York Mineralogical Club) was formed in 1886 (George Kunz was a founding member). "The Students Mineralogical Club of Philadelphia" (now the Philadelphia Mineralogical Society) was formed in 1892. However, the first club in California was not formed until 1931. That is us, the Mineralogical Society of Southern California in Pasadena.

As the hobby grew, so did a perceived need for the hobby societies. On Mineral Day, June 16, 1935, at the San Diego Exposition, representatives of several California mineral societies met and formulated plans to organize a state organization of mineral societies. The first convention of the Mineral Societies of California was held on January 4-5, 1936, in Riverside, California. The seven charter members (in alphabetical order) were:

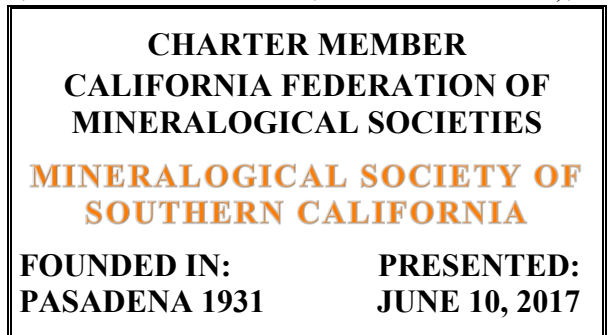
- Kern County Mineral Society, Founded March 18, 1935 in Bakersfield.
- Los Angeles Mineralogical Society, Founded September 9, 1932 in Los Angeles. (Disbanded)
- Mineralogical Society of Southern California, Founded in 1931 in Pasadena.
- Mineral Society of San Diego (*now* San Diego Mineral and Gem Society, Inc.), Founded March 1934 in San Diego.
- Northern California Mineral Society, (*now* San Francisco Gem and Mineral Society, Inc.), Founded January 16, 1935 in San Francisco.
- Orange Belt Mineralogical Society, Founded April 6, 1932 in San Bernardino.
- West Coast Mineral Society, Founded May 1934 in Fullerton. (Disbanded)

Now we need to renew our 86-year commitment to the Society. At the **September 10 Board meeting**, we will be discussing candidates for office for 2018. There are rumors of change in the air. Please let me know your interests. All members are welcome to attend Board meetings, but please RSVP so we know that you are coming.

OTHER (FREE) THINGS TO DO...

The **Von Kármán Lecture** on September 21 and 22 is titled "**A Volcanologist's Paradise,**" and presented by Dr. Ashley Davies. He is a Research Scientist at JPL and has been there for over 20 years. He will describe how studying volcanoes on Earth leads to a clearer understanding of how Io's volcanoes work and how best to study them from spacecraft. And he has a great sense of humor: every year he sends his Ph.D. advisor a birthday card depicting a work of great art "improved" by the addition of a volcano. Thursday is at the Von Kármán Auditorium at JPL and Friday is at the Vosloh Forum at PCC. Start time is 7 PM.

The **Watson Lectures** at Caltech will restart in October.



The Meteorite Gallery (Geology room 3697) is open with a docent present every Sunday from 1 until 4 except for the last two Sundays in the calendar year. And it is open every work day from 9 until 4 but without a docent. It is not open Saturdays. The website is <http://www.meteorites.ucla.edu/>. There you can find a map of our corner of the UCLA campus and instructions for parking in structure 2.

The next Gallery Lecture will occur on Sunday Sep 17. The speaker is UCLA Professor David Jewitt. The title of his talk is: "From the Edge of the Solar System". We have discovered that a new comet, C/2017 K2, is active at record distance from the Sun. It appears to be making its debut in the planetary region, following 4.5 billion years in the frigid Oort cloud. I will discuss the new object and describe what we know about the outer realms of the solar system.

MINUTES of the Annual Picnic Meeting, August 6, 2017

The Mineralogical Society of Southern California (MSSC) held its 947th meeting in conjunction with the Annual Picnic. The affair was held at the home of Bruce and Kathy Carter. The event began around 12:00 noon, people began showing up, setting up their potluck items and checking out and adding items on display for the Silent Auction. The food service began at 1:10pm, allowing time for others bringing food to show up.

Much of the regular business is suspended until the next membership meeting, September 8th. However, this 947th meeting proceeded to go on record.

President Ann Meister welcomed all to the event and called the meeting to order at 2:30pm. She thanked Bruce and Kathy Carter for the use of their lovely backyard for the picnic; she thanked Rudy Lopez, Program Chair, for his great smoked brisket and pulled pork....yum!! And, thanked everyone for the lovely food they brought to share. The Silent Auction will go on until 3:30pm.

