

Bulletin of the Mineralogical Society of Southern California

Volume 98 Number 6 June, 2025

The $1{,}039^{th}$ meeting of the Mineralogical Society of Southern California

With Knowledge Comes Appreciation

A ZOOM Meeting

June 13, 2025, at 7:30 P.M.

Program: "Digital Microscopes and Minerals": Presented by Michael Cox

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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

Program: Digital Microscopes and Minerals: Presented by Michael Cox

Michael Cox is known for bringing a Keyence digital microscope to micromineral conferences. Many take advantage of the instrument to collect depth-focused images of wee critters under study. Cox believes that the real power of digital imaging is collaborative inspection of samples. Unlike passing around a sample from one microscope user to the next, and trying to explain where to look, a digital scope feeds the virtual image to an LCD screen or projector and that allows simultaneous inspection and discussion. Digital instruments are also amenable to modifications, such as different light sources and analyzers. Cox will demonstrate his digital microscope and discuss some of his experiences along his imaging journey, starting with common techniques and culminating in the less common use of a high-end digital microscope made for manufacturing inspection.

From This: To This:





Photos © Michael Cox

How to Join our ZOOM Meetings

MSSC members are automatically included in the invite list each month.

For non MSSC Members who want to attend this meeting. You must respond to our programs chair, Carolyn Seitz <u>speakers@mineralsocal.org</u>. no later than the Thursday prior to the next scheduled meeting. Please include "*current month* ZOOM Meeting" in the subject line of your response. This response date will allow time for us to send you the information needed to participate in the ZOOM meeting.

From the Editor: Linda Elsnau.

Wow, it looks like we have an unusual topic for our June Program..Try not to miss it!

It seems that MSSC has quite a crisis coming up soon. The current members filling many of the positions to keep MSSC running are suffering burnout. We need someone new to fill these positions or MSSC will cease to exist. If you think you might be interested, contact the current holder of any position you think you may be interested in filling. She will be more than happy to fill you in on just what's required. MSSC needs YOU!

******* **************************

From Our President: Angie Guzman

Ah, June. It's time to honor Dads (15th), congratulate grads, give a salute on Flag Day (14th), celebrate at weddings, welcome the summer solstice (20th) and prepare for "June gloom", although late April and parts of May had their share of dreary weather.

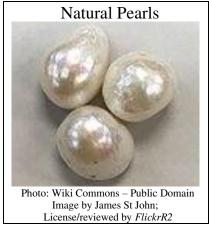
While we're on this streak, it has been reported that birthstones for June – now there are three! - are pearl, alexandrite and moonstone. I guess I'm "old school,"



not to be confused with <u>old</u>, but I recall 1 birthstone per each birth month. "...the times, they are a-changin'..." Please say you remember Bob Dylan!

At any rate, let's take a look at these three birthstones.

PEARLS



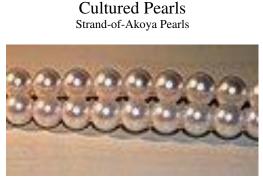


Photo: Wiki Commons - Public Domain

Pearls are organic, derived from living organisms and formed inside mollusks around a foreign particle. Pearls are calcium carbonate and conchiolin (complex protein excreted by the mollusk's outer epithelium) deposited in concentric layers in minute crystalline form. Natural pearls are rarely perfectly round; many being irregularly shaped referred to as "baroque pearls."

Natural pearls or wild pearls are rare.

On the other hand, cultured pearls are <u>farmed</u>. Compare these to, say, the imitation or synthetic pearls that are not created naturally.

Gem quality pearls, whether natural or cultured, are almost always nacreous and iridescent. They have many layers, the thinner the layers, the finer the luster. The unique luster of pearls depends on the reflection, refraction and diffraction of light on the translucent layers.

In the past, natural pearls were used as decoration on clothing or crushed and used in women's makeup. Today, pearls are used mostly in jewelry.

Fine quality natural pearls are rare; their value is determined by, as with other "gems and jewels," their shape, size, color, orientation and luster. These days most natural pearls are confined to the Persian Gulf (in seas off Bahrain) and Australia (South Seas pearl industry).

