

# Bulletin of the Mineralogical Society of Southern California

Volume 97 Number 8 – August, 2024

*The 1,028<sup>th</sup> meeting of the Mineralogical Society of Southern California*

*With Knowledge Comes Appreciation*

## A ZOOM Meeting August 9, 2024, at 7:30 P.M.

**Program:** “What is a Pseudomorph?”  
**Presented by:** Erin Delventhal

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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: “What is a Pseudomorph?” Presented by: Erin Delventhal**

Pseudomorphs have captured the attention of scientists and collectors for centuries, yet those who have delved into the study of these mineralogical oddities may have noticed a distinct problem: when the question “What Is a Pseudomorph?” is asked, the answer often seems to depend entirely on who is asked. This presentation does not seek to answer that question definitively but to provide an overview of how that question has been answered over time.








Western accounts of the history of the study of pseudomorphs often begin at the turn of the 19th century, when the term *pseudomorph* (Greek; *pseudo* = false, *morph* = form) enters the lexicon from René Just Haüy’s *Traité de Mineralogie* (1801). In an intriguing example of simultaneous invention, however, other authors concomitantly began to describe the same phenomenon. *Afterkristalle* (German; *After* = after[1], *kristall* = crystal), a term generally attributed to Abraham Gottlob Werner as it appears in the works of his students, appears as early as 1794 (Estner).

[1] *After* can also indicate “no longer productive [...] (expressing that something is false or fake): <https://en.wiktionary.org/wiki/after-#German>

It is fitting that the story of pseudomorphs begins in disunity over what to call them, as the rest of the story continues in disunity about everything else: the definition of a pseudomorph, which classification scheme should be used for studying them, how they are formed, what should and shouldn’t be considered as a “true” pseudomorph, and so on – for some time, it was even debated as to whether pseudomorphs exist.

It is important to note that much of the literature concerning pseudomorphs known to the Western world is written in German, occasionally in French, and more recently in English. Many of these works have not been translated into other languages, rendering the study of the subject difficult. This record is also undoubtedly perforated by the absence of works in non-Western languages such as Arabic, Russian, Chinese, etc.

Though the study of pseudomorphs is rife with inconsistency and debate, investigation of these discrepancies provides an opportunity to question and redefine our understanding of what a pseudomorph is. The matter will not be settled today, but only further conversation can propel us towards an ultimate consensus: after all, no conflict can be resolved without understanding the disagreement.

				
<p><b>Malachite ps. Copper ps. Aragonite</b></p> <ul style="list-style-type: none"> <li>• Corocoro, Pacajes Province, La Paz, Bolivia</li> <li>• 2.0 cm • Erin</li> <li>• Erin Delventhal coll. &amp; photo</li> </ul>	<p><b>Copper ps. Azurite with Crinoids</b></p> <ul style="list-style-type: none"> <li>• Copper Rose Mine, Grant County, New Mexico, USA</li> <li>• 3.3 cm</li> <li>• Erin Delventhal coll. &amp; photo</li> </ul>	<p><b>Malachite ps. Azurite •</b></p> <ul style="list-style-type: none"> <li>• Burra Burra Copper Mine, Burra, South Australia, Australia</li> <li>• 3.2 cm • ex. Alex Venzke</li> <li>• Erin Delventhal coll. &amp; photo</li> </ul>	<p><b>Dolomite ps. Aragonite</b></p> <ul style="list-style-type: none"> <li>• Cottonwood Draw, Chavez County, New Mexico, USA</li> <li>• 3.9 cm</li> <li>• Erin Delventhal coll. &amp; photo</li> </ul>	<p><b>Copper ps. Quartz var. Agate</b></p> <ul style="list-style-type: none"> <li>• Wolverine No. 2 shaft, Wolverine Mine, Wolverine, Houghton County, Michigan, USA</li> <li>• 2.1 cm</li> <li>• Erin Delventhal coll. &amp; photo</li> </ul>

Erin Delventhal grew up collecting minerals with her family – long road trips were punctuated with detours where she and her brothers could get dirty (and very tired) while collecting minerals. Photography and design took precedence as a hobby and a profession for many years, but a visit to the Tucson Gem & Mineral Show rekindled her love for minerals. She rejoined the mineral community with enthusiasm and has since been an active member in several organizations ranging from local to international, has been involved in mineral museums, symposia, and other educational programs, and has joyously returned to a life punctuated by getting dirty (and very tired) while collecting minerals. Among other things, Erin works as a freelance photographer, photo editor, and graphic designer.

### 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 at [speakers@mineralsocal.org](mailto: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.

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### From the Editor: Linda Elsnau.

This is possibly the most difficult article I’ll ever write. My beloved husband Fred passed away mid-July after 6 weeks in hospital. I will miss him more than I can imagine. I am doing “OK” and endeavoring to stay busy. Along that line, I want to express my gratitude to MSSC as without the Bulletin to keep me anchored, I think I might have “lost it”.

