



Bulletin of the Mineralogical Society of Southern California

Volume 95 Number 2 – February, 2022

The 998th meeting of the Mineralogical Society of Southern California

With Knowledge Comes Appreciation

A ZOOM Meeting

Note: Special Meeting Date

February 18th, 2022 at 7:30 P.M.

Program : A Brief Introduction to Indonesian Gemstones

Presented By: Sujat Miko

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Remember: If you change your email or street address, you must let the MSSC Editor and Membership Chair know or we cannot guarantee receipt of future Bulletins

About the Program: A Brief Introduction to Indonesian Gemstones

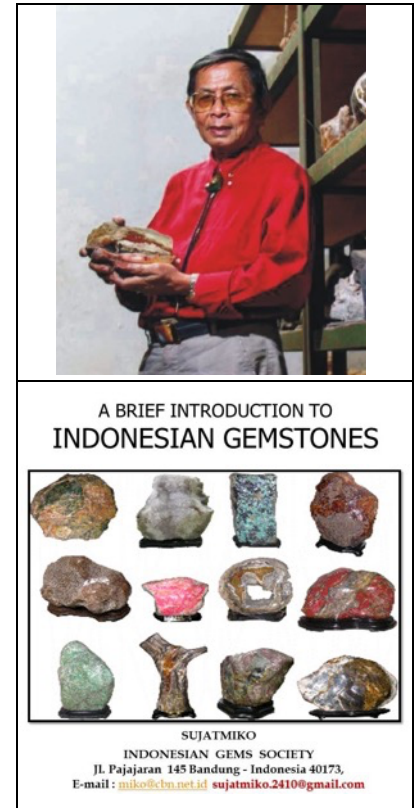
Presented By: Sujat Miko

A Brief Introduction to Indonesian Gemstones (with emphasis on Pictorial Gemstones taken from different geological environments in West and Central Java Provinces).

Presenter: Sujat Miko, In 1967 passed his geological degree from Bandung Institute of Technology in which the first and the third Presidents of Indonesia, respectively the late Sukarno and B.J.Habibie also received their degree. Sujat directly worked at the Geological Survey of Indonesia in Bandung and published several systematic and regional geologic maps. In 1973 he moved to Total Indonesia, Subsidiary of French Oil Company CFP and in 1978 passed his post graduate degree from French Petroleum Institute in France.

Sujat retired in 1986 and worked as a geological exploration consultant. In 1990 he started to collect various types of gemstones from almost all major islands in Indonesia. To be known, 33 out of 34 provinces in Indonesia have potential gemstone resources and 23 out of 24 varieties of those gemstones, which are his collections, were published on Indonesian stamps during the period between 1997 and 2001

He is a member of the Association of Indonesian Geologists and the Indonesian Gemstone Society and is also an active member of Rotary International and has been the Governor of Rotary Indonesia in 2006 – 2007, coordinating 100 Rotary Club's Presidents with more than 2000 Rotary members.



How to Join our ZOOM Meetings by Rudy Lopez

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

Non-Members must request to attend MSSC zoom meeting each month.

Please go to the MSSC website, <http://www.mineralsocal.org> to read our Bulletin for upcoming programs, then send Rudy Lopez an email, no later than the Tuesday before the meeting, to programs@mineralsocal.org and he will make sure you're contacted.

From the Editor: Linda Elsnau

Here we are at February, 2022 already, Happy Valentine's Day and President's Day.

Again, we have another interesting program scheduled this month. The presenter, Sujat Miko, lives in Indonesia and joined MSSC in February 2021. An interesting side effect of our ZOOM meetings is the possibility of world-wide membership!

Our Membership Roster is due to go out this month so make sure your membership is renewed in time to be included.

