

Bulletin of the Mineralogical Society of Southern California

Volume 90 Number 8 - August, 2017

The 947th meeting of the Mineralogical Society of Southern California

With Knowledge Comes Appreciation

August 6th, 2017 from 12:00 Noon to 4:30 P.M.

Annual MSSC Picnic

Where: Bruce & Kathy Carter's house

Program: Picnic Theme: Why I Love Minerals

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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 Picnic: 2017 MSSC ANNUAL PICNIC - POT-LUCK & SILENT AUCTION

Theme: Why I Love Minerals

PICNIC - SUNDAY AUGUST 6TH 12:00pm - 4:30pm

Where: Bruce & Kathy Carter Residence

This year's theme is "Why I Love Minerals" so come and share why you enjoy minerals. What attracted you to minerals in the first place and what has held your interest from then on.

Rudy is preparing his special seasoned pulled pork and brisket. He has all three smokers ready to go and ready to cook up some great picnic meat. The smoking process will take 2 days, 14 hours for the pork shoulders and 12 hours for the brisket.



Food: Potluck: Please bring your own special potluck offering to share: chips and dip, salsa or guacamole, a salad (macaroni, potato, vegetable or other; homemade or from the deli), a veggie tray, grapes, fruit salad, cookies, pie or other dessert item, or anything edible. Let's see what scrumptious goodies turn up this year!

If you are not contributing to the potluck menu, **you can make a monetary donation in lieu of food.**

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.

Drinks: Water provided. Bring other beverages as you prefer.

RSVP: Cheryl Lopez –email: membership@mineralsocal.org

Please RSVP by August 1st. If you call, there is an answering machine so please CLEARLY IDENTIFY YOURSELF and HOW MANY ARE IN YOUR PARTY and WHAT YOU'RE BRINGING.

THE LOCATION

Bruce and Kathy's home is just north of Foothill Blvd and west of Mayflower Ave in Monrovia. Street parking is available. They have a beautiful back yard with shade structures and an outdoor kitchen.

THE SILENT AUCTION

Returning to a former tradition of MSSC, we are having a silent auction at our summer social event. Please bring items that are related to our hobby – minerals, fossils, lapidary, gems/jewelry, geo-science books & magazines, mineral art & posters, and mining memorabilia. Rudy is cleaning his garage and bringing lots of slabs! What's minerals are in your garage?

From the Editor:

I hope everyone is looking forward to the upcoming MSSC Picnic. The theme of "Why I Love Minerals" should bring some interesting discussions, and the picnic will bring some awesome food! As you can see in the above picnic information, the deadline to RSVP is August 1st. I think if you get the "snail mail version and plan to attend, Cheryl and Rudy will accept a late response from you (since you won't have this before the 1st.) Everyone else that plans on coming, do your RSVP now. Don't forget to let him know what you are bringing and if you can't bring food, a cash donation instead will be accepted. I don't have any nifty articles for this month, so I've use some pics of minerals to show why I love minerals. Take a look and see if you can figure out my reason. See you at the picnic Linda Elsnau

MEANDERINGS FROM THE PRESIDENT by Ann Meister

It's picnic-potluck month. Bring your favorite dish for 6-10 people. I'll probably bring some variant of my bean salad. I keep tweaking the ingredients. It's a vegetarian dish for those who prefer to not partake of Rudy's 5-star barbeque. Also, don't forget items for the silent auction. The July Bulletin has all the information. Don't forget to RSVP to Rudy and Cheryl Lopez by Aug. 1, email membership@mineralsocal.org

The abnormal and high humidity has caused me some health problems. I have difficulty breathing. I don't know whether it's the water in the air from which my lungs can't extract enough oxygen or the particulates that are suspended causing my asthma reaction – whatever it is, it's not fun or comfortable. Life is much better when you can breathe easy. And now that the government is talking about easing air quality standards, I'm really concerned, as are all of us who suffer from breathing problems. Anyway, without oxygen, my brain doesn't function well and causes an inability to think and write. So, this is a short month. See you at the picnic.

OTHER (FREE) THINGS TO DO...

The **Von Kármán Lecture** on August 24 and 25 is titled "40 Years in Space: Voyager's Remarkable Journey Continues," by Alan Cummings, Senior Research Scientist at Caltech and Voyager team member since 1973. Thursday is at the Von Kármán Auditorium at JPL and Friday is at the Vosloh Forum at PCC. Start time is 7 PM. (Personal note: My dad's former company, a proto-type machine shop Meister Engineering, made parts for the Voyager spacecrafts. I programmed some to run on our CNC machines. So, I feel a strong affinity to these distant travelers. And it's hard to believe it's been 40 years!!!)