MOONSTONE



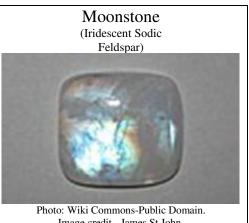


Photo: Wiki Commons-Public Domain. Image credit - James St John, License/ reviewed by *FlickrR2* Moonstones have a "moon-like" appearance. They are a sodium potassium aluminum silicate of the feldspar group. Their internal blue-milky white (pearly) shimmer, called *adularescence* or *schiller*, is caused by light reflecting off alternating layers of albite and orthoclase minerals within the stone. It is said they have an opalescent

schiller. Alternatively, they are referred to as hecatolite, from the goddess Hecate.

Moonstones vary from white, green, yellow-brown, grey to almost black (schiller effect of blue, silver or white) to transparent. This equates to quite a variety of moonstone. Sri Lanka is the global main producer of moonstone and with secondary producer, Myanmar, have high quality moonstone. There are other deposit locations which include Brazil, Mexico, USA, Madagascar, Tanzania, India, Norway, Poland and Switzerland.

Moonstone is usually cut as a cabochon or in a moon shape to reveal the adularescence effect at its best. It is a popular material used by jewelry designers, clockmakers, lapidarists, as well as silversmiths.

Alexandrite Variety of Chrysoberyl Photo: Wiki Commons Released under the GNU Free Documentation License

ALEXANDRITE

BeAl₂O₄

Alexandrite, a rare variety of gem-quality chrysoberyl, has a unique and fascinating color change. This gemstone is bluish green in daylight and purple red under incandescent/artificial light. There are other varieties of alexandrite: yellow or pink during the daylight and columbine (reddish) and raspberry red by incandescent light.

Note: Chrysoberyl is an aluminate of beryllium and is 8.5 on the Mohs scale. It is <u>not beryl</u>, although they both contain beryllium.

Alexandrite was first reported from emerald mines in the Ural Mountains, Russia, in 1834. That day happened to be the same day the future Russian Tsar, Alexander II, became of age. Eventually, the stone was so named in his honor by Nils Gustav Nordenskiöld (1792-1866), a Finnish mineralogist.

Over the years, the original Russian alexandrite deposit has been depleted. However, specimens can be found in certain museums and private collections. Newer deposits are in Sri Lanka, East Africa, India, Madagascar, Tanzania and Brazil.

There are, in fact, some famous alexandrite gemstones. From Brazil is the Whitney Alexandrite coming in at 17.08 carats and from Sri Lanka is the Smithsonian's Alexandrite of 65.7 carats. There was a whopper of a tale of a 122,400 carat (54 lbs.) alexandrite from Brazil that is supposed to be housed in the private collection of Jules Roger Sauer, its discoverer. It's said that the specimen is uncut.

Like most gemstones, alexandrite can be produced synthetically in the lab but are actually referred to as *simulated* rather than *synthetic*.

If you are a June baby, which is your favorite and why?

References: Wikipedia, Mindat, Wiki Commons Images, Petra Gems.com, SaltShack.co.wk/admiring-alexandrite/

MSSC's FIRE VICTIMS FUND

Is now accepting your tax-deductible donations by **checks**, **money orders** or **gift cards**. Visit **www.mineralsocal.org** for full details how you can help. Thank you for donating to MSSC's members and affiliates who *lost everything* in the January 2025 devastating Eaton wild fires.

National Park vs National Monument

Is There a Difference Between National Parks and National Monuments?

There *is* a difference between National Parks and National Monuments. How they are created is the primary difference and how they're managed is the second difference.

National Parks (NPs) (and National Forests Historical Sites, etc.) are created by an act of Congress. All National Parks are managed by the National Park Service under the Department of the Interior. The **National Park Service** was created in 1916 under the Organic Act, "...to conserve the scenery and the natural and historic objects and wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations³.

