

Bulletin of the Mineralogical Society of Southern California

Volume 97 Number 12 – December, 2024

The 1,033rd meeting of the Mineralogical Society of Southern California

With Knowledge Comes Appreciation

A ZOOM Meeting

December 13, 2024, at 7:30 P.M.

Program: "The Rarest of the Rare at The Mineralogical & Geological Museum Harvard University" Presented by Dr. Raquel Perez, PhD, FGA

In this Issue:

TITLE Quartz of New Mexico	Page
Program: "The Rarest of the Rare at The Mineralogical & Geological Museum Harvard University" Presented by Dr. Raquel Perez	2
From the Editor: Linda Elsnau	2
From Our President: Angela Guzman	2
Minutes of the November 8, 2024, ZOOM Meeting	6
List of Upcoming MSSC Events	
MSSC Annual Banque & Silent Auction	
2025 Pacific Micro-Mineral Conference	
Other Free Things to Doby Ann Meister	
Calendar of Events	
Mineral Vocabulary	
2024 Officers	13
About MSSC	13

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: "The Rarest of the Rare at The Mineralogical & Geological Museum Harvard University" Presented by Dr, Raquel Perez

Dr. Raquel Alonso-Perez is a dynamic leader with over 15 years of experience in museum management, specializing in Mineral Sciences. Currently the Curator at Harvard University's Earth and Planetary Sciences Department, she spearheads strategic initiatives that enhance the collection, preservation, and public engagement of rare and valuable geological collections. Raquel's expertise lies in curatorial excellence, exhibition development, and collection management, with a focus on educating diverse audiences and promoting scientific discovery. With a Ph.D. in Mineral Physics from ETH Zurich and graduated gemologist by Gemological Association of Great Britain, Raquel has extensive field experience across continents. Raquel is a highly knowledgeable professional in mineralogy, petrology and gemology, with deep specialization in geochemistry. Raquel's work emphasizes innovative approaches to gemstone provenance studies and mantle geochemical processes, leveraging advanced analytical methods and technologies to push the boundaries of her field. Raquel has overseen major projects like the preservation of Harvard's mineral collection and has secured millions in grants to fund her initiatives, making her a pivotal figure in the development of modern mineral collections. Her leadership extends beyond the museum walls, serving on national boards, advising academic programs, and fostering collaborations with international research



The Hamlin Necklace

Photo Courtesy of the Mineralogical & Geological Museum at Harvard
University, The Hamlin Necklace,
by A.C. Hamlin.1890 ©2023,

President and Fellows of Harvard
College. All rights reserved

communities. Passionate about the intersection of science and public education, Raquel continues to drive innovative curatorial practices that ensure the long-term stewardship of invaluable natural history collections, while inspiring the next generation of geoscientists.

How to Join our ZOOM Meetings

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

For non MSSC Members who want to join this meeting. You must respond to our Programs chair, Carolyn Seitz speakers@mineralsocal.org. 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.

Boy, has 2024 gone by fast! It seems the older I get, the faster time flies.

May your holiday season be all that you hope it will be. I'll be back at my computer next year to put MSSC's Bulletin together for your enjoyment.

From Our President, Angie Guzman

These dendritic crystals form a branching pattern, much like a tree. The pyrolusite (manganese dioxide) crystals formed on a bedding surface of a piece of lithographic limestone collected near Solnhofen, Germany.

The Christmas Mine located in SE Arizona was staked in 1902, on, you guessed it, Christmas Day! It was mainly a copper producer. The mine operated, went bankrupt,



re-opened and then closed in 1980. It is currently owned by Freeport-McMoran and is closed to the public. The minerals *apachite*, *junitoite* and *ruizite* were discovered there.





<u>Apachite</u>: A rare hydrated copper silicate, it has been seen as blue fiberous crystals, spherules of radial fibers or as tiny blue botroyoidal crystals. Preview on mindat.org

Photo Credit:

The image is a public domain photo created by Aram Dulyan at the Natural History Museum of London



<u>Junitoite:</u> Calcium zinc silicate. This mineral was named for chemist Jun Ito.