FROM THE PRESIDENT: Interesting Minerals, A to Z. Round 2, installment 23, the letter "W": by George Rossman

Wulfenite: PbMoO_4

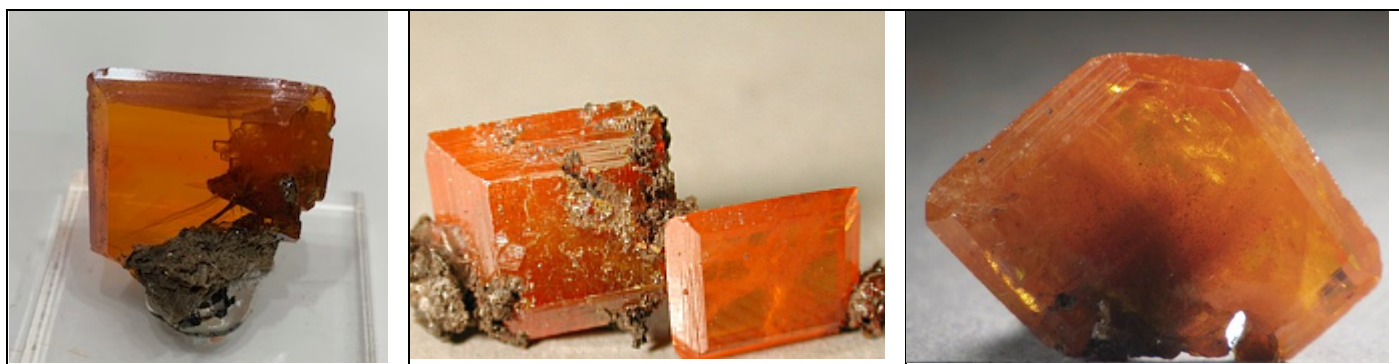
Wulfenite is a favorite among mineral collectors. It is a mineral that has undergone interesting name changes over the years. Originally, in 1772, it was named by Ignaz von Born "plumbum spatiosum flavo-rubrum, ex Annaberg, Austria" - roughly translated as a long yellow-red lead from Annaberg, Austria. Then, in 1781, Joseph Franz Edler von Jacquin renamed the mineral "Kärntherischer bleispath".

Finally, in 1845, Wilhelm Karl von Haidinger renamed the mineral in honor of Franz Xavier von Wulfen who was a botanist, mineralogist, and alpinist. Wulfen authored a monograph on the lead ores of Bleiberg, Austria. Naming the mineral after him is appropriate because the type locality is Bad Bleiberg, Villach-Land District, Carinthia, Austria.

Haidinger W (1845) Zweite Klasse: Geogenide. II. Ordnung. Baryte. VII. Bleibaryt. Wulfenit., in Handbuch der Bestimmenden Mineralogie, Bei Braumüller and Seidel (Wien) 499-506.

von Born I (1772) *Lythophylacium Bornianum*; Index fossiliumquae colligit, etc., Prague. part 1: 90.

Many of us are familiar with the thin, tabular crystals of this mineral species which are often bright orange red to yellow-orange color. It occurs as a secondary mineral in lead deposits wherein the primary ore minerals have become oxidized by hydrothermal activity. Beautiful crystals from the Red Cloud Mine are a particular favorite among collectors (**Figures 1-3**).



Figures 1,2,3. Wulfenite from the Red Cloud Mine, Yuma County, Arizona. Photo credits 1) GRR 2,3): Mark Garcia

If you buy the chemical lead molybdate, PbMoO_4 , from a chemical supply company, you will not get orange-red crystals. Indeed, it will be colorless. In fact, colorless wulfenite does occur in nature (**Figure 4**).

Obviously, not all wulfenites are orange. So, what is the origin of the orange color. The answer is that they have a minor chromium content. As Haberlandt and Schroll showed in 1950, the chromium is present as the chromate ion (CrO_4^{2-}) which substitutes in solid solution with the molybdate (MoO_4^{2-}). Chromates are bright orange, so it only takes a trace of chromate to cause the color. Haberlandt and Schroll determined that only 0.003-0.26% by weight is necessary. They also found traces of vanadium in some wulfenites. Talla *et al* (2013) confirmed the role of chromate as the cause of color with synthetic PbMoO_4 doped with various amounts of chromate.