Looks like an amazing program this month—don’t miss it.

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### From Our President, Angie Guzman

#### MSSC’s AUGUST “2-FER”



**AUGUST 9<sup>th</sup>**

**Membership Meeting** via ZOOM Friday evening at 7:30pm - includes speaker **ERIN DELVENTHAL**  
Photo: Microsoft Stock Image



**AUGUST 24<sup>th</sup>**

**MSSC’s ANNUAL POT-LUCK PICNIC AND SILENT AUCTION** at Tournament Park (Caltech Campus)  
Photo by A Guzman



### **SPOTLIGHT on RUTILE**

**Rutile** is a very interesting mineral. It comes in contrast of distinct habits and color. It has multiple crystal forms that are unique. Rutile can range from mirror-like metallic-looking crystals to dark reddish sub-metallic crystals to bright golden-yellow needles. Even the opaque metallic-looking forms are slightly translucent on edge under backlighting, with dark red translucent tinges.

<p><i>Photo</i></p>  <p><i>source</i></p> <p>Wikimedia Commons Images with attribute as follows:      {Information  Description={{en 1=Rutile on quartz - Bresil - Minas Gerais - Bresil (3.5x2.5cm)}}      {{fr 1=Inclusions de Rutile dans le quartz - Bresil - Minas Gerais - Brésil (3.5x2.5cm)}}  Source=travail personnel (own work)  Author=Didier Descouens  Da</p>	 <p>RUTILE in/on hematite with quartz      Novo Horizonte, Bahia, Brazil</p> <p>Photo A.Guzman</p>
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This mineral is known for its habit of forming needle-like inclusions within other minerals, especially quartz, in the form of long, slender yellow straw-like crystals. The inclusions provide unique optical effects. They, the inclusions, range from scattered needles to dense parallel fibers in the host mineral, called **rutilated quartz**. Rutilated quartz is used as a collector specimen and a gemstone.

Aside from rutilated quartz, there are other varieties of rutile. A few of the varieties include: **Ilmenorutile** (niobium bearing variety), **Sagenite** (acicular, reticulated, or capillary forms of rutile) and **Struverite** (tantalum bearing variety).

Chemical formula for rutile is  $TiO_2$ , titanium dioxide – often with iron (Fe); the variable formula is  $(Ti,Fe)O_2$ . The streak for rutile is white to light brown, it has a hardness of 6 to 6.5 on the Mohs scale and it has a tetragonal crystal system. As for colors, they are dark-red, metallic-gray, brownish-red, orange-red, reddish-black, straw yellow and golden-yellow.

The crystals are straight prismatic, long, and slender, deeply striated with steep terminations. Not to be outdone, there are short prismatic and thick stubby crystals, as well. Twining is common and in various forms, such as sixlings, eightlings, knee-shaped and V-shaped twins. Many times, there are snowflake-like aggregates, some in star-shaped formations as well as other variations.

The rutile fracture is uneven, and the tenacity is brittle. The Specific Gravity is high at 4.2-4.3. Rutile is igneous and metamorphic and belong to the Oxides group. It is used as a white pigment for paint, as a ceramic glaze and in optical equipment.

It is found in many deposits worldwide, but usually occurrences are limited to small and isolated crystals. However, Switzerland produces classic specimen in many alpine environments, and there are occurrences in some of the alpine areas of Italy.

Brazil has exceptional rutile occurrences, especially in the Novo Horizonte, Bahia, which produces golden-yellow *acicular* (fragile slender needle-like crystals) and star-shaped formations associated with mirror-like hematite crystals. Also in Brazil, are the prolific occurrences of rutilated quartz. In Minas Gerais, freestanding crystals and V-shaped twins occur in many of the gem pegmatites there.

United States has a few noteworthy sources: Lincoln County, Georgia (stubby, lustrous, mirror-like crystals), Alexander County, North Carolina (dark red and etched prismatic crystals), the unique sixling twins in Chester County Pennsylvania. Garland County, Arkansas produces rutile pseudomorphs after brookite. As for California, there are two localities of note that produce exceptional, lustrous stubby crystals. They are the White Mountains in Mono County and Darwin in Inyo County.



## What is the difference between a rock and a mineral?

According to [www.USGS.gov/faq](http://www.USGS.gov/faq)

A **mineral** is a naturally occurring inorganic element or compound having an orderly internal structure and characteristic chemical composition, crystal form, and physical properties. Common minerals include quartz, feldspar, mica, amphibole, olivine, and calcite.

A **rock** is an aggregate of one or more minerals, or a body of undifferentiated mineral matter. Common rocks include granite, basalt, limestone, and sandstone.