Credit:

Wilimedia Commons – Free use with Attribution, Rob Lavinsky, iRocks.com CC-BY-SA-3.0



<u>Ruizite:</u> A sorosilicate was named for discoverer, Joe Ana Ruiz.

Credit: Willimedia Commons – Free use with Attribution, Rob Lavinsky, *iRocks.com* CC-BY-SA-3.0

Echo...

The following is an excerpt from MSSC's first BULLETIN, Vol 1, No. 1, November 1931 written by President John A. Renshaw. Hope you enjoy this historic throwback; A Message from the President.

"The germ of a new idea sometimes takes a long time to sprout. Two years ago, on a collecting trip to the Mojave Desert, I visited the plant of the Natural Soda Products Co., in Keeler, as the guest of our director, Mr. David Scott. One evening after a long day's search for specimens, the conversation naturally turned to rocks and minerals and their collection. Mr. Scott asked me if there was a collector's club in Southern California, and, upon my telling him that I knew of none, suggested that one be organized similar to an Eastern organization with which he had been most favorably impressed. Mr. Scott was the first man to offer his support to our club.

I gave no further attention to the matter until last spring, when a notice appeared in "Rocks and Minerals" asking if there was someone in Southern California who would organize a mineralogical club. Then I recalled Mr. Scott's remarks of two years ago, and wrote to the

editor of "Rocks and Minerals" asking him to run a notice to the effect that all interested in organizing such a club should get in touch with me. While awaiting the next issue, I asked my good friend, Mr. Van Amringe, if he would help me to organize the club, and he agreed to devote a limited amount of time to it.

Not until the announcement finally appeared did I realize what I had started, for I immediately began to hear from prospective members. This enthusiasm really frightened me into calling the first meeting. Mr. Van Amringe and I made out a list of all we thought might be interested and I mailed about sixty-five announcements. We thought perhaps twenty might respond and were pleasantly surprised when forty persons appeared at the first meeting. Probably the greatest factor in our success, both then and now, has been the generous permission of the Pasadena Public Library for the use of their lecture hall. The attendance has grown to the capacity of the room, nearly 200.

It would be unfair if I failed, at this time, to give credit to our secretary, Mr. Van Amringe, for the many ways in which he has worked for the welfare of the society. Those of you on the outside may not know how generously he has given of this time and effort. As long as he is secretary, I am sure our organization will prosper. I wish to take this opportunity of thanking him and our other officers and my fellow members for their hearty support. I had never dreamed there were so many men and women interested in the study of the various phases of mineralogy.

Why not? For after all it is a great hobby; and where would our civilization of today be without minerals?

I would like to see more specimens brought to our monthly meetings for display and exchange. Have you noticed how they add to the life and spirit of the gathering? Please remember that by the rules of the library, we are prohibited from selling specimens at the meetings. Also, kindly refrain from starting a sale at the meeting to be consummated later. It is most important not to commercialize our club. We now have our monthly bulletin, and those who have minerals for sale may reach prospective buyers through the medium of advertising. The rates are reasonable and may be had by applying to the secretary.

JOHN A. RENSHAW"

Mr. Renshaw realized back in 1931, that the importance of a great support staff is essential to the success of an organization! What Renshaw experienced with the help and support he received from Van Amringe and the other officers of the society, is nothing short of commitment and dedication to a like mindset. The Mineralogical Society of Southern California was founded on the desire and enthusiasm of men and women who wanted to get together and talk about minerals and mineralogy. The monthly meetings and occasional field trips afforded members the opportunity to do just that.

Today, we've evolved with the times; we hold our meetings via the ZOOM conferencing platform on-line and we have great speakers who provide wonderful presentations. Our post-COVID in-person field trips, annual summer social (Pot Luck Picnic and Silent Auction), the Installation Banquet and our Pacific Micro-mineral Conference (preceding the world known Tucson Gem & Mineral Show) has always been a great event. MSSC has been connected by our interests in all things mineral.

The glue to our success through the years has been, well, us...officers, board, committee chairs, our membership and even the guests who drop by to check us out. Individually and together we love minerals and continue to expand our knowledge of mineralogy. So, to all of us, THANK YOU!