Figure 4. A colorless wulfenite crystal fragment from Tsumeb, Namibia.
Photo Credit: Mark Garcia

Haberlandt, H.; Schroll, E.(1950) The color and fluorescence of wulfenite in relation to the content of chromium and other trace elements. *Experientia* (1950), 6, 89-90 (in German).




Talla D, Wildner M, Beran A, Škoda R, Losos Z (2013) On the presence of hydrous defects in differently colored wulfenites (PbMoO_4): an infrared and optical spectroscopic study. *Physics and Chemistry of Minerals* 30, 757-769.

Other colors of wulfenite occur. Some are paler and more yellowish (**Figures 5-7**). The yellow variety is often called yellow lead ore.

An interesting variety of wulfenite is the blue wulfenite from Tsumeb, northern Namibia (**Figure 8**). In an article by Embrey *et al* in the 1977 Tsumeb special issue of *Mineralogical Record*, they report dark blue pyramidal crystals of wulfenite that are zoned with a brown core. Their analyses showed a bit of tungsten in

the sample, but not arsenic, chromium, or vanadium. They speculated that the blue color was due to a small amount of molybdenum that was reduced from the 6+ to the 4+ oxidation state.

Embrey PG, Dunn PJ, Clark AM (1977) Blue Wulfenite from Tsumeb. Mineralogical Record, 8, 86-7.

		
<p>Figure 5. Wulfenite from Rialto Castle, Yuma County, Arizona Photo Credit: Mark Garcia</p>	<p>Figure 6. Wulfenite from Santa Maria del Oro, Durango, Mexico. Photo Credit: Mark Garcia</p>	<p>Figure 7. Wulfenite from Ojeula Mine, Mapimi, Durango, Mexico with mimetite and calcite. Photo Credit: Mark Garcia</p>
		
<p>Figure 8. Blue wulfenite from Tsumeb, Namibia. Photo credit: Mark Garcia</p>	<p>Figure 9. Wulfenite from Los Lamentos, Chihuahua, Mexico Photo credit: Mark Garcia</p>	

Another popular locality for wulfenite is Los Lamentos, Chihuahua, Mexico (**Figures 9-11**) where orange to brown crystals occur. In the United States, most wulfenite is found in various mines in Arizona, including the Red Cloud Mine, the Finch Mine, the Mammoth Saint Anthony Mine, the Glove Mine, and the Defiance Mine.

Sometimes wulfenite (PbMoO_4) is in solid solution with stolzite, lead tungstate, (PbWO_4). Some dealers sell tungsten-rich wulfenite under the varietal name “chillagite”. This, however, is not an official species name.

	
<p>Figure 10. Wulfenite from Los Lamentos, Mexico. Photo credit GRR</p>	<p>Figure 11. Wulfenite from the Ahumada Mine, Los Lamentos, Mexico. Photo credit: Mark Garcia</p>

Wulfenite is a secondary mineral usually formed in the oxidation zone of hydrothermal lead deposits. It can be associated with cerussite (lead carbonate), anglesite (lead sulphate), pyromorphite (a lead phosphate), and mimetite (a lead arsenate) as well as other minerals.

In unique situations, it may precipitate from volcanic fumarole gas, in temperatures from 400 to 550°C (Africano et al., 2002).

Africano, F., Van Rompaey, G., Bernard, A., Le Guern, F. (2002) Deposition of trace elements from high temperature gases of Satsuma-Iwojima volcano. *Earth Planets Space*: 54: 275-286.

Because of its striking color, crystal shape, and comparative availability, it is found in many mineral collections. It is also well-liked in Europe. The Austrian Mineralogical Society has declared wulfenite to be the Mineral of the Year 2020, but because of COVID and restrictions on meetings and gatherings, the honor was extended to 2021. Remember, the original type locality is Bad Bleiberg, Austria.

Chances are that you might even have some wulfenite in your collection.

MINUTES of the January 14, 2021 ZOOM Meeting

Call to Order (Dr. Rossman):

At 7:32 p.m., the 997th Membership Meeting of the Mineralogical Society of Southern California (MSSC) was called to order by President Dr. Rossman, Ph.D. It was MSSC's 20th ZOOM conference Membership meeting, 3rd under MSSC's license.