There are currently 63 U.S. National Parks¹. The NPs are protected areas that were selected/designated for their beauty, unique geologic features, recreational opportunities, diverse ecosystems and "because there is some outstanding scenic feature or natural phenomena." The first NP was Yellowstone (1872) followed by Mackinac (1875). NPs are more of <u>a destination</u>. There is no hunting or extractive activity allowed². California has the most NPs with 9, Alaska has 8, Utah has 5 and Colorado has 4.

National Monuments (NMs) are created either by Presidential Proclamation <u>or</u> an act of Congress. National Monuments are <u>managed by several agencies</u>: the National Park Service, the U.S. Forest Service, the U.S. Fish and Wildlife Service, the Bureau of Land Management (BLM), National Oceanic and Atmospheric Administration (NOAA) and some are managed by multiple agencies depending on their specific designation and their location. National Monuments can be managed by one to two of eight Federal agencies from five departments depending on location and/or management goals.

There are currently 138 U.S. National Monuments². The first NM was the Devil's Tower (WY) followed by the Petrified Forest (AZ) then many others. <u>NMs are protected for their historical or archaeological significance</u>. California has the most NMs with 20 followed by Arizona with 19 and New Mexico with 13.

President Barak Obama proclaimed 34 NMs, the most of any president. The land and water mass includes over half a *billion acres* of public land and water that is protected² by his proclamations designated at his discretion.

There are many instances where designations or proclamations have changed the status of the lands originally referenced. Former NMs have been redesignated as NPs or other status while others still had been turned over to their state or disbanded. Likewise for National Parks, some were former NMs while others have been redesignated by Congress².

It's confusing, an intricate web of Federal lands, agencies, designations and regulations!

There is more, of course, a lot more, all the bills, legislation, how the military is involved, what happened during the wars, etc., but all of that is another story for another time.

Thanks for your interest.

References:

- 1 https://nationalparkobsessed.com/list-of-national-monuments/
- 2 https://en.wikipedia.org/wiki/National_monument_(United_States)
- 3 https://www.nature.nps.gov/air/Regs/npsOrganic.cfm

National Monument UPDATE

RE: Mojave Trails National Monument and Chuckwalla National Monument.

Neither "national monument" has been finalized in their designations. The Mojave Trails' management report has not received final approval as a proclaimed National Monument. Chuckwalla is bogged down with a lawsuit by a group out of Texas who say there were violations involving the Antiquities Act of 1906 process. It also has not received its final approval and probably will not for a few years.

End result, as of this report received at the CFMS Convention May 10, 2025, by your CFMS Director, both NMs are still open to *recreational rockhounding*, **including mineral collecting and in-the-field classroom study.**

MSSC Membership ZOOM Meeting Minutes, Friday, May 9, 2025

Welcome

President Angela Guzman welcomed 36 members and guests to the Mineralogical Society of Southern California's 1,038th membership meeting (MSSC's 60th Zoom conferencing meeting). She asked any guests to please introduce themselves; Doug Nicholson was visiting because he knows the speaker; he is from Vancouver Island.

Business:

Approval of the membership meeting minutes of April 11, 2025, as published in the May 2025 Bulletin. Angie asked for a motion to approve the stated minutes. A motion was made by Tony K. and seconded by Carolyn S. Angie asked if there were any additions, corrections or discussion; there were none. She called for a voice vote to approve the motion; the minutes were approved.

Approved Mineral Species Update

According to the International Mineralogical Association (IMA) there are 6,145 approved mineral species as published on the New IMA List of Minerals, May 2025.

Angie mentioned a pending new mineral species called Sugarwhiteite. For those of you who don't know, Sugar White was a member of MSSC who participated in the Pacific Micromount Conferences when they were held at the San Bernardino County Museum. Angie said this mineral is so new, she could not find it on Wikipedia or on Mindat.org, it stated the mineral's status is pending IMA approval. However, it is listed in a few publications: (a) IMA-CNMNC Newsletter 84, Feb. 2025, (b) Mineralogical Magazine 89 (2025) and (3) the European Journal of Mineralogy 37 (2025). The chemical formula is Pb₂Te₂O₁₂. The IMA year and number are 2024-079. It was discovered at Moctezuma, Bambolla Mine, Sonora, Mexico; she said as far as she can determine, that is the only location, so far.