Epilogue...

There is one more article I'd like to share/reprint. It is from that same first BULLETIN, November 1931 – by the Editor:

THE EDITOR'S CABINET

"It is our aim for this little paper to be entertaining as well as instructive. If this issue is too serious or too technical, please let us hear your wishes. Contributions, too, will be most acceptable. We hope to please all our members, for it is your money which keeps us going. Some day we may have enough advertisers to make this publication self-supporting. When you patronize the pioneers of this issue, be sure to tell them of the BULLETIN. Although we now have eighty-six members, we have barely scratched the surface. We know many members who feel that the initiation fee of \$1.00 and the \$1.00 annual dues are insignificant compared to the benefits of membership. We ourselves know how these benefits will increase with increasing numbers. How about every present member bringing in a new membership by Dec.14?"

I "echo" most of that article. We have not implemented the initiation fee for some years, but our annual dues have increased since 1931. That sentiment in the last sentence is something I'd like to request in 2024. Try to bring a new person to our membership meeting on **December 13th**. Contact any of the officers to get your guest on the ZOOM invitation list. We'll do the rest. Thanks!







The three photos above are in the Public Domain

'Tis the season...Merry Christmas, Happy Hannukah, Happy Kwanza and/or Have a Great December! It's been a fast 2024! I look forward to sharing 2025 with you. It's going to be a great year!

Note: These photos are not intended to offend anyone, they are not a political statement; they just are. Angie

E N D

MINUTES of the November 8, 2024, MSSC ZOOM Meeting

President Guzman called the meeting to order at 7:32 pm, she welcomed 36 members and guests to the 1,032nd membership meeting of the Mineralogical Society Southern California (MSSC). She said, it is our 54th ZOOM conferencing meeting. Angie asked for guests who would like to introduce themselves, there were none.

Approved Mineral Species Update

According to the International Mineralogical Association (IMA) there are 6,100 approved mineral species as of November 2024 posted in the New IMA List of Minerals. The complete list can be found on the IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) website, https://cnmnc.units.it/ Speaking of mineral species, Dr. George Rossman gave a short presentation listing 15 minerals that are named after current or former MSSC members. You can find the complete list in last month's (November 2024) bulletin.

President - OPEN MSSC Officer and Director Nominations & Hold Elections

President Guzman said "Per MSSC By-Laws and Operating Rules and Regulations, I hereby declare **OPEN** the Nominations for Officers (1-year term for 2025) and Directors (2-year term for 2025 and 2026)."

Accepted Nominations

Angie Guzman President

Renee Krause Vice President Pat Stevens - Director 1
Leslie Ogg Secretary David Lesperance - Director 2
Carolyn Seitz Treasurer Rudy Lopez - Director 3

Angie Guzman CFMS Director

Angie asked for any changes or corrections from last month's nominations. We did not have an accepted nomination for president last month. Angie self-nominated herself this month with the stipulation that she will not accept a nomination for 2026. She indicated that we had a slate and declared nominations closed. She opened the election: After asking for any objections, she asked for the slate vote by acclamation; the slate passed. She declared the elections final and closed the election. President Guzman congratulated and thanked all volunteers.

PROGRAM

President Guzman turned the meeting over to secretary, Leslie O. to introduce the speaker Glenn Waychunas, presenting a talk on Mineral Luminescence.

Leslie introduced Glenn Waychunas a visiting scientist at Caltech and a scientific associate at the Lawrence Berkeley National Laboratory.

Glenn began his talk by giving a tour of fluorescent minerals from around the world. He began by showing fluorescent calcite (bright lime green) and calcite on quartz (with phantoms) a dark green with red calcite. The next slide showed rocks containing willemite, sphalerite, calcite, wollastonite, and fluorite from Garpenberg Nord, Sweden. They were photographed under long-wave and short-wave ultraviolet light and showed a rainbow of spectacular colors.