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### MINUTES of the July 12, 2024, MSSC ZOOM Meeting

MSSC President Angela Guzman called the 1,027<sup>th</sup> Membership Meeting of the Mineralogical Society of Southern California to order at 7:31pm. She welcomed 26 attendees. It is our 50<sup>th</sup> ZOOM meeting; she asked if there were any Guests who would like to introduce themselves, hearing none she welcomed all to the meeting.

Mineral Species Update: According to the International Mineralogical Association (IMA) there are now 6,062 approved mineral species as of July 6, 2024. Some of you may recall that our last report was 6,050 approved mineral species. This is an increase of 12 new mineral species that have been approved since the IMA May 2024 report. The latest report is from IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) Newsletter No.79 (June 2024).

MSSC members Dr. Anthony Kampf and Dr. George Rossman, as well as Caltech's Chi Ma, mineralogist Joe Marty and others, individually, jointly or with other scientists, have made contributions to many of the newly approved mineral species.

One of those mineral species is named Rotherkopfite, Newsletter 77 (Feb 2024). Rotherkopfite ( $\text{KNa}_2\text{Fe}^{2+}(\text{Fe}^{2+})_2(\text{Ti}_{1.5}\text{Fe}^{2+}_{0.5})[\text{Si}_4\text{O}_{12}]_2$ ) also identified as IMA no.2023-032a has a monoclinic crystal system. It is the lithium-free member of the neptunite group. Rotherkopfite has potassium, sodium, iron, titanium, silicon, and oxygen. Dr. Kampf, Dr. Rossman, Chi Ma as well as, Gerhard Möhn, Joy Désor and Yunbin Guan are cited as authors of the approved proposal. Type material is maintained in the collection of the Natural History Museum of Los Angeles County, USA.

Another newly approved mineral species is Chinnerite ( $[\text{Mg}(\text{H}_2\text{O})_6]\text{Na}(\text{H}_2\text{O})_2\text{Al}_3(\text{PO}_4)_2\text{F}_6$ ]) from Australia and is IMA no.2023-083. Authors are Dr. Anthony Kampf, Peter Elliott, Ian Grey, Colin MacRae, Stephanie Boer, Alexander Glenn, and Cameron Davidson. This mineral species also has a monoclinic crystal system and, type material is housed in NHM of LA County as well as South Australian Museum in Adelaide. Chinnerite contains magnesium, hydrogen, sodium, aluminum, phosphorus, oxygen, and fluorine.

There are many more...OK, finally there is Mangano-newberyite ( $\text{Mn}(\text{PO}_3\text{OH})(\text{H}_2\text{O})_3$ ) coming from Cassagna Mine in Genoa Province, Liguria, Italy. Dr Kampf, Chi Ma and Fabrizio Castellaro are authors. It is the manganese (Mn) analogue of newberyite. It is an orthorhombic crystal system and type material is maintained at the NHM of LA County

MSSC member Dr Anthony Kampf, Tony, has characterized 374 mineral species to date, more than anyone else in the world! Dr. Kampf, Dr. George Rossman, Chi Ma of Caltech and other scientists are devoted to characterization, identification and exploration of growth patterns and content of old and new mineral species.

By way of introduction, Dr. Kampf joined the Natural History Museum of Los Angeles County in January 1977 after earning his Ph.D. in Mineralogy and Crystallography from the University of Chicago. He was instrumental in creating the museum's world-renowned Hall of Gems and Minerals which opened in 1978. He oversaw the museum's gem and mineral collection growth from about 20,000 to more than 150,000 specimens, as well as, implementing other improvements and additions to the gallery. Since April 2011, he has been Curator Emeritus at the museum.

Tony conducts research in the areas of descriptive mineralogy, crystal chemistry and structural crystallography focusing on characterization of new or inadequately described minerals. He is the U.S. delegate to the Commission on New Minerals, Nomenclature and Classification (CNMNC) of the International Mineralogical Association (IMA).

Angie introduced Dr. Anthony Kampf and asked him to say a few words about his work with mineral species. He said one of the most rewarding parts of his mineral characterization work is being able to collaborate with people all over the world. He worked with three separate groups of people on the three new mineral species listed above, a group from Australia, Germany and Italy. He also mentioned a new mineral he and Paul Adams just submitted that is from Santa Barbara, CA. It is a fumarole mineral from the “Hope Ranch Volcano” (*sec. note: perhaps a future program about this mineral and area?*). He said he retired so that he could spend more time characterizing minerals. Angie asked. Who is number two on the mineral identification list, he said it is Igor Pekov. See the publication [Elements](#) for more details.