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

The **UCLA Meteorite Gallery** lecture is on Sunday, August 27 at 2:30 PM. The speaker is UCLA Researcher Paul Warren. His topic is "Meteorites from Mars and on Mars." Martian meteorites are key sources of information about the Red Planet, especially its volcanic history. Ar and N isotopic ratios show the Martian connection. Even though there are fewer Martian meteorites (about 110) than lunar meteorites (140), the tally for meteorite falls is 5 Martians to zero lunars. Rovers have analyzed a few meteorites among the cobbles on the Martian surface. The Meteorite Gallery in Geology room 3697 is open with a docent present every Sunday from 1 till 4. The lecture is in room 3656 near the Meteorite Gallery.

MINUTES of the July 14, 2017 Meeting

On Friday, July 14, 2017, the Membership meeting of the Mineralogical Society of Southern California (MSSC) was called to order at 7:43 p.m. (*late start in consideration of members who may be delayed by accident on 210Fwy*) by President Ann Meister who welcomed all to the 946th Membership Meeting.

President Meister called for any corrections or additions and seeing none, made a call to entertain a motion to approve the Minutes of the June 2017 Membership Meeting Minutes as published in the July 2017 MSSC *Bulletin*. The MOTION was made by Rudy Lopez and seconded by Laura Davis to accept the minutes as published. Ann asked for discussion and seeing none, called for the vote. The vote was taken and the Motion passed unanimously to approve the minutes as written and published.

REGULAR BUSINESS

- Deadline to submit items for the *Bulletin* is the 22nd of each month;
- The Picnic Pot Luck will be on August 6, 2017 at the Carter residence. The details are published in the July *Bulletin* (pg 9). The picnic starts at Noon (start serving food at 1p.m.) until 4:30p.m. This year's theme is "*Why I Love Minerals*". There will be a Silent Auction so bring your backyard bins, camping gear, etc., to donate to this great fundraiser for our Society. So, what's in your garage? Food? See Rudy's announcements below;
- The next Board meeting will be Sunday, September 10, 2017, at the Carter residence. Once again, we are looking for those members who would love to run for office. The slate of officers for 2018 will be

discussed. YOU ARE INVITED TO ATTEND THIS BOARD MEETING TO PLACE YOUR NAME ON THE SLATE;

ANNOUNCEMENTS

- Meteorite Gallery's next presentation at UCLA will be Sunday, July 16, 2017;
- The vonKármán Lecture Series for July is actually being held concurrent with MSSC's Membership meeting tonight!

SHOW and TELL

- BJ Ledyard brought in a couple of specimens, one she received as a raffle prize at the Suiseki event last December and one she happened across while collecting. Both look to have a similar metallic oxidized coating.

OTHER - SPECIAL ANNOUNCEMENTS

Rudy Lopez reminds us the Pot Luck **Picnic** is coming up and he will again be doing the major meat cooking/smoking. The meat has already been picked up. We'll be having pulled pork and brisket again. What we need is salads, side dishes, chips/dips, desserts, etc. - enough to feed 8-10 people. We have a lot of containers and things from last year so we're good there. If you plan to come, please let him know so he knows how much to prepare. Cheryl will be out of town, so any help will be appreciated. *[Secy Note: MSSC will have a donation box for those who, for whatever reason ("the dog ate my homework", "oops, I forgot", etc.,) were unable to bring a food item to feed 8-10. It's a POT LUCK Picnic.]*

Rudy will be ordering the **Tee Shirts** and has order forms here if you'd like to order now to get your tee by the Picnic. Contact Rudy to RSVP for the Picnic and to let him know what you're bringing AND to put your order in for MSSC Tee Shirt! Membership Roster has the contact information for Rudy (e-mail and phone number).

PROGRAM

Program Chair Rudy Lopez introduced the program for the evening. Dick and Mary Pat Weber speaking about the Amethyst rocks of Thunder Bay, Canada.

Dick and Mary Pat Weber completed their geologic studies in Minnesota. Dick graduated University of St. Thomas, has a Masters in Geology and Economics from the University of Minnesota. Mary Pat has a bachelor's in geology and earned her MBA from Pepperdine University. Together, they have extensive field experience, are avid mineral and agate collectors and have visited the largest commercial deposits of amethyst in North America, at the Canadian border in Southern Ontario, Thunder Bay, among other localities. They received the American Federation of Mineralogical Societies' "Rockhound of the Year" award in 2014. Tonight, it's about Thunder Bay and the trove of amethyst just lying about.