Next were rare minerals from Franklin, NJ including florescent margarosanite (turquoise), a green and purple margarosanite, with willemite, and pectolite under short-wave UV, and Axinite (orange), hardystonite (blue), and willemite under long wave UV. Another white willemite from Franklin fluoresced bright green and had a green "afterglow" showing zoning in the crystals. A third 'beta willemite' fluoresced yellow under short-wave uv and orange under mid-wave uv. The different colors are due to different activators (trace elements that determine luminescence).

The next specimens were from Mt. St. Hilaire, Quebec, Canada, an alkali pegmatite. There was catapleiite which fluoresced green due to uranium. Natrolite and calcite; fluorescent green and pink. An elpidite and

microcline specimen (green and pink). Next a specimen from the cover of the current <u>elements magazine</u>. It contained sodalite, pectolite, microcline, gaidonnayite, and fluorite!

An aragonite from Agrigento, Sicily had zoned luminescence; pink-manganese crystals with blue cores from organics, the cores have a green afterglow.

Swedish minerals a "swirling" metamorphic rock with svabite, johnbaumite, and calcite from Jakobsberg. Langban minerals bright blue and pink/red. Limestone with sphalerite, dolomite, willemite, and hydrozincite from Hasselhojden. Apatite from Grangesberg (iron mine).

He showed some pictures of collecting in Sweden and showed an 18" specimen from Hasselhojden that fluoresced red from dolomite and yellow from sphalerite (under long-wave UV).

Another place Glenn collected was the Third Plain deposit, Blinman, Flinders Mtns, South Australia (zinc mine). There was fibrous willemite and hydrozincite, another specimen with massive willemite, hydrozincite, dolomite, and smithsonite crystals.

Next Dr. Waychunas told us about the cause of luminescence. It is similar to the production of color in minerals. Electrons are excited and absorb energy and produce light of varying colors. In luminescence something happens to the minerals after absorption. Depending upon the wavelength of light absorbed, the electron will first give off heat as it drops to a lower excitation level. When the electron goes from the 1st excited state down to the ground state, a photon of light is emitted. (Jablonski Diagram).

To fluoresce the mineral sample must contain activators (atoms, molecular units, electrons). For example, Mn, Fe, Cr, V, rare earth elements (Eu, Ce, Dy, Er), complexes (MoO₄, WO₄, TiO₆) and molecular complexes (UO₂, O₂, S₂).

Delayed luminescence: glowing after you turn the light off. In willemite the electron gets "trapped" by arsenic impurities. when the electron is released, you get thermoluminescence.

Classical Phosphorescence: happens only in organic molecules (esp. aromatic). The color of the fluorescence and the phosphorescence in the same specimen are different. In the example he showed calcite with an aromatic hydrocarbon: the fluorescence was blue, and the phosphorescence was green!

The last section of Dr. Waychunas lecture focused on two specific examples fluorite and apatite.

Fluorite fluoresces due to various activators and electronic defects (electrons in the wrong place). In calcite from Mt. St. Hilaire the calcite fluoresced red instead of the normal blue; all due to misplaced electrons M centers) and tenebrescence (look it up). Next, he showed red fluorescent fluorite from Berbes, Spain. The M centers are caused by radiation. If a fluorite crystallizes where there is radiation it produces red fluorescence.

The next slide was zoned color fluorescence and fluorescent inclusions in fluorite from China, and Cave-in Rock, IL. Some minerals will not fluoresce, but their inclusions will.

Peru fluorite from the Huanzala Mine. Cube-octahedrons with zoned fluorescence the pink internal surface has uranyl activation on specific faces. The pink emission is the sum of blue and orange, you can see it under midwave uv best. The specimen is 50 years old. Next an example of zoned color and luminescence in fluorite, from Okorusu, Namibia; due to Eu²⁺ Sm²⁺ coactivation.

Apatite has many fluorescent colors and interesting zoning. It can fluoresce many different colors; red, yellow, pink, blue. He showed one sample of apatite under different wavelengths of light: visible light-light pink, under 365nm blue, 405nm yellow, 295nm pinkish purple, 255nm purple. The color is due to rare earth elements and manganese. Another specimen Bolivian fluorapatite, an old specimen from Llallagua, Potosi, Bolivia tin mines. A colorless crystal, under short and mid-wave uv it was purple, under long wave it's bright yellow. Glen's last slide was zoned chlorapatite on calcite from Dashkasan, Azerbaijan. The crystal terminations fluoresced purple under mid-wave uv due to Eu2⁺, Ce³⁺ the crystal prisms fluoresced purple under long-wave due to Mn^{2*} and rare earth elements. The calcite glowed red at both wave lengths.