### **President’s Message - Announcements**

1. At MSSC’s June 30, 2024, Board Meeting, a motion passed to reject unsolicited announcements, requests for advertising, endorsements and the like, effective immediately.
2. MSSC Officer and Director Nominations and Elections: Nominations will be accepted during the October and November Membership Meetings and elections will take place at the November meeting as soon as nominations are closed. The following offices are one-year terms, except as noted:

President (2025)	CFMS Director (2025)
Vice President (2025)	Director #1 (2025-2026)
Secretary (2025)	Director #2 (2025-2026)
Treasurer (2025)	Director #3 (2025-2026)

This is your opportunity to give back to your society. No experience necessary. We offer on-the-job training. Huge benefits! Volunteer now, you will not regret it!

### **Business:**

Minutes to approve are from the June 14, 2024, membership meeting as published in the July 2024 Bulletin. A motion to approve the stated minutes was made by Ahni D. and seconded by Laura D. The president called for additions, corrections or any discussion, hearing none she called for a vote to approve the motion. The motion to approve the stated membership minutes was passed by a show of hands.

### **Announcements and Reports**

1. Field Trips (Marek C) – He went to Palos Verdes to scout a field trip spot; it was too hot!
2. Treasurer (Carolyn S)- Our member, Miko, is not in attendance tonight because he is hosting a gathering of 40 retired mineralogists and mining engineers in Indonesia.
3. Programs & Education (Rudy L)
  - a. Installation Banquet Location will be Pinocchio’s, we need at least 35 committed (pre-paid) guests before we can reserve a room. There are two separate menus with the price ranging from \$40-47 (including tax and tip). It will be January 11.
  - b. Annual Potluck Picnic and Silent Auction – (Rudy L) The picnic will be on August 24, 2024. The society will provide water. Guests/members can come as early as 8am to help Rudy set up. The sign-up sheet is posted on the [website](#).
  - c. Prehistoric OC will be this fall. MSSC will be handing out tumbled rocks, etc. to children. All members are welcome to help.
4. CFMS (Angie G)- Angie mentioned our member Michael Cox received a CFMS scholarship; he picked a student, Melissa Schott, from San Jose State as his awardee.

5. Membership recruitment brief report (Renee K)- Renee followed up on the ideas she presented at the June 30 board meeting. She said she has started a spreadsheet of Geology departments and contact info. from Universities and Colleges. She would like to send email flyers to schools. She suggested a QR code for our website so younger people can access quickly with their phones.



### **Speaker's Presentation**

President Guzman turned the meeting over to Carolyn S., Speaker Chair, who introduced tonight's speaker, Dr. John Rakovan who is the State Mineralogist for New Mexico and senior museum curator for the New Mexico bureau of Geology and Mineral Resources. He spoke about the Amethyst Scepters in Ashaway Village, Hopkinton, Rhode Island.

John started by saying the 44<sup>th</sup> annual New Mexico Mineral symposium is from November 1-3 in Socorro. He encouraged all to attend. The Featured speaker will be Daniel Trinchillo presenting the "Stories of the King of Kashmir."

John was a mineral collector from a young age, and getting involved in this discovery and the research behind it was a formative experience in his career. He started working on this project in 1981 while he was in High School. He said he would talk about the history and the mineralogy of the find.

The east coast of the US is well known for amethyst locations. They are produced by three types of geologic formations: Granite Pegmatites, e.g., Stoneham, ME; Basalt Flows, e.g. Paterson, NJ; Hydrothermal Veins, e.g. Jackson's Crossroads, GA. Many of these locations have been known about for over 100 years.

Rhode Island has some insignificant amethyst discoveries all the way back into the 1800s. In 1981 in Ashaway Village, in Hopkinton, RI, a significant amethyst find occurred; and it was not discovered by humans. He showed a beautiful cluster of 5-6 magenta colored amethyst on white quartz scepters, this piece is on display in the Smithsonian, and has graced the cover of the Mineralogical Record.

An early mentor of Dr. Rakovan, Sal Avella (1928-2013) owner of Apple Valley Minerals in Smithfield, RI was influential in John's life from the fifth grade on. Mr. Avella ran a butcher shop and started collecting minerals which took over the shop, so he started selling them! He showed a few photos of the shop insides from 1979, by then all traces of the butcher shop were gone.

The amethyst discovery site was called diamond hill, an allusion to previous milky quartz discoveries. Two teachers bought the property and built a new house. In the process of preparing a septic system leach field, some of the dirt from the area was dug up and moved and subsequently had a garden planted on it. Their chickens were pecking through the garden dirt and leaving piles of purple rocks. They called Sal Avella to come out and take a look; he took John with him. They decided that the purple amethyst rocks came from the leach field.

They went down and dug around the leach field as far as 20 feet down! They were digging through topsoil followed by clay. The holes were not safe for people, so they used a backhoe to bring the material to the surface where they could sift through it.

In later years they decided that they needed to close the hole up after every dig; for safety and to keep random collectors out of the hole. They would dig for one day each year. Sal continued to dig for the next 25 years. The best stuff was collected in the early 1980s.