The authors for this mineral species are Hexiong Yang, Anthony R. Kampf, Robert A. Jenkins, Ronald B. Gibbs and Robert T. Downs (2025).

Angie said she never met Sugar White, but saw her once at San Bernardino, she asked Tony and Annie and anyone who knew Sugar to provide some background about her. Tony said she was a great micromounter. Carolyn mentioned the beautiful mineral photographs she provided to the PMC.

Program

President Guzman turned the meeting over to MSSC Speaker's Chair, Carolyn S. who introduced the speaker, Phil Persson. Phil's talk was about the mim Museum in Beirut, Lebanon.

Phil started by providing some background on the museum. The mim (the name is inspired by the 24th letter of the Arabic alphabet, pronounced "mim", which is also the first letter of the worlds museum, mineral, and mines in both Arabic and English) is a public museum located in Beirut, Lebanon. It is the brainchild of Salim Eddé, a Lebanese entrepreneur, collector and scientist. The museum, located on the campus of Saint Joseph University in downtown Beirut, opened in October of 2013. It currently contains approximately 2500 specimens and is organized both systematically and aesthetically to stimulate excitement about minerals and the natural world in the public of Lebanon and beyond. The focus of the mim collection is both world-class examples of aesthetic minerals, as well as high-quality systematic specimens representing rare and unusual minerals, ideally in macroscopic, high-quality crystals.

The museum attracts nearly 40,000 visitors a year and is currently the #1 ranked activity in Beirut on the TripAdvisor website.

Phil showed a sample of mineral photos from the complete collection. Mr. Eddé gave him a copy of 2500 high quality images of the museum's specimens and a catalog. Many of the specimens are the best examples in the world. Phil showed crystals of minerals that rarely form crystals. Examples include: a golf ball sized natural diamond crystal.

• The largest known crystal of the unusual, rare earth element carbonate mineral burbankite.

- A 29cm crystal of Anhydrite from the Balmat mine (the topic of our April meeting).
- A 13cm Azurite "rose" from the Milpillas copper mine in Mexico.
- A 40cm wide Elbaite Tourmaline, Lepidolite: "Chameleon Pocket", Minas Gerais, Brazil!
- An enormous 12cm V-Twin dichroic diaspore crystal
- A 7cm Elbaite attached to a gemmy pollucite crystal; the quintessential "mim aesthetic' the rare combined with the beautiful.

Rather than describe all the specimens Phil showed, I have provided some weblinks below. These show many fine specimens from the mim and the museum's web page supplies some information about each mineral specimen.

mim Museum Website

mim Facebook page.

Bluecap Productions Videos

99 Minerals of the mim Museum - WITH On-screen Labels

Salim Eddé - Founder; mim Museum, Beirut, Lebanon,

Part 5- mim Museum, Beirut Lebanon,

Part 6 - mim Museum, Beirut Lebanon

Conclusions:

- In addition to having one of the finest mineral collections in the world, the mim is a dynamic and growing museum which is taking a forward-looking approach to earth science education.
- Despite current political challenges, Beirut is a cosmopolitan city, rich with history and culture and is worth a visit no matter where you are from. The city is easily accessed by daily flights from around the world and the region.
- Mr. Eddé and his team have taken a unique and modern approach to creating a mineral museum, and their model can be replicated elsewhere to educate more people about the wonders of the mineral kingdom and the importance of earth science in daily life.
- The mim staff look forward to welcoming you to the museum on your next visit!

A short Q & A session followed. Angie thanked the speaker and all in attendance.

President's Messages

• MSSC is now accepting donations for the Fire Victims Fund relating to the January 2025 firestorms that raged through So. California. The Five (5) member and associates victims will benefit equally from your tax-deduction donations. We accept personal checks, Money Orders and Gift Cards. If you submit a check, remember to make it payable to Mineralogical Society of Southern California (or MSSC) and, in the *memo section*, please indicate "Fire Victims Fund." The last date to donate is September 30, 2025. Send your donations to MSSC's Treasurer, Carolyn S., at the address listed on MSSC's website. For full details go to: www.mineralsocal.org On behalf of these fire victims who lost their homes, everything really, thank you for your donations!