Thank you, Glenn, for a fascinating and colorful talk!

A lively Q & A session followed with lots of questions about UV lights and photography.

Business:

We have two sets of minutes to approve, both of which were published in the November 2024 bulletin: (a) membership meeting minutes of October 11, 2024, and (b) the board meeting minutes of October 27, 2024. Angie asked for a motion to approve the two stated minutes. A motion was made by George R. and seconded by Marek C. She asked for any additions, corrections or discussion. Hearing none. Angie called for the vote to approve the motion. The motion to approve the two stated minutes carried on a voice vote.

Announcements and Reports

- 1. Field Trips (Marek C.) Acton Saturday (10/19) they collected titanite, pseudomalachite, gemmy cuprite and metallic cuprite, Marek found native cuprite. There is a possible trip one weekend before Thanksgiving, he needs to scout the locale.
- **2.** Education/Outreach (Rudy L.) Orange County Parks event Saturday, 10/12; Rudy and Angie gave out over 370 bags of minerals, not rocks! See bulletin for report and photos.
- 3. Installation Banquet (Rudy L.) Pinocchio's, Pasadena, January 18, 2025. It will be a pre-paid, non-refundable dinner of salads, appetizers, pastas, and dessert. \$44 per person, \$46 if you use PayPal. We must put down a nonrefundable deposit for the space and meet a minimum group size. We are looking forward to receiving your donated items for the silent auction to be held at the banquet! An email flyer will follow. Rudy will reserve Tournament Park for the 2025 picnic.
- 4. National Monument Proposals (Angie G.): Please refer to the President's message in the November 2024 Bulletin and/or MSSC's website for more information. In the interest of mineral collecting, the latest national monument proposals, Chuckwalla and Kw'tsan in total, are over 1 million acres in the desert between the Chocolate Mountains and the Colorado River. This includes another big chunk of land from Joshua Tree! If you add the yet unresolved Mojave Trails' 1.6 million acres, we're looking at over 2.6 million acres of land that could be closed to mineral study, mineral collecting and rockhounding. Now is the time to become active by writing a letter (snail mail or e-mail) to your elected officials and representatives!
- **5.** (Angie G.): MSSC's next membership meeting will be held December 13^{th,} and our first quarterly board meeting will be Sunday, January 12, 2025. Both meetings will be held via ZOOM conferencing.

Last Words: President Guzman, on November 11th, thank a veteran for his or her service to this country. Have a Happy Thanksgiving. Thank you for attending tonight's meeting. Our next membership meeting will be held December 13, 2024, via ZOOM. Bert V. mentioned the West Coast Gem and Mineral Show happening this weekend; he will be on the hunt for fluorescent minerals! Marek mentioned a possible donation of chalcedony for tumbling from a man in Malibu. He will send the info to Rudy. Rudy mentioned Bob Pedersen's collection of micro minerals will be sent from Arizona to Pasadena. MSSC will be able to see them and possibly get a donation. We finished off the meeting with some corny rock jokes from Renee K.

Adjournment: The president adjourned the meeting at 9:23 pm.

Respectfully submitted, Leslie Ogg, MSSC Secretary

List of Upcoming MSSC Events: Mark your Calender!

Event	Date	Comments / Scheduled Program (if known)
Meeting Dates:	ZOOM January 10, 2024	Dr. Nathalie Brandes on "From Gold to Lead"
	Annual Banquet, Jan 18, 2024	Pinocchio's Restaurant in Pasadena (see details in Bulletin)
	ZOOM February 14, 2024	Joan Karrie on "Orbicular Granite from New Mexico
	ZOOM March 14, 2024	Christopher Stefano, PH.D.: TBA
Board Meeting	ZOOM January 12, 2024	ZOOM at 1:00 PM
Field Trip	TBA	No trips scheduled at this time

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.