Announcements: Editor Linda Elsnau will accept submissions until August 22 for the *Bulletin*; the next **Membership Meeting will be Friday, September 8, 2017** at 7:30pm (PCC) and, the next **Board Meeting on Sunday, September 10, 2017** at 1pm (Carter residence). Everyone is invited to come to the Board meeting as the slate of officers will be discussed.

The theme for today's picnic is "Why I Love Minerals".

Ann started off by saying she loves minerals because, like everyone, she thinks they're beautiful, that they have perfection, they are different but alike and they're interesting. Ann said she likes to look at their history, how they're formed and where they're from. They're fascinating!

Bruce Carter exhibited 2 items he put on the Silent Auction table. Bruce, while he doesn't collect minerals, collects specimens that have minerals. The first is an exquisite specimen, one of the finest chrysanthemum stone he's seen. It is a lime mud matrix and there are little small fossils on the back side. But, growing within the lime mud are spectacular crystals of celestite [celestine]. It grew outward, snowflake like, except not with symmetry. There are multiple parallel points, with lateral ones growing on top in a layer fashion.

The 2nd item Bruce described is a stromatolite, the oldest fossil in geological records. This specimen may be Eocene and possibly from Bolivia – not sure, so don't quote it. They form when there is a crust of algae growing on a surface. Stromatolites are as old as 3.5 billion years. If the surface has not been scraped off, it possibly grew in quiet waters, with no critters to scratch it. These layers of crust are like our skin that protects the surface from outside elements while protecting from the inside up to the skin layer. The specimen was a beautiful brown, with lighter brown running through it. It was beautiful. [You should have been at the picnic to see these pieces!]

Gene Reynolds spoke next about crystal and crystal systems and said that would lead to some discussion. But, he wanted to remind everyone about the Pacific Micromount Conference [coming up in January 2018].

Jerry Wendt told about his days at PCC and the collecting he's done over years. He finally settled on his specialty, coprolite [fossilized dung]. He said he has quite a collection and will bring it in to one of our meetings.

George Rossman brought a purple bi-colored specimen from Indonesia. He gave the background of this mineral, how it grew and told how it now is called amethyst. George also brought a mineral that looks like black tourmaline. It is foitite not schorl. How do we know? We know by detailed examination and analysis. Dr. George confessed that this is the arena he loves. And, he is very good at it!

Ann mentioned she is fascinated by all of it. It's the geology, too. In the early 1800's the mapping was pretty accurate to the maps of our generations. It's incredible that people have been interested in minerals for so long...

Gene spoke about some of his field studies and collecting and told his RV story while on a field trip. What fun! Rocky Mountain had a show with AFMS in Butte and their field trip was to Crystal Hill, just south of Butte. Fish, collect? Tough choice. But because of bad weather, narrow road and other problems, everybody piled into the RV and there they sat! But, there was decomposed granite quartz rhyolite and, in a sand matrix quartz that was clear, smoky and amethyst or any combination of those! It was amazing.

He told about how the area has great collecting sites and about the western history of Lewis and Clark, the Louisiana Purchase (that was quite the political battle, today's climate is nothing by comparison) and his 3-month trip through Oregon up into Canada and back plus other memorable gems – but that's for another picnic. Sounds like Gene had a great time!

A few other people contributed during the discussion including Marek who talked about the micromount conference in Northern California where he picked up some lepidolite from the Himalaya Mine but found out it was not lepidolite at all but columbite [an associated mineral]. The lesson here, check the label, it may not be accurate.

Ann mentions that the analysis is important. Now, according to Dr. George, there are 5,227 known minerals. Maybe you'll discover 5,228...maybe me.

JoAnna Ritchey, CFMS Director, presented President Ann Meister with an award she received while at the CFMS Convention recently. This award was presented to one of the charter members of the California Federation of Mineralogical Societies, of which there are still 7 in existence. The award is encrypted "To The Mineralogical Society of Southern California, a Charter Member of the California Federation of Mineralogical Societies".

Ann said she didn't exactly know where to keep it right now, since we don't have a club house. She also said she would investigate and research to find out who all the original charter societies or clubs were. Ann mentioned a large photograph at Rock Currier's, mementos, decrees and other items that belong to our society. We need a place to showcase them somewhere.