President's Remarks (Rossman)

Dr. Rossman reports that the International Mineralogical Association (IMA) has approved 5,780 mineral species thus far. Four years ago, the IMA had approved 5,320 minerals, averaging 115 minerals per year. Of late, 6 of the approved minerals are associated with MSSC member Dr. Tony Kampf and 2 involve Chi Ma from Caltech. And one of the newer ones, found in El Dragón Mine, Boliva, is a hydrated aluminum selenite hydroxyl-silicate named petermegawite. Peter Megaw is an exploration geologist and, among other distinguished career milestones, chairman of the Tucson Gem and Mineral show.

Regular Business (Rossman)

MINUTES: Dr. Rossman announced that the December 2021 Membership Meeting Minutes, as published in the January 2022 Bulletin, need to be approved. George asked for any corrections or additions, seeing none, called for a motion to approve the Minutes. Motion was made by Leslie Ogg, seconded by Ahni Dodge and there being no discussion, Rossman called for the vote which passed unanimously.

Installation of Officer and Directors (term starting January 1, 2022) (Ann Meister, Past President)

2022 Installed officers and Directors are:

President	Dr. George Rossman, Ph.D.
Vice President	Cheryl Lopez
Treasurer	Carolyn Seitz
Secretary	Angela Guzman
CFMS Director	Angela Guzman
Director 2022-2023 Ahni Dodge	
Director 2022-2023 Pat Caplette	

Ann Meister, Past President, installed the newly elected Officers and Directors by administering the oath of office. Congratulations to all! Our thanks to Ann Meister for the installations.

Announcements and Reports

1. Membership (Cheryl Lopez)

Cheryl had two announcements:

- a) Dues are due by February 12, 2022, for: (i) Roster inclusion and (ii) Bulletin. Please pay via PayPal through the website or send a check to MSSC in care of our Treasurer, Carolyn Seitz. Dues are \$30 for

individual or \$40 for household family. Please include the Membership application, found on-line or print copy included with the latest Bulletin and,

b) MSSC Board meeting is January 16, 2022. Please attend if you wish to bring something to our attention or if you have an issue to discuss. Please contact Cheryl or Rudy Lopez to be put on the ZOOM invite list.

2. Membership Meeting in February (Angie Guzman)

Angie announced that the February Membership meeting will take place on February 18, 2022, a week later than regularly scheduled. This delay is due to the gem shows in Tucson which will go through February 13, 2022. It will give our members, and others who attend our ZOOM meetings, the opportunity to travel to attend the shows in Arizona.

3. Programs Chair (Rudy Lopez)

Rudy reports:

- a) MSSC's 1,000th Membership Meeting will be celebrated at our April 2022 meeting. Rudy is putting a Power Point presentation together with information he's collected including old photos, notes about the first meeting and the first MSSC show in 1936 (in San Diego) that was attended by President Roosevelt! We want other members to participate, so if you have something to contribute, please contact Rudy as soon as possible;
- b) Speakers for our meetings are booked in advance and include Jurupa Discovery Center, which is preparing a video presentation of their facility for us and,
- c) Rudy has done outreach to other societies and clubs. In fact, we have a club member from Tennessee in attendance tonight. Welcome!

4. Field Trip Report (Marek Chorazewicz)

Marek reports that the next field trip is tentatively scheduled for Saturday, February 19, the day after our next Membership Meeting. The destination is Ord Mountain, south of Barstow. Collecting will include fluorescent minerals, hematite, magnetite, and lots of other minerals. Check the website and Bulletin for information. Let's go have some fun!

Program

Dr. Rossman turned the meeting over to Program and Education Chair, Rudy Lopez. Rudy reminisces about when he assumed the Programs Chair from Dr. Bruce Carter in 2013. While at a Pacific Micromount Conference, Rudy inquired about speakers. Someone in attendance introduced him to our speaker tonight, Denise Nelson and her husband Dennis. Since then, Denise has given MSSC many delightful presentations, usually at the January meeting.