Looking closely at what came out of the holes you see that most of it is very nice milky quartz crystals. They are very shiny but also opaque; the outer layer of the crystals is filled with fluid inclusions. The inclusions are so dense that even a thin section under a microscope is cloudy! The cores of the crystals are clear. The crystals they were looking for had a milky quartz stem partially covered by a gemmy purple amethyst cap.

Now a little geology of the area; they initially believed that the crystals were associated with igneous rock. The crystals were enclosed in clay which was assumed to come from feldspar weathered out of granite. But what actually happened is that the Diamond Hill deposit is in a Proterozoic quartzite of the Plainfield formation that is crosscut with granite inclusions which presumably formed the quartz.

To study what happened they decided to look at the fluid inclusions in the quartz; these inclusions contain the water that formed the quartz. They sliced 30-micron layers from the amethyst crystals. In the thin sections you see a round vapor bubble; this is called a two-phase fluid inclusion. The vapor bubble was not present when the crystal grew. The crystals grow at a high temperature and the inclusions are initially all water. When the crystal cools the water shrinks forming a void or bubble in the inclusion. To figure out the temperature the crystal grew, reverse the process! Heat the crystal until the vapor bubble disappears and note the temperature. You can also measure the salinity of the water. If there is salt dissolved in the water the freezing point will be different than pure water. If you freeze the sample, you can determine salinity.

Finally, if you break open the fluid inclusion you can measure the chemistry. The inclusion is frozen and then ablated with a laser; the melted water is sampled for isotopes of hydrogen and oxygen. The ratios and amounts of the various isotopes of hydrogen and oxygen can help determine the origin of the water.

Results show that the amethyst formed at a different (lower) temperature than the milky quartz; amethyst formed later from different fluids. Their hypothesis was that the amethyst sceptors grew from an igneous granite. The data from the fluid inclusions shows that the crystals grew from Meteoric water (water from Earth's surface). Surface water (rain) infiltrated and heated dissolved the silica and precipitated the quartz crystals. Based on the data the new interpretation is that the veins formed along faults that were infiltrated by water and that the clay is fault gouge.

From the data and close looks at quartz veins, you can see that some quartz broke and brecciated before the amethyst formed. He showed several examples to illustrate.

He mentioned Ben DeCamp, a surfer in Rhode Island who found amethyst pebbles on Green Hill Beach. Rivers from Ashaway flow to the beach; there are no other amethyst deposits in the area, so the pebbles likely came from Ashaway.

He finished by showing examples from Ashaway, they are in museums and collections all over the world. If you want more information: article in Mineralogical Record vol. 26, 1995, and Rocks and Minerals, 1986, vol. 61. And more recently a children's book "A Quest for Shiny Purple Crystals" by Monica Tsang Rakovan and dedicated to Sal Avella.

Lastly, he encouraged all to join the Mineralogical Society of America, mostly for their publication Elements. A short questions and answer followed.

**Last Words:**

- (a) BONUS IN AUGUST: Regular Membership meeting August 9 via ZOOM plus MSSC's In-Person Annual Potluck Picnic and Silent Auction on August 24<sup>th</sup> at Tournament Park (Caltech campus).
- (b) The president thanked all for attending tonight's meeting.

Adjournment: The president adjourned the meeting at 9:21 pm

Respectfully submitted, Leslie Ogg, MSSC Secretary

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**List of Upcoming MSSC Events : Mark your Calender!**

Event	Date	Comments / Scheduled Program (if known)
<b>Meeting Dates:</b>	ZOOM September 13, 2024	TBA
	ZOOM October 11, 2024	Scott Braley - Zeolites
	ZOOM November 8, 2024	Glenn Waychunas. -TBA
	ZOOM December 13, 2024	Nathalie Brandes - From Gold to Lead
<b>Board Meeting</b>	ZOOM October 27, 2024	ZOOM at 1:00 PM
<b>MSSC Picnic</b>	<b>August 24, 2024</b>	Technology Park, Caltec Campus Watch for more details
<b>Field Trip</b>	<b>TBA</b>	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.*

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



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**Save the Date: MSSC's Annual Picnic 2024 is coming up!** Cheryl & Rudy Lopez:  
[rclopez002@verizon.net](mailto:rclopez002@verizon.net)