As a segue to our upcoming election, think about how we can, as a society, carry on, perhaps a rotational presidency or ??? So, come to the Board Meeting on September 10, here at the Carter residence or if you want to make comments at the Membership Meeting on September 8th, you're invited to do so. Your input is valuable and appreciated. Let's work together to make this work. There was some discussion regarding members who live far away and have issue with travel.

The discussion concluded and the formal meeting was adjourned at 3:00pm. Some members, who did not speak on record, informally discussed why they love minerals. Annie is right; they're beautiful and are as multifaceted as the people around us, unique and interesting.

Ann announced that the Silent Auction will conclude at 3:30pm. Rudy says there are To Go containers for those who want to take home some food.

Jerry Wendt talked about the upcoming Solar Eclipse on August 21st. In 1984 Jerry was in Mexico under a palm frond shelter and there were many eclipses on the ground through the pinholes in the palm. That eclipse



lasted 7 minutes. The 2017 eclipse will be about 2 minutes – depending on your location. Angie said she will be in Kentucky for the solar eclipse.

Thanks to everyone! The Silent Auction yielded approximately \$200 (including a check to be mailed) plus T-shirt sales....

All the food was soooooo good, the auction was fun and the company couldn't have been better. Once again, a good time was had by all. See you next time!

Respectfully submitted by Angela Guzman, Secretary

List of Upcoming MSSC Events : Mark your Calender!

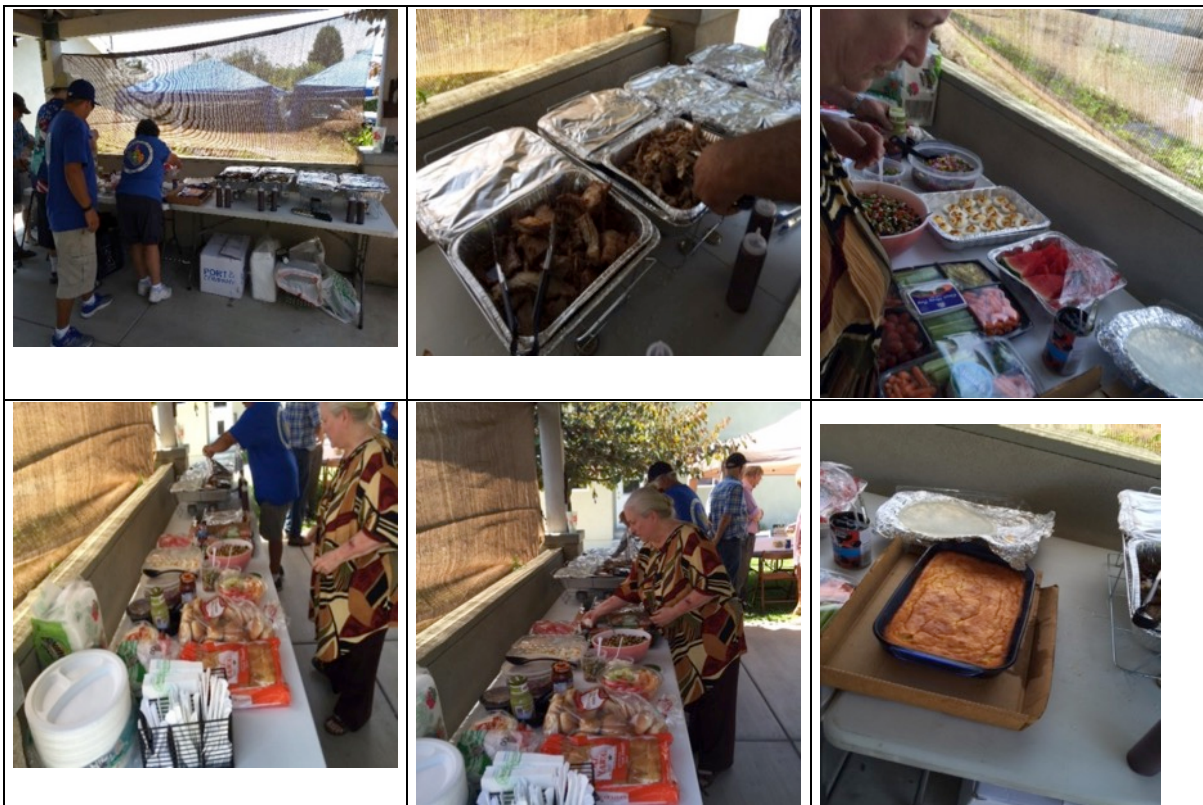
Event	Date	Comments / Scheduled Program (if known)
Meeting Dates:	October 2017	Larry & Leslie - Opals Part 2
	November 2017	Chuck Howser - Flight
	December, 2017	Eric Scerri – to be announced
Annual Banquet	January, 2018	Speaker to be announced
Board Meeting	September 10, 2017	Board Meeting at Bruce Carter's house

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

MSSC Annual Picnic: By: Rudy Lopez

On Sunday August 6th, the MSSC held their annual picnic at the Carter residence.