Announcements and Reports

- Field Trips (Marek C.) No trips planned.
- Banquet and August Picnic (Rudy L.) Banquet had 32 guests, and a great presentation. Lots of silent auction material (4 tables). Good food, good minerals, good company. The picnic will be August 23 at Caltech Tournament Park from 12-4 PM.
- Brief report on Financials (Carolyn S.) No report given.

Last Words:

• Angie spoke about the history of the MSSC, established in 1931. Our numbers are dwindling (early field trips had 200 people!). She said critical seats are open for the next term: President (2026 term), Treasurer (2026 term) and a director (2026-2027 term). She asked "Are you on the fence about volunteering for the Society? Need a nudge? Well, here it is. If no one steps up to run for President and no one steps up to run for Treasurer, your society will cease to exist. We will be mandated to close

our doors and dissolve our 501(c)3. As we are the oldest mineralogical society west of the Mississippi. I would be deeply saddened to see our historic organization disappear into thin air. So, how about it? Are you willing to give back to MSSC? Send me an email so we can arrange to meet to discuss this important issue. Thank you!"

- The next membership meeting will be at 7:30pm on Friday, June 13, 2025, via Zoom.
- Thank you all for attending tonight's meeting. Your membership and attendance are much appreciated. Hope to see you next time!

Adjournment: The president adjourned the meeting at 9:02 p.m.

Respectfully submitted, Leslie Ogg, MSSC Secretary

List of Upcoming MSSC Events: Mark your Calender!

Event	Date	Comments / Scheduled Program (if known)	
	ZOOM July 11, 2025	TBA	
Meeting Dates:	ZOOM August 8, 2025	TBA	
	ZOOM September 12, 2025	TBA	
Board Meeting	ZOOM July 20, 2025	ZOOM at 1:00 PM	
MSSC Picnic	Saturday, August 23, 2025	Great food & Silent Auction	
Field Trip	In The Works	Around the end of May into June; watch the website for more info.	

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

<u>The Ride Share Listing</u> is being temporarily discontinued until such time as MSSC starts holding in-person meetings again.

Mineralogical Society of Southern California (MSSC) Board of Directors Approved April 6, 2025

FIRE VICTIMS FUND

For the benefit of MSSC members and associates who lost their homes during the January 2025 firestorms that ravaged Southern California.

• 100% of your *tax-deductible* donations will be shared equally with the fire victims:

Laura Davis Alexandria Dorozhkinsa Keith Harshbarger Ann Meister

Alyssa Morgan

Send checks, Money Orders or Gift Cards to:

MSSC

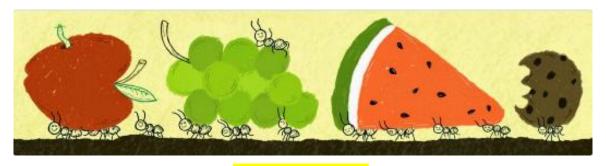
13781 Alderwood Ln, #22-J Seal Beach, CA 90740

Make checks or Money Orders payable to: MSSC.

In the Memo section please write "Fire Victims Fund."

■ *The deadline to donate is September 30, 2025.*

DONATE NOW while it's on your mind!



Save The Date:

MSSC Picnic 2025

Please join us for our annual potluck picnic and silent auction.

Date: Saturday-August 23, 2025

Time: 12:00 noon-4:00 pm

Location: Tournament Park on the campus of CALTECH.

1200 E. California Blvd.

Pasadena, CA 91125

Coming July: The RSVP sign up form and Potluck Food Sign up list will be released soon. Also, a Map, directions to Tournament Park, and parking directions will be included.

We need Silent Auction and Raffle items.

If you have questions, please feel free to contact the MSSC Picnic Committee: Rudy Lopez: rclopez002@verizon.net

OTHER (FREE) THINGS TO DO...by Ann Meister

The Watson Lecture Series at Caltech is on hiatus until the Fall semester. Watson lectures will return in October! Find past Watson Lectures on <u>Caltech's YouTube channel</u>.