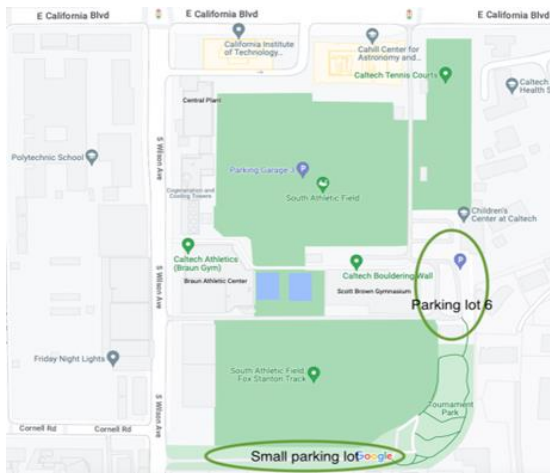
**Please join us for our annual potluck picnic and silent auction.**

**Bring a dish. Bring a friend.** We'll have our Silent Auction fundraiser, raffles (minerals and mineral-related items), hand-outs for the kids, great food, great friends, fun stories and much, much more! **Date:** Saturday-August 24, 2024

**Time:** 12:00 noon-4:00 pm

**Location:** Tournament Park on the campus of CALTECH.  
1200 E. California Blvd.  
Pasadena, CA 91125

**Directions: Park & Parking** To reach Tournament Park you can insert the name "Children's Center at Caltech" in Google Map, and you will be directed to the parking lot 6 (see picture). There is also a small parking lot inside Tournament Park off S Wilson Ave.



**You can sign up for the picnic and show your choice for food on the MSSC website. RSVP today!**

We have our website set up for you to RSVP and tell us what food you are bringing and how many are attending. Go to the main page of our website [mineralsocal.org](http://mineralsocal.org) and locate this text, or just click on the link below.

**[Sign up for the MSSC Picnic and silent auction.](#)**

The link will take you to the picnic form:

1. Click on **RSVP** and complete the form.
2. After submitting the form complete the part that says **Sign up below**, tell us what you are bringing, or you can sign up and donate towards the food.
3. This will be **the only way we track attendees**. If you do not use the forms, we will not know how many people are coming or if we have enough food. No email RSVPs please!

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### **INMEMORIAM - FRED ELSNAU**

It is with a heavy heart that I inform you of the passing of one of our long-time members, Frederick (Fred) L. Elsnau. On July 14, 2024, Fred passed peacefully after enduring a period of illness. He was 88 years old. He collected his first specimen at age 6 and never stopped. Self-taught in all things gem & mineral related, he was a fount of information for us all. In fact, at MSSC's annual picnic in August 2015, Fred shared about his favorites, neptunite and benitoite, telling the group that the benitoite twin crystal is rare and only found at the fringes of the ore body. They form 6-point stars, or Israeli stars (Star of David). Neptunite is a close associate mineral of benitoite, whose crystals occasionally twin forming an "X" twin.

Fred is survived by his wife, Linda, his sons Fred A & Edward as well as two grandsons, Danny and Christopher. . Linda Elsnau is MSSC's Bulletin Editor.

Our sympathies and condolences are extended to his family and friends. According to Fred's wishes, there are no services planned.

Angela Guzman,  
MSSC President

## MSSC Board Meeting June 30, 2024, via ZOOM

Roll Call: Present- Angie G., George R. (late), Pat S., Bob H., Renee K., Pat C., Marek C., Leslie O., Rudy L., Carolyn S. Excused: Laura D., Ahni D., Al W., Linda E., Simona C.  
Absent: David L., Ann M.

1. **From the Chair** – President Guzman called the meeting to order at 1:04 pm.