The picnic was a great success, we had good food, a silent auction, new t-shirts, a new table cover with MSSC logo and name on it. As usual we had great food, brisket and pulled pork. There were some great side dishes, desserts and of course Leslie's Hawaiian shave ice.



Jo Anna Ritchey presented an award from the California Federation of Mineralogical Societies to Anne Meister as president of MSSC. The award is for being one of 7 charter members of the California Federation of Mineralogical Societies. I am sure Anne will bring the award to the next meeting.



The presentation of the award.

This award shows how MSSC has survived as a society for 86 years, and let's keep it going!

We had a great silent auction with plenty of tables full of minerals and books that were sold.



Angie showing off her new t-shirt and looking for some great bargains

The new MSSC table cover that will appear at all events we will be a part of (we have two covers).

The Theme of this year's Picnic was "Why I Love Minerals"



Bruce Carter gave a great talk on his special mineral, which he put up for the silent auction.

George Rossman also educated us on his Grape Agate specimen, which did not go up for auction

Here are more pictures from the picnic:



We had a great time at the picnic and I want to thank Angie Guzman for helping me set up the food tables, tents, tables for the silent auction and putting out all the silent auction items. I also want to thank Leslie and her son, Jon who also helped set up and take down the tents and tables.

I want to give a very special thank you to Bruce and Kathy Carter for the use of their beautiful home and yard that made for a great picnic.

I want to thank Bob Thomas for his donation. Bob sent me an e-mail the week prior to the picnic with a donation that provide over 150 items for the silent auction tables. Love those donations!!

See you next year, Rudy

Featured Mineral: **Erythrite**

Formula: $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$

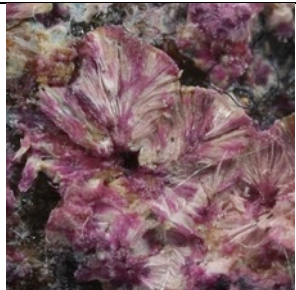







Crystal System: Monoclinic

Member of: Vivianite Group

Name: Named in 1832 by François Sulpice Beaudant from the Greek ἐρυθρός, "erythros" for "red"

Color: Crimson to peach red, pale rose, pink

Luster: Sub-Vitreous, Waxy, Pearly, Dull, Earthy

 <p><i>irocks.com photo</i></p> <p>Erythrite : $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$ Locality: Jáchymov, Jáchymov District, Krušné Hory Mts, Karlovy Vary Region, Bohemia, Czech Republic 5.7 cm x 4.3 cm x 1.2 cm</p>	 <p><i>irocks.com photo</i></p> <p>Erythrite : $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$ Locality: Aghbar Mine, Aghbar, Bou Azzer District, Tazenakht, Ouarzazate Province, Drâa-Tafilalet Region, Morocco 2.7 cm x 2.3 cm x 1.6 cm</p>	 <p><i>irocks.com photo</i></p> <p>Erythrite : $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$ Locality: Mount Cobalt Mine, Selwyn District, Cloncurry Shire, Queensland, Australia 1.6 cm x 0.9 cm x 0.6 cm</p>	 <p><i>irocks.com photo</i></p> <p>Erythrite : $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$ Locality: Bou Azer, Bou Azzer District, Tazenakht, Ouarzazate Province, Drâa-Tafilalet Region, Morocco 3.9 cm x 2 cm x 1.3 cm</p>
 <p><i>irocks.com photo</i></p> <p>Erythrite : $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$ Locality: Bou Azzer District, Tazenakht, Ouarzazate Province, Drâa-Tafilalet Region, Morocco 4.2 cm x 3.5 cm x 2.4 cm</p>	 <p><i>irocks.com photo</i></p> <p>Erythrite : $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$ Locality: Sara Alicia Mine, San Bernardo, Mun. de Álamos, Sonora, Mexico 7.5 cm x 5.3 cm x 3.5 cm</p>	 <p><i>irocks.com photo</i></p> <p>Erythrite : $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$ Locality: Mount Cobalt Mine, Selwyn District, Cloncurry Shire, Queensland, Australia: 3.9 cm x 2.9 cm x 1.8 cm</p>	 <p><i>irocks.com photo</i></p> <p>Erythrite : $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$, Quartz : SiO_2 Locality: Schneeberg District, Erzgebirge, Saxony, Germany 4.2 cm x 3.8 cm x 3.0 cm</p>