The **Von Kármán Lecture** is on Thursday, **June** ?? at 5:00 PM. Available live on YouTube at <u>NASA Jet Propulsion Laboratory - YouTube</u>. Date, speaker, and topic were not available at the time of publication. Check website for information and past lectures <u>Lecture Series (nasa.gov)</u>. Previous lectures are available on YouTube.

The **UCLA Meteorite Gallery** is open to the public weekdays from 9 am to 4 pm and on Sundays from 1 to 4 pm when it is staffed with volunteer docents. Admission is always free. The monthly lectures seem to have been discontinued but the gallery is well worth exploring. Visit the website and check on events, videos, and other neat things including resources for teachers, Go to https://meteorites.ucla.edu

With Knowledge Comes Appreciation

Calendar of Events:

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

June 7-8, 2025 – Escondido, CA

Palomar Gem and Mineral Club

The California Center for the Arts, The Museum,

340 N, Escondido Blvd., Escondido, CA 92035

Hours: Sat, 10 AM – 5 PM, Sun 10 AM – 4 PM

Admission \$5.00, children under 12 free.

Enjoy a large free parking lot

Website: http://palomargem.org

June 14, 2025 – Bellflower, CA

Delvers Gem & Mineral Society

Holy Redeemer Lutheran Church, 14515 Blaine Ave.,

Bellflower, CA 90706

Hours: 9 AM – 4 PM

Rock and Lapidary Extravaganza - Parking Lot Sale

Website: https://delversgemclub.wordpress.com/

June 28-29, 2025 - Culver City, CA

Culver City Rock & Mineral Club

Veteran's Memorial Auditorium, 4117 Overland Ave.,

Culver City, CA 90230

Hours: Saturday 10 AM-6 PM, Sunday 10 AM-5 PM

Website: https://culvercityrocks.org/fiesta/

August 16-17, 2025 – Tehachapi, CA

Tehachapi Valley Gem & Mineral Society

Tehachapi Senior Center, 500 East "F" St., Tehachapi,

CA 93561

Hours: 9 AM - 5 PM both days

Website: http://tvgms.org

MSSC Adv	vertisement Policy:			
Mineral-related ads are allowable in the	ne MSSC bulletin. Below is	the price per month		
Business Card	\$5.00			
One-third page	\$10.00			
One-half page	\$20.00			
Full Page	\$35.00			
In addition, any advertiser who purchases 12 n	nonths of space in advance v	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 13781 Alderwood Lane, #22-J, Seal Beach, CA 90740				

2025 MSSC Officers:

OFFICERS					
President	Angie Guzman	president@mineralsocal.org			
Vice President	Renee Kraus	vicepresident@mineralsocal.org			
Secretary	Leslie Ogg	secretary@mineralsocal.org			
Treasurer	Carolyn Seitz	treasurer@mineralsocal.org			
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20252026	David Lesperance				
20252026	Pat Stevens				
2024-2025	Pat Caplette				
2024-2025	Ahni Dodge				
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Micro Mount Conf. Chair	Al Wilkins				
Program and Education	Rudy Lopez	programs@mineralsocal.org			
Speaker Bureau	Carolyn Seitz	treasurer@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. We are a scientific non-profit organization that actively supports those endeavors through public outreach, field study and related programs. 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. However, due to current health considerations, MSSC meetings are conducted via ZOOM conferencing until further notice. The annual Installation Banquet occurs in January, and the annual Picnic and Swap Meeting are in August. Check the Society website for details.

The Society also sponsors the annual Pacific Micro mount Symposium held at the Fallbrook Mineral Museum during the last weekend of January.

Annual Membership dues for the MSSC are \$30.00 for an individual membership, \$40.00 for a family membership. Bulletins are sent by email, there is an additional annual fee if you prefer paper bulletins mailed to your address. The Society's contact information:

Mineralogical Society of Southern California

13781 Alderwood Lane, 22-J, Seal Beach, CA 90740

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:



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Your MSSC Bulletin Is Herel