### 2. **Business**

- a) Approval of the April 14, 2024, Board Meeting Minutes as published in the May 2024 Bulletin. A motion to approve was made by Carolyn S. and seconded by Pat S. Angie asked for any discussion, questions, or corrections; hearing none she called for a voice vote. The motion carried.
- b) Updates/Discussion: 2025 Installation Banquet and Silent Auction: Chair: Rudy L  
Rudy stated that we need a minimum of 35 people paid in advance (to MSSC). Renee said we could get people to prepay to get enough to reserve a room. Angie offered two alternatives: someone's house or a restaurant with no minimum. Rudy said we tried The Only Place in Town- all a la carte ended up being \$55 without drinks or dessert. Leslie mentioned Hof's Hut would be amenable to separate checks. Marek mentioned we would not be able to have a speaker there. Renee said collect money with a suggested cut-off of September 1. Pat S. suggested we vote. Angie said wait Marek said bring it up at the picnic. Rudy said he will have the info. at the picnic and start collecting checks. Pat S. said, let's move forward and get commitments. Rudy asked about date: try to get January (second week). Angie was concerned that the prices will be a lot higher. Rudy said he will check the prices and have it for the picnic. Angie will announce at the July meeting, and we will take money at the picnic. Angie wanted to explore Hof's Hut; the problem is we would not all eat at the same time. Also, on a weekend they might not be happy with Pinocchio's. Collect checks with no refunds!
- c) Updates/Discussion: President Guzman mentioned unsolicited announcements, advertising, endorsements, etc. The question: should we accept and post on website and/or in MSSC Bulletin? As an example: *The Elder Statesman* – wants collaboration with “educational video or photo shoot and visits on field trips, mining sites, etc.” She said aside from insurance and liability issues, she wants to hear comments. Leslie-some of the contacts from the web site are scams: Renee-unless it is initiated by us. Angie formulated a motion “MSSC does not accept unsolicited announcements, ads, endorsements, and the like effective immediately.” Carolyn made the motion, which was seconded by Renee. The motion passed on a voice vote.
- d) A reminder from the President. These seats are up for re-elections (Nominations in October and Election in November): President, Vice President, Secretary, Treasurer, CFMS Director, Board -1 Simona C, Board -2 David L, Board -3 Patrick S
- e) There will be two meetings in August. The August 9<sup>th</sup> membership meeting with a scheduled speaker via ZOOM and the picnic on August 24.
- f) Picnic -Final Planning for MSSC's Annual Potluck Picnic and Silent Auction: We need volunteers for set-and tear-down; Simona and her family will come early to help set up and will help all day. Rudy said he will be there at 8 am and could use help setting up canopies and tables. Food Sign up forms; Leslie will post on MSSC's website. Rudy suggested the only people counted for the picnic will be the ones who RSVP via the web site. No emails! Donations for Silent Auction – Donations from the micromount conference. Some donated items were being inventoried by David L. Angie said we do not know if he finished. We need stuff to raffle. Marek said he will bring some for the giveaway table and kids. Leslie has some hand lenses, minerals, and Mineralogical Records to donate. Other purchases (water, plates, napkins, utensils, etc.)- club will provide. Angie wants to cook hotdogs: Rudy said he will bring a small grill. Tournament Park: 12-4pm.

### 3. **Reports**

a) Vice President (Renee K) – Membership Recruitment on Social Media. She had five ways to boost membership:

1. **Online presence, social media:** It is FREE - Following other people who are interested in rocks & minerals and earth sciences, ask if we can FEATURE OTHERS' PICTURES, – Liking others' pictures, commenting, engaging, saying thanks for following and let them know where they can find more info.  
**93 posts on our Instagram** – not one about membership, or @GEOSTUDENTORG in Riverside @pccdanaclub (the geosciences club at Pasadena city college) All kinds of posts...did you know series with cool facts, weekly photo features, etc.  
ADS – paying to get in front of the right target audience.
2. **Colleges/Partnerships** – Contacting professors/clubs of geology & sciences departments and ask if they will mention us or put a flyer up. These are going to be the people who are interested in our content.
3. **Membership Benefits** – Offer compelling incentives for joining. What do we have to offer people, students could take an officer position to add as a resume builder.
4. **Events** – Have a booth at events (other than the child-oriented events that we currently do annually) Children are not going to be paying for memberships and do not have the capacity to listen to an hour presentation. Or offer educational content for younger ones. Conferences, trade shows, community events.
5. **Giveaway** – Post online that we are giving away a free membership for a year! People may not even know what we offer as a club.

b) Treasurer (Carolyn S) – She sent a copy of her report to all board members, there were no questions or additions.

c) Secretary's Report (Leslie O)- nothing to report.

d) CFMS Director Report (Angie G) – Report on May 2024 CFMS Board Meeting and CFMS/AFMS Show. CFMS bulletin online only. She mentioned the awards banquet; especially the scholarship honoree Dr. George Rossman and his honoree from Caltech; Lily Randall.

#### 4. Director Remarks

Pat C (2024-2025) -CFMS show was a disappointment, no educational displays.

Ahni D (2024-2025)- excused

Simona C (2023-2024) – Instagram and Facebook status no report- excused

David L (2023-2024) - excused

Patrick S (2023-2024)- none

#### 5. Committee Reports/Comments/Issues

a) Bulletin Editor (Linda E): Linda appealed to all members for short articles for the Bulletin.

b) Field Trips (Marek C): A trip to Palos Verdes in second half of July. No date set yet. Also, exhibition of California minerals, they want some good minerals from other areas besides Pala.

c) Membership (Linda E): Nothing currently.

d) PMC (Al W, Bob H) -No updates.

e) Programs/Education (Rudy L)- The OC Parks event will take place in the Fall, mid-October.

f) Speakers (Carolyn S)- Carolyn listed the speakers she has for the next 4-5 months.

g) Webmaster (Leslie O)- Showed Instagram statistics

h) Past President (Dr. George)- Commented that students and younger people in general are not interested in what we want to share. He suggested YouTube videos of our field trips; one

downside is people may overrun collecting sites. In addition, video of laboratory analysis of the minerals. Angie said an assistant to go along and video, Renee volunteered to go along and

record some video clips. George mentioned the short YouTube videos, Ethan Baxter's, [“Every Rock Has a Story”](#) and said that's the direction we need to go. Pat S mentioned [Geo Beck](#) as another example of mineral/geology content on YouTube.

i) Historian (Ann M)- absent

#### 6. New Business:

Rudy had a question about raffles at the picnic. The number of items raffled will depend upon how many

people participate. Renee said that it would be good to mute everyone at the beginning of the meeting. Maybe announce that everyone is muted, and they must unmute to speak. Leslie volunteered to watch whether people are muted, and mute as needed. Another thing: Renee said we need to enable people to pay for patches, hats, and shirts, with PayPal, this is the only way younger people will buy these things.