Mary Pat and Dick have brought several specimens of gorgeous amethyst. Mary Pat opens their presentation by stating that Southern Ontario, Canada & Thunder Bay in particular, is one of their favorite sites. Although, in their presentation, there will be photos from various mines, most will be from the commercial mine at Thunder Bay, some from the Blue Point Amethyst Mine, while others will be from smaller mines. Thunder Bay is on the Canadian Shield. *[Secy Note: The Canadian Shield, is the largest area of exposed Precambrian igneous and high-grade metamorphic rocks that forms the ancient geological core of the North American continent.]* On visits to the commercial amethyst mine dig in Thunder Bay, the Amethyst Mine Panorama owners afforded Mary Pat and Dick some latitude, although they could not collect samples or specimens. That would require licenses and paperwork equivalent to regulations for mining operations in the US as required by OSHA. Amethyst is the official provincial stone of Ontario, Canada, it is also the official stone of Wednesday. The Thunder Bay amethyst is quartz, red violet to deep purple. Chemically, there is ion replacement, silica, low level radiation and other dynamics. The color is stable and will generally keep its hue if protected from overt sun light. If, however, you heat it to 500° you will end up with Citrine.

In the early days, Thunder Bay shipped their amethyst to Europe. Mary Pat reports there is even an altar made of amethyst in Germany! From early exports to about the 2nd half of the 1800's, Thunder Bay amethyst

generally went unnoticed locally when in 1887, the amethyst trade suddenly boomed. By the early 1900's, the silver mines closed and Brazilian amethyst makes her worldwide entrance. In 1955 Thunder Bay was rediscovered when government bulldozers building a road to a new mountain top facility uncovered the amethyst literally lying on the ground waiting to be picked up. Current mining production began in 1960's and continues to this day.

Weather wise, there is snow, frost and general cold most of the months and it is difficult to see the amethyst. However, from about May 15th through October 15th, the 5 months of good weather, except for 2 weeks of bugs and black flies, are excellent for mining on the shield. There are two areas, Area 1 is approximately 25 x 40 miles and is open to (restricted) mining. Area 2 is a National Park and no mining is allowed there.

Thunder Bay amethyst has a distinctive red cap. It is rare in amethyst and only is found in Thunder Bay amethyst. There are hematite inclusions, 25-30 angstroms. The inclusions are little disks or spherules included in the quartz. In Thunder Bay, there are veins of amethyst in granite, cavities that are amethyst filled, the littlest crevice or space is filled with amethyst crystals. The colors are spectacular. Mary Pat showed wonderful photos of amethyst specimens. 40% of the amethyst is usable!

The Precambrian hard rock granite at the Panorama is exhibited underfoot, in walls, loose chips on the ground, chunks lying about, seemingly everywhere. During the off months, October to May, the mine dig area is flooded, on purpose, by waters from adjacent Elbow Lake and the winter weather takes care of the rest. In that way, the Panorama's amethyst mine is protected. Come spring, Elbow Lake is refilled from waters flooding the Panorama.

Lower quality amethyst became very popular with the metaphysical world. Amethyst is a remarkable stone that holds spiritual as well as contentment properties for some people. Crystals are sold on-line and in shops. One particular product, Auralite 23, is said to contain 23 different mineral energies. Along the same vein, no pun intended, care should be taken when doing on-line, in show or in store purchases of Thunder Bay red-cap amethyst. Some samples coming out of India claim to be red cap but are fake! The red cap is sprayed on and there is, of course, no hematite. Buyer beware!

In Thunder Bay, Canada, the Panorama and the Blue Points Mine each offer Do-It-Yourself (DIY) tailings mining to the general public. At the Panorama, the cost is \$3/pound while the Blue Points cost is \$2 for a 2-gallon bucket. The Panorama also has a store on site and one in town.

Mary Pat and Dick's presentation also included breccia granite filled in by amethyst crystals, fault lines, more granite, volcanic rock, the Rowe Formation (2.3 billion years old-lots of iron) and the wonderful find at Blue Points by a fortunate young man.

Great presentation, wonderful photos, spectacular specimens and excellent information. Thank you, Mary Pat and Dick Weber.

DOOR PRIZE

The Door Prize was won by Catherine Govaller, our member who lives in San Bernardino, CA who comes out for these fun and informative meetings. Congratulations, Cathy!

ADJOURN

The meeting was adjourned at 8:38p.m. Hospitality Chair, Laura Davis, provided wonderful refreshments and Rudy, the baker, brought goodies, too. Good discussion and camaraderie followed adjournment. Thanks everyone.