MSSC ANNUAL BANQUET& SILENT AUCTION 2025

Pinocchio's Pizza, Pasadena
1449 N Lake Ave (near Washington Blvd)
Free parking in lot across the street

Saturday, January 18, 2025

Happy Hour: 5:30 p.m. – 6:30 p.m. Dinner & Silent Auction: 6:30 p.m. -11:00 p.m.

Plan to attend the Installation Banquet and Silent Auction, MSSC's fundraising Winter social! Dinner reservations are \$44 per person. We need your headcount* by Saturday, December 14th and must receive your *payment by Wednesday*, *December18*, *2024*. *NO REFUNDS*. IMPORTANT: MSSC will reserve the location with the required non-refundable deposit.

MAKE YOUR RESERVATIONS TODAY!

\$44 per person

Two Methods to Pay:

Use PayPal® through MSSC's website: www.mineralsocal.org (Please include \$2.00 fee assessed by PayPal®)

OR

Pay by check, payable to "MSSC."

Mail Checks to:

MSSC

c/o 13781 Alderwood Lane #22J

Seal Beach, CA 90740-3993

(*Please e-mail your reservation number to: treasurer@mineralsocal.org)

MENU

SALAD: Green Salad & Caesar Salad

APPETIZERS: Bruschetta, Caprese CHICKEN: Chicken Parmigiana

FISH: Fettuccine Alfredo with Shrimp

MEAT: Beef Lasagna

VEGETARIAN: Lasagna

DESSERT: Cannoli & Cheesecake.

BEVERAGES: Unlimited Soft Drinks, Coffee or Tea.

MSSC ANNUAL BANQUET
SILENT AUCTION

2025

Silent Auction items needed.

Your donation is somebody's treasure



PACIFIC MICRO-MINERAL CONFERENCE

January 31, February 1-2, 2025

Flyer by A Guzman

Photo by A Guzman

Where: Fallbrook Gem & Mineral Hall

123 W Alvarado

Fallbrook, CA 92028

Speakers: Friday, Jan 31 Herwig Pelckmans:

"A World-Famous Phosphate Locality"

Sitio do Castelo Mine in Portugal

: Sat., Feb 1 Paul Adams:

"The Reward Mine, Inyo County, CA

: Sat., Feb 1 Bruce Kelley:

"Art in Minerals"

Plenty of microscope time, lots of \$1 table micro items, Silent Auction and Oral Auctions and free specimen tables. Field Trip, to be announced. Meals on your own. Arrange your accommodations early as hotels/motels tend to book quickly.

Event Cost: \$20 pre-paid or \$25 at the door.

Register: Send your registration information and check made payable to

MSSC to:

Al Wilkins 34731 Calle Ramona

Capistrano Beach, CA 92624-1536

Conference chairs: Al Wilkins and Bob Housley.

OTHER FREE THINGS TO DO...by Ann Meister

The **Watson Lecture** is on holiday break. See you in January. Find past Watson Lectures on <u>Caltech's YouTube</u> channel.

The Von Kármán Lecture is on Thursday, December ?? at 5:00 PM. Available live on YouTube at NASA Jet Propulsion Laboratory - YouTube. Date, speaker, and topic were not available at time of publication. Check website for information and past lectures Lecture Series (nasa.gov). The November 2024 lecture is available on YouTube. The subject, "Fixing Voyager: How NASA Restored Communications with Voyager 1 from Across the Solar System" may be of interest to MSSC members.