Denise Nelson is a GIA graduate, she and her husband are world travelers who attend trade shows, visit mines, and collect treasures from Brazil, Thailand, Malaysia, China, Japan, Germany, and other interesting places. Denise designs and crafts fine jewelry and is herself an appraiser. She returns to MSSC for another great presentation. Welcome back Denise! Tonight, Denise takes us to *Tucson, 30 Years of Glitter*.

Denise greets the group and says, "I'm going to take you to Tucson, the kind of visit without having to go there." She tells us she has been going to the Tucson shows more than 30 years and she gives us a little of history about the gem shows there. Talk of a Tucson Gem show started about 1946 when Tucson Gem and Mineral Society, TGMS, had about 28 members. But it wasn't until 1955 that the first show was actually held - at an elementary school. It'd taken TGMS a while to get volunteers and build up their membership to take on the task of a gem show, though. Eventually, the society's show moved to the Convention Center, where it is held to this day. The "Tucson Gem and Mineral Show" is a combination of many exhibits that have grown over the years, venues were added and vendors, too, all originally domestic, but now, since the 1970's, include an array of international dealers and vendors with exotic and interesting items they bring to the table.

Today, the “Tucson” show is a destination. It has become a world-class grand affair and is an event experts, collectors, designers, artists, dealers, and vendors clamor to attend. There was no show last year due to COVID-19. This year’s will be different due to effects and restrictions of the virus, but the show will go on.

Tucson, as it is known, is preceded by the huge event in Quartzite, down the road. For a few weeks before the Tucson show officially begins, many people, as many as a million in past years (including “snow-birds”), go to Quartzite for pre-Tucson previews, bargains, and camaraderie. It is a bargain-hunters paradise! Beginning in late January, many people will migrate over to Tucson and settle in for the shows. By mid-month February, Tucson ends.

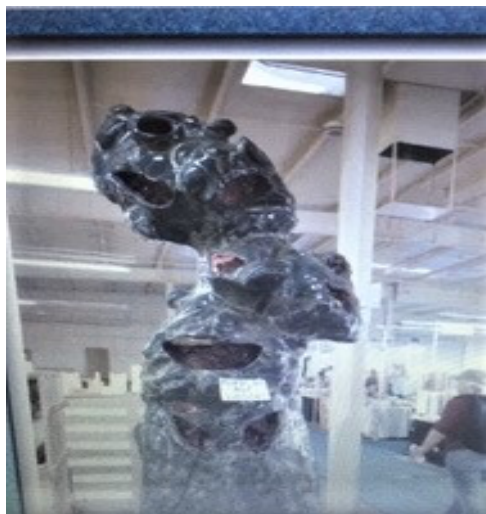
Here is a little of Denise’s history before we continue to the Tucson show. Back in the 1980’s, Denise told us that she worked for a jewelry company in Washington, D.C. No one from the company had ever gone to Tucson to see what was new, to acquire contacts, or to look for sources of gems or anything like that. She convinced her employer it was the thing to do and off she went to Tucson in 1987. She attended the shows for a few subsequent years while representing the company. Soon, however, Denise branched out, began her own business and continued to attend the shows on her own, all the while building her business, expanding her knowledge, and making those important contacts.

In Tucson, Denise tells us, the American Gem and Trade Association, AGTA, holds their show 3 days before the Tucson show opens. This special pre-show is for wholesalers. It attracts artists, designers, buyers, and sellers on an international scale. The AGTA show is very successful. Finally, the Tucson show opens in the Convention Center.

In her presentation, Denise gives us a tour of the 2015 Tucson show. She warns us to take our “tools” with us when we go, a hand lens, small fluorescent flashlight, etc. Many of the dealers have tools and equipment for sale, so if you forgot yours, you can easily pick something up. Your tool kit is for your personal inspection of the mineral specimens, gems, etc. – for you to judge the quality of an item you may wish to purchase.