7. **Next Board Meeting:** October 27, 2024, 1:00-3:00 pm.

8. **Adjournment:** President Guzman adjourned the meeting at 2:34 pm

Minutes respectfully submitted by Leslie Ogg, MSSC Secretary

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**OTHER FREE THINGS TO DO...**by Ann Meister

Everyone is on summer hiatus so there is nothing to report this month.

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**Calendar of Events:**

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

**August 17-18, 2024 – Tehachapi, CA**  
 Tehachapi Valley Gem and Mineral Society  
 Tehachapi Senior Center, 500 East “F” St.,  
 Tehachapi, CA 93561  
 Hours: 9 AM – 5 PM Both Days  
 Website: <http://tvgems.rocks>

**October 12-13, 2024 – Long Beach, CA**  
 Long Beach Mineral and Gem Society  
 Signal Hill Library, 1800 E. Hill Street, Signal Hill,  
 CA  
 Hours: Saturday 10 AM – 5 PM, Sunday 10 AM – 4  
 PM  
 2024 Gems on the Hill  
 Website: <http://www.facebook.com/LBMGS>

**August 24-25, 2024 – Arcadia, CA**  
 Pasadena Lapidary Society  
 Arcadia Masonic Lodge, 50 W. Duarte Rd., Arcadia,  
 CA 91007  
 Hours: Sat 10 AM – 5 PM, Sun 10 AM – 4 PM  
 Now in our 75th year, Pasadena Lapidary Society  
 celebrates our 64th Annual Tournament of Gems.  
 Website: <https://pasadenalapidary.org>

**October 19, 2024 – West Hills, CA**  
 Woodland Hills Rock Chippers  
 First United Methodist Church, 22700 Sherman Way,  
 Woodland Hills, CA 91307  
 Hours: 10 AM – 5 PM  
 Website: <http://www.rockchippers.org>

**No Shows scheduled in September.**

*With Knowledge Comes Appreciation*

<b>MSSC Advertisement Policy:</b>			
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 <a href="mailto:bulletin@mineralsocal.org">bulletin@mineralsocal.org</a> and the payment should be sent to the <b>MSSC Treasurer 13781 Alderwood Lane, #22-J, Seal Beach, CA 90740</b>			

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**2024 MSSC Officers:**

<b>OFFICERS</b>		
President	Angie Guzman	<a href="mailto:president@mineralsocal.org">president@mineralsocal.org</a>
Vice President	Renee Kraus	<a href="mailto:vicepresident@mineralsocal.org">vicepresident@mineralsocal.org</a>
Secretary	Leslie Ogg	<a href="mailto:secretary@mineralsocal.org">secretary@mineralsocal.org</a>
Treasurer	Carolyn Seitz	<a href="mailto:treasurer@mineralsocal.org">treasurer@mineralsocal.org</a>
CFMS Director	Angie Guzman	
Past President	George Rossman	
<b>DIRECTORS</b>		
2023--2024	Simona Cianciulli	
2023--2024	David Lesperance	
2023--2024	Pat Stevens	
2024-2025	Pat Caplette	
2024-2025	Ahni Dodge	
<b>COMMITTEE CHAIRS</b>		
Bulletin Editor	Linda Elsna	<a href="mailto:bulletin@mineralsocal.org">bulletin@mineralsocal.org</a>
Field Trip	Marek Chorazewicz	
Historian	Ann Meister	
Hospitality	Laura Davis	
Membership	Linda Elsna	<a href="mailto:membership@mineralsocal.org">membership@mineralsocal.org</a>
Micro Mount Conf. Chair	Al Wilkins	
Program and Education	Rudy Lopez	<a href="mailto:programs@mineralsocal.org">programs@mineralsocal.org</a>
Speaker Bureau	Carolyn Seitz	<a href="mailto:treasurer@mineralsocal.org">treasurer@mineralsocal.org</a>
Webmaster	Leslie Ogg	<a href="mailto:webmaster@mineralsocal.org">webmaster@mineralsocal.org</a>

**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. 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 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](mailto:treasurer@mineralsocal.org)

**Website:** [www.mineralsocal.org](http://www.mineralsocal.org) **The Mineralogical Society of California, Inc.**

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To:



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