Respectfully submitted, Angie Guzman, Secretary (*Apologies in advance for any omissions or misspellings.*)

*[Secretary's Note: Our next meeting will be **MSSC's Annual Pot Luck Picnic on August 6, 2017**. It will be held at the Carter residence (see above: Regular Business, 2nd item for address). We start at Noon and go until 4:30 p.m. The theme is "Why I Love Minerals" and, we will have a Silent Auction! So, come on, join the fun, enjoy a good meal and talk with others who also love minerals. **See you there!**]*

List of Upcoming MSSC Events : Mark your Calender!

Event	Date	Comments / Scheduled Program (if known)
Meeting Dates:	September 8, 2017	Dr. George Rossman - Quartz crystals
	October 13, 2017	Larry & Leslie - Opals Part 2
	November 10, 2017	Chuck Howser - Flight
	December 8, 2017	Eric Scerri – to be announced
Annual MSSC Picnic	August 6, 2017	Theme: Why I Love Minerals
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.

The National Parks and Federal Recreational Lands Senior Pass



Photo: <https://www.nps.gov/planyourvisit/passes.htm>

Get your Pass BEFORE August 28, 2017!

On August 28, 2017, the price of the America the Beautiful – The National Parks and Federal Recreational Lands Senior Pass will increase for the first time since 1994.

Why is the price of the Senior Pass increasing?

The price of the America the Beautiful – The National Parks and Federal Recreational Lands Senior Pass is increasing as result of the Centennial Legislation P.L. 114-289 passed by the US Congress on December 16, 2016.

The Senior Pass has been \$10 since 1994. On August 28th, the lifetime Senior Pass will increase from \$10 to \$80.

For information on how to apply for the \$10 Senior Pass ---- check this web site....

<https://www.nps.gov/planyourvisit/senior-pass-changes.htm>

MSSC T-Shirts: Rudy Lopez

The MSSC T-Shirts have been ordered!!!

They will be ready for our picnic, if you have ordered one and you're going to attend the picnic I will have your t-shirt there. If you will attend the picnic and haven't ordered your t-shirt I will bring some to sell.

WE HAVE DESIGNED T-SHIRTS FOR MSSC.

They are, 100% cotton, preshrunk, blue with logo on front and back.

THE PRICES OF THE T-SHIRTS ARE

\$20.00 Each For Sizes S, M, L XL

\$22.00 Each For Sizes 2XL

\$23.00 Each For Sizes 3XL

\$24.00 Each For Sizes 4XL And Up To 5XL

Please contact Rudy Lopez if you would like to have a t-shirt.

He will need your size and number of t-shirts you want. Please

make your checks out to

MSSC and mail to:

**MSSC program director
1301 Leonard Ave.
Pasadena, Ca 91107.**



If you request your order to be mailed to you, there will be an additional charge for mailing. Hopefully, all will have one for the annual picnic.

Send your request to: programs@mineralsocal.org

Why I Love Minerals: Based on these pictures, can you guess why I love minerals? Linda Elsnau

 <p><i>irocks.com photo</i></p> <p>Calcite : CaCO_3 Locality: North Vernon, Jennings Co., Indiana, USA 2.2 cm x 1.8 cm x 1.4 cm</p>	 <p><i>irocks.com photo</i></p> <p>Chalcedony (Var: Agate) : SiO_2 Locality: Brazil 19.7 cm x 13.2 cm x 0.5 cm</p>	 <p><i>irocks.com photo</i></p> <p>Diamond : C Locality: Ghana 0.4 cm x 0.4 cm x 0.1 cm</p>
 <p><i>irocks.com photo</i></p> <p>Rutile : TiO_2, Hematite : Fe_2O_3, Quartz : SiO_2 Locality: Novo Horizonte, Bahia, Brazil 2.7 cm x 2.4 cm x 1.7 cm</p>	 <p><i>irocks.com photo</i></p> <p>Wulfenite : PbMoO_4, Calcite : CaCO_3 Locality: Red Cloud Mine, Silver District, Trego Mts, La Paz Co., Arizona, USA 5.7 cm x 3.5 cm x 3.4 cm</p>	 <p><i>irocks.com photo</i></p> <p>Beryl (Var: Aquamarine) : $\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$, Muscovite : $\text{KAl}_2(\text{Si}_3\text{Al})\text{O}_{10}(\text{OH})_2$ Locality: Chuwar Backdoor, Hamza Valley, Gigot District, Gilgit-Baltistan, Pakistan 5.8 cm x 5.2 cm x 4.8 cm</p>

Continued on page 10

Featured Mineral: Hanksite

Formula: $\text{KNa}_{22}(\text{SO}_4)_9(\text{CO}_3)_2\text{Cl}$

Crystal System: Hexagonal

Color: Colorless to grey, ...