Vendors and dealers display their goods. There are people who are experts in bead antiquities, such as Cindy Schloss. Her husband is an amethyst expert. Someone from California is an expert in etching on quartz. Another person, Angela Fowler, does fine wire jewelry. A fellow, Enrique, with Sea of Cortez Pearl Company is an expert in Baja pearls. Jade West, out of British Columbia, is the largest producer and exporter of nephrite jade. Many of these and other dealers and artists are known to Denise on a personal level. She has dealt with them over the years, and they basically know what she is looking for when she visits their booth or station. Other marvelous examples at the show include wonderful lapis on display, colorful tourmaline, citrine, gold, silver, precious gems and on and on. At any point, the dealers are helpful, answer questions and are polite and courteous. The point, Denise suggests, the experts, dealers, artists, and other vendors are all approachable and are willing to talk to you. Most are happy to share information and provide tips.

Denise showed exquisite mineral specimens, some huge, some small and all gorgeous. She teased us with a spectacular and unique creation made of kyanite, river sapphire, apatite crystals and opal. Price is \$16,500. She showed a large geode from Brazil that had its outer layer stripped off. The remaining crystal structure was just stunning [*Secy Note: my photo does not do it justice*]. She showed some of the large carvings from China (tables and chairs all carved out of stone). Then she flashed photos of some strange sunglasses made from tourmaline (on loan from the Larson Collection), a skull carved out of a meteorite, and some other crafted oddities (human face mask, huge fish etc.).



Geode without outer layer
Photo by Denise Nelson



Tourmaline sun glasses
Photo by Denise Nelson



Fake fossil cluster
Photo by Denise Nelson

She showed a wonderful photo of a huge bi-colored amethyst-acrylic rectangular table, maybe 4'x6', I'm guessing. It is quite a beautiful piece. Denise was surprised to learn it is from Morocco, not Brazil, where there is also such wonderful amethyst. She then showed an ancient sapphire carved with a unique, shell-like concave design that is just simply exquisite. Denise sprinkles tidbits of information within her presentation. The fossils, oops...she says these are fake! Take a look at the photo. It is extremely unlikely the fossil cluster is natural. It is; however, the fossils are real but the assembly is man-made. This is a case of a man-made fake fossil - lesson learned - buyer beware! Of course, there are actually real fossils in natural settings, too; but don't forget to bring your Geiger counter, some fossils give off a low-grade radiation. So, there are spheres and new freshwater pearls that are huge and have a natural peach color. While on some man-made items, there are beautiful quartz clusters (grown in a lab) that are milky white balls with spiky tentacles reaching out in all directions. Denise says that as long as the items are marked as man-made, and not natural, you should be all right.

Outside of the Convention Center, there are shows in hotels, open spaces with tents of vendors, industrial areas with other vendors, Keno Park area and so on. The tents are full of goodies for sale, flats upon flats, boxes upon boxes and vats full of everything (crystals) imaginable. Denise told us an amazing story she found out when she spoke with a vendor who sold his whole inventory to one buyer and got a great price to boot! In Keno Park, she spoke about the turquoise gallery of rough and cut. Hotels, such as the Marriott, showcase high-end quality specimens that are very pricey. Yet, some vendors sell only to wholesalers (you'll need to show your resale license), while others may sell specimen, slabs, cabs, etc., at wholesale prices (lucky you!). People who bought goods the year before may sell what they bought at the next year's show, for a higher price, of course. Overall, genuine article prices of gems, minerals, rocks, slabs, rough cut, etc., can cover a huge range, some pieces can go from a few dollars to the tens of thousands of dollars and beyond.

Oh my gosh, there is so much to see, so many places to visit, such a huge variety of everything mineral, gem, rock, fossil, etc., etc., etc. There is an entrance fee of about \$13 per day, perhaps a special price for a 3-day pass, perhaps. Plus, the TGMS Convention show has raffles and door prizes throughout the show. Some of the dealers and vendors have give-away(s) and there is always the merchandise, the eye candy! The show ends with a dinner banquet that is worth the \$35 or so cost. And, for your purchases, ask if there is a discount if you pay cash. Usually, there is a deal to be had! One more tip, if you go to a booth that is ready to pack up, say 2nd to last day or on the last day, you may get a good deal on your purchase(s). Overall, Tucson is so incredible.