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

The Huntington Library is offering a program on "Our National Parks, Past and Present: A Conversation," on December 2 at 6 PM at the Education and Visitor Center, Rothenberg Hall. The event is free with reservation. (Our National Parks, Past and Present: A Conversation | The Huntington) The Huntington and Huntington-USC Institute on California and the West presents a program focused on the history and present-day opportunities and challenges in the ongoing preservation of natural land in the form of national parks and monuments. How are the goals of the conservation movement and government agencies different now than they were in the late 19th century? How can we continue to improve our interactions with the landscapes that surround us? The newly expanded San Gabriel Mountains National Monument, located in Los Angeles' backyard, builds on the history established at Yellowstone and Yosemite, but it differs from those parks. In particular, ideas about pristine "wilderness" and Indigenous land rights have evolved in the past 150 years. Together we will consider what that evolution means for the 21st century. This program derives from the exhibition "Storm Cloud: Picturing the Origins of our Climate Crisis," which traces the rise of environmental awareness throughout the long nineteenth century. The show focuses on the work of British and American writers and artists who helped garner public and government support for conservation, including the establishment of the earliest national parks in the U.S.

Join a conversation with Rep. Judy Chu, who has long worked on the San Gabriel Mountains designation; Kimberly Morales Johnson (Gabrieleno/Tongva), Tribal Secretary of the San Gabriel Band of Mission Indians; and Megan Kate Nelson, historian and author of Saving Yellowstone: Exploration and Preservation in Reconstruction America. The discussion will be moderated by Josh Garrett-Davis, The Huntington's H. Russell Smith Foundation Curator of Western American History.

Calendar of Events:

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

2024

No CFMS Shows Scheduled for December

<u>2025</u>

January 18-19,2025 – Exeter, CA

Tule Gem & Mineral Society

Exeter Veterans Memorial Building, 246 Chestnut St.,

Exeter, CA 93211

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

Tule Gem & Mineral Society Gemboree

Website: http://www.tulegem.com

March 1-2, 2025 – Ventura, CA

Ventura Gem and Mineral Society

Ventura County Fairgrounds, 10 W. Harbor Blvd.,

Ventura CA 93003

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

Free admission but the Fairgrounds charges parking if

using the Fairgrounds lot.

Website: http://www.vgms.org

March 7-9, 2024 – Stoddard Wells, CA

Victor Valley Gem and Mineral Club

1-15 toward Barstow. EXIT #157, stay on Stoddard

Wells Road. Follow the signs 7 miles to tailgate

Hours: Daily 9 M – 5 PM

Family field trip on Saturday 9a-1p at local collecting

site.

Website: http://vvgmc.org

With Knowledge Comes Appreciation

MSSC Advertisement Policy: Mineral-related ads are allowable in the 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 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 13781 Alderwood Lane, #22-J, Seal Beach, CA 90740

Mineral Vocabulary

(Descriptions are as defined in Manual of Mineralogy, 15th edition, by: Dana & Hurlbut; published in 1941)



irocks.com photo

Massive

Any mineral that is compact material with an irregular form and no specific appearance described by other descriptive terms in common usage.

Lead:

Pb

Locality: Långban, Filipstad, Värmland, Sweden 7.9 x 6.4 x 2.9 cm



irocks.com photo

Twinned

Two or more crystals intergrown according to some definite "law" based on the molecular crystal lattice of the crystals.

Quartz:

SiO₂

Locality: Black Pine Mine (Combination Mine; Black Pine Tailings; Black Pine Dump), Flint Creek Valley, John Long Mts, Philipsburg District (Flint Creek District), Granite Co., Montana, USA

2.3 x 0.9 x 0.5 cm.



Calcite: CaCO₃
Mine No. 884, Leiping,
Guiyang Co., Chenzhou
Prefecture, Hunan Province,
China 7 cm



Aragonite: CaCO₃
Kombat Mine (Klein Otavi;
Asis), Kombat, Grootfontein
District, Otjozondjupa
Region, Namibia
8.9 cm x 6.4 cm x 5.3 cm

Polymorph:

When the chemical composition is identical, but the crystals form in more than one stable structure.

Dimorph: The property of a chemical compound to crystallize in either of two different crystal structures, e.g., CaCO₃ as trigonal calcite and as orthorhombic aragonite.

irocks.com photo

2024 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			
CFMS Director	Angie Guzman				
Past President	George Rossman				
DIRECTORS					
20232024	Simona Cianciulli				
20232024	David Lesperance				
20232024	Pat Stevens				
2024-2025	Pat Caplette				
2024-2025	Ahni Dodge				
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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. 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:

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To:



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