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	

WEST COAST GEM & MINERAL SHOW

November 10-12, 2017

Minerals ♦ Fossils
Gemstones ♦ Jewelry
Meteorites ♦ Beads
Decorator Items
Lapidary
Metaphysical



Chrysocolla
Ray Mine, Pinal Co., AZ
Photo by Jeff Scott/PO

FREE Admission
FREE Parking
Open to the Public
Wholesale section
for Qualified Buyers
Unique Holiday Shopping

SANTA ANA, CA ♦ HOLIDAY INN / ORANGE COUNTY AIRPORT

2726 S. Grand Ave. (Take 55 Fwy Exit 8 for Dyer Rd. to S. Grand Ave.)

www.mzexpos.com
Facebook.com/mzexpos

MSSC Advertisement Policy:			
Mineral-related ads are allowable in the MSSC bulletin. Below is the price per month			
	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/>

SEPTEMBER

There are no S. California Shows in September

OCTOBER

October 7 - 8: BORON, CA

Mojave Mineralogical Society

Boron Community Center

26998 John Street

Hours: 9 - 4 daily

Web Site: [Facebook page](#)

October 7 - 8: VISTA, CA

Vista Gem & Mineral Society

Antique Gas & Steam Engine Museum

2040 North Santa Fe Avenue

Hours: Sat 10 - 5; Sun 10 - 4

Website: www.vistarocks.org

October 8: FALLBROOK, CA

Fallbrook Gem & Mineral Society

Fallbrook Gem & Mineral Building

123 West Alvarado Street

Hours: 9 - 4

Website: www.fgms.org

October 14 - 15: TRONA, CA

Searles Lake Gem & Mineral Society

Gem Show Building

13337 Main Street

Hours: Sat 7:30 - 5; Sun 7:30 - 4

Website: www1.iwvisp.com/tronagemclub

[Show Flyer/Details](#)

October 21: WEST HILLS, CA

Woodland Hills Rock Chippers

First United Methodist Church

Sherman Way

Hours: 10 - 5

Website: www.rockchippers.org [Show Page](#)

NOVEMBER

November 4 - 5: ANAHEIM, CA

American Opal Society

Business Expo Center

1960 S. Anaheim Way

Hours: Sat 10 - 6; Sun 10 - 5

Website: www.opalsociety.org [Show Page](#)

November 4 - 5: RIDGECREST, CA

Indian Wells Gem & Mineral Society

Desert Empire Fairgrounds

520 South Richmond Road

Hours: 9 - 5 daily

November 18 - 19: OXNARD, CA

Oxnard Gem & Mineral Society

Oxnard Performing Arts Center

800 Hobson Way

Hours: Sat. 9 - 5; Sun. 10 - 4

Website: <http://oxnardgem.com> [Show Page](#)



22700

This is a Bou Azzure, Morocco Erythrite that Fred photographed years ago. At the time, it was in a private collection. As I recall, it was a nice fist sized cabinet specimen. Sometime after this photo was taken, the owner told us he tried to trim some of the Quartz matrix off and the specimen was split in half...the wrong way! Ouch!

2017 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		
2016--2018	Bruce Carter	
2016--2018	Bob Housley	
2016--2018	Leslie Ogg	
2016-2017	Pat Caplette	
2016-2017	Pat Stevens	
COMMITTEE CHAIRS		
Bulletin Editor	Linda Elsnau	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 Elsnau	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

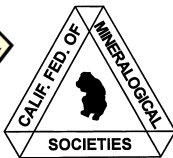
Website: www.mineralsocal.org **The Mineralogical Society of California, Inc.**

Permission to reproduce and distribute original material published herein, in whole or in part, for non-commercial purposes, is hereby granted provided the sense or meaning of the material is not changed, the editor is notified, and the author's notice of copyright is retained. **All other articles used in our bulletins are with the specific permission of the author. Permission to use these documents must be obtained from the author for each use**

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.

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

To:



**With Knowledge Comes
Appreciation**

***Your MSSC
Bulletin Is
Here!***