It's impossible to cover Denise's entire presentation here. It's something you had to see for yourself. She gave us full descriptions, audio and visual, of what has happened in Tucson for years, past, present and for the future. Tucson is a fabulous experience whether you love minerals, gems, rocks or fossils or not. If you get the opportunity to go to Tucson, go. Do it for yourself. You will definitely not be disappointed! Thank you, Denise, for another wonderful presentation. A wonderful Q&A followed.

MSSC members and guests, please keep in mind this is an abbreviated report of Denise Nelson's *Tucson, 30 Years of Glitter* and does not do justice to her full presentation. But plan to join MSSC next month when our scheduled presenter will be Miko, who will speak on *A Brief Introduction to Indonesian Gemstones*. You won't want to miss it!

The next MSSC membership meeting will be Friday, February 18, 2022. The February meeting is scheduled a week later than normal due to the Tucson shows. We give those who wish to attend Tucson, the opportunity to visit and enjoy. Please check the Bulletin for meeting details and contact our Program/Education Chair, Rudy Lopez, to be included on the ZOOM invitation list for February 18th.

B J Ledyard made an announcement about Suiseki Stone Exhibit at the Huntington Library. It is virtual this year and can be viewed on the Huntington website now.

There was no other society business, and the meeting was adjourned by MSSC President, Dr. Rossman, at 9:03p.m.

Respectfully submitted, Angie Guzman, MSSC Secretary

*** * * REMINDER: MSSC will celebrate its 1,000th Membership Meeting on April 8, 2022. Do you have a story, photo, memory to share? Please contact Program Chair Rudy Lopez to submit your item for the Member's Presentation. * * ***

List of Upcoming MSSC Events : Mark your Calender!

Event	Date	Comments / Scheduled Program (if known)
Meeting Dates:	ZOOM March 11, 2022	Peter Megaw: TBA
	ZOOM April 8, 2022	MSSC Special Presentation
	ZOOM May 13, 2022	L, Michael Kaas: Silver Hill
	ZOOK June 11, 2022	John Rakovan -Mosaic and Split Crystals
Board Meeting	ZOOM April 3, 2022	ZOOM
Field Trip	February 19, 2022	Red Hill Prospect/ Ord Mountain near Barstow, CA

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

It's Time To Renew your MSSC Membership !

This will be your last MSSC Bulletin if your Membership renewal is not in by February 12, 2022!

Information to use PayPal is located on the MSSC website or mail a check and complete the Membership application (now online) to:

MSSC
13781 Alderwood Lane #22J
Seal Beach, CA 90740-3993

If you have any questions, please contact Cheryl Lopez at membership@mineralsocal.org.

As the Membership roster will be sent in Feb/Mar, renewals must be received by February 12, 2022, if you wish to be included in the MSSC Roster.

If you've already sent in your 2022 Membership Renewal....Thank You!

With Knowledge Comes Appreciation

MSSC Board Meeting Minutes, January 16, 2022

Call to Order and Roll Call

The MSSC Board meeting was called to order at 1:03 p.m. by President Dr. George Rossman. The following Officers, Directors and Committee Chairs were present: George Rossman, Cheryl Lopez, Carolyn Seitz, Angela Guzman, Ann Meister, Pat Caplette, Ahni Dodge, Leslie Ogg and Rudy Lopez. Excused were Bob Housley, Marek Chorazewicz, Al Wilkins, Linda Elsnau, Patrick Stevens and Laura Davis. There was a quorum.

Action Item (s)

Approval of the October 2021 MSSC Board Meeting Minutes as posted in the November 2021 Bulletin: Dr. Rossman asked for any corrections or additions and seeing none, asked for a motion to approve the minutes as published. Dr. Rossman called for a motion to approve the minutes. A **MOTION was made by Carolyn Seitz and seconded by Leslie Ogg**. There was no discussion, the vote was called and taken. The Motion to approve the Board Minutes of October 2021 was approved unanimously.