Luster: Vitreous, Dull

Hardness: 3 - 3½

Name: Named by William Earl Hidden in 1885 in honor of Henry Garber Hanks (12 May 1826, Cleveland, Ohio, USA - 19 June 1907, Alameda County, California, USA) for service as first state mineralogist of California.

The mineral was on display, by Hanks, at the 1884 World's Industrial and Cotton Centennial Exposition at New Orleans, labelled as thenardite but noted by Hidden to be something different.

A crystal of the mineral was examined by Dana and Penfield in 1883, but the source locality was unknown so they waited to publish until more was found.



rocks.com photo

Hanksite :

$\text{KNa}_{22}(\text{SO}_4)_9(\text{CO}_3)_2\text{Cl}$

Locality: Searles Lake, San Bernardino Co., California, USA

16.3 cm x 13.8 cm x 7.4 cm



irocks.com photo

Hanksite :

$\text{KNa}_{22}(\text{SO}_4)_9(\text{CO}_3)_2\text{Cl}$

Locality: Searles Lake, San Bernardino Co., California, USA

4.7 cm x 4.7 cm x 3.4 cm



irocks.com photo

Hanksite :

$\text{KNa}_{22}(\text{SO}_4)_9(\text{CO}_3)_2\text{Cl}$

Locality: Searles Lake, San Bernardino Co., California, USA

8.8 cm x 6.2 cm x 5.2 cm



irocks.com photo

Hanksite :

$\text{KNa}_{22}(\text{SO}_4)_9(\text{CO}_3)_2\text{Cl}$

Locality: Searles Lake, San Bernardino Co., California, USA

9.7 cm x 7.4 cm x 7.2 cm

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 Scoville

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FREE Parking
Open to the Public
Wholesale section
for Qualified Buyers
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[Facebook.com/mzexpos](https://www.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			

With Knowledge Comes Appreciation!

Calendar of Events:

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

AUGUST

August 4- 6: NIPOMO, CA

Orcutt Mineral Society
Nipomo High School
525 North Thompson Avenue
Hours: Fri/Sat 10 - 5; Sun 10 - 4
Website: www.omsinc.org [Show Page](#)

SEPTEMBER

There are no September shows listed for Southern California area

OCTOBER

October 7 - 8: BORON, CA

Mojave Mineralogical Society
Boron Recreation Park
26998 John Street
Hours: Sat 9 - 5; Sun 9 - 4

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

October 8 - 9: TRONA, CA

Searles Lake Gem & Mineral Society
SLGM Show Building
13337 Main Street
Hours: Sat 7 - 5; Sun 7 - 4
Website: www1.iwvisp.com/tronagemclub

October 8: FALLBROOK, CA

Fallbrook Gem & Mineral Society
Fallbrook Gem & Mineral Building
123 West Avocado Street
Hours: 9 - 4
Website: www.fgms.org

October 21: WEST HILLS, CA

Woodland Hills Rock Chippers
First United Methodist Church
22700 Sherman Way
Hours: 10 - 5
Website: www.rockchippers.org



© The Arkenstone, iRocks.com

irocks.com photo

Quartz (Var: Rose Quartz)

: SiO₂, Quartz : SiO₂

Locality: Pitorra claim,
Laranjeiras, Galiléia, Minas
Gerais, Brazil

6.9 cm x 6.5 cm x 5.3 cm



irocks.com photo

Spessartine :

Mn²⁺₃Al₂(SiO₄)₃, Albite :
NaAlSi₃O₈

Locality: Little Three Mine,
Ramona, Ramona District,
San Diego Co., California,
USA

4.5 cm x 4.3 cm x 3.7 cm



irocks.com photo

Quartz : SiO₂

Locality: Boekenhoutshoek
area, Moola, Nkangala
District, Mpumalanga
Province, South Africa

9.2 cm x 8.7 cm x 7.5 cm

Guessed my reason yet? For me, it's the beauty, unique crystallography, and the "glitz".

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

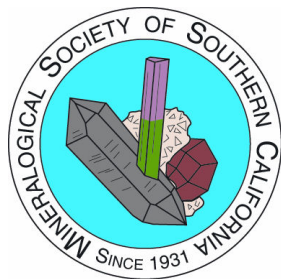
Website: www.mineralsocal.org **The Mineralogical Society of California, Inc.**

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

To:



**With Knowledge Comes
Appreciation!**

**Your MSSC
Bulletin Is
Here!**