Reports, Items and Discussions

1) Comments from the President (Dr. Rossman):

Focus and increase of membership: Dr. Rossman has opportunity to interview many new students and visitors to Caltech. He asks them why or would they join MSSC. Many of the responses were concerning the speakers: topics, localities, mines they visit, minerals they find and those kinds of subjects. He thought the primary attraction would be field trips but was surprised to learn that students research sites on-line and by reading literature. Some of the students go out in the field on their own or with friends. Dr. Rossman said that we, as a mineral society should focus on minerals and that our center of attention is not jewelry, lapidary or rockhounds, for instance. George summed up this way, "...So, that's just a free-flowing set of comments I got. I realize speakers are hard to come by, but it seems to me if we want to bring in younger people, which I think is critical to the long-term success to our society, we've got to get mineral focused, mineral collecting type of talks..."

Board discussion followed with comments by Rudy Lopez (outreach), Carolyn (speakers and scheduling); other topics included speaker rates, Internet talks (ZOOM), environmental concerns (some don't like to dig in the dirt...yucky), social media ad(s), Young Mineral Collectors (YMC) on Instagram and advertising in a brochure/booklet for Tucson shows.

2) Treasurer's Report (Carolyn Seitz)

- a) *Status of MSSC accounts:* Carolyn reviewed the report she sent Board members prior to the meeting. There were no comments regarding these reports, including Logix bank accounts or the closed Bank of America account;
- b) *PayPal* notified us of money they received this morning;
- c) *Payments:* (1) Insurance payment is due through CFMS. A **motion** by Angie Guzman and seconded by Leslie Ogg to pay the insurance costs and postage as presented. There was no discussion, the vote was called and the motion to approve passed unanimously. (2) Carolyn asked to reimburse Guzman for her expenses to CFMS conference held November 2021 in Visalia. The **motion** was made by George Rossman and seconded by Leslie Ogg to approve reimbursement (hotel, gas, food). There was no discussion, the vote was called and the motion was approved;
- d) *Change in membership status:* Carolyn proposed that longtime member Richard Stamberg's (60 years member) status change to Life Member. The **motion** to change member status for Richard Stamberg to Life Member as of 2023 was made by Angie Guzman and seconded by Cheryl Lopez. After further discussion, Guzman amended her motion, agreed to by C. Lopez, to include absorbing costs of mailing printed Bulletin to him. There being no further discussion, the vote was called, and the amended motion was approved and passed unanimously.

[Action Item-future] A second membership change was proposed but rejected. Board discussion followed regarding acknowledgement of good deeds performed for benefit of the Society. Result of discussion was to annually publish an article in Bulletin to recognize such acts; details to be determined and forthcoming.

[Action Item – Ad Hoc Committee] Board discussion regarding recruitment of students becoming members of MSSC: Scholarships in the form of MSSC member- ships were proposed by Angie Guzman followed by additional favorable discussions. Result is Ad Hoc Committee headed by Guzman with assist by Ahni Dodge for the purpose of formulating a program/plan to expand this proposal.

e) Contribution to Mindat: Seitz proposed MSSC contribution to Mindat for \$500. A **Motion** was made by Pat Caplette, seconded by Cheryl Lopez for the \$500.00 contribution to Mindat. Board discussion included PCC, VanAmrige, Dana Club and PCC Foundation co-mingled funds. There was no further discussion, the vote was called, and the motion passed to send a \$500 contribution to Mindat for 2022.

3) Membership Chair Report (Cheryl Lopez)

a) Report on current membership numbers: Total members = 76, Honorary = 4, Life = 5, Individual = 41 and Family = 13 (26 members). We lost an Honorary Member quite recently. 23 E-Mails and 1 snail mail were sent to those who have not renewed. Each were informed about the 2/12 deadline to be included on the Roster, receive the Bulletin and, as a member, receive automatic ZOOM invitations.

Discussion regarding age of members: Cheryl states that we cannot ask the ages of members so there is no way to determine the age range although we know we have a few youngsters. A majority of our membership is of a mature age.

b) Cheryl drew our attention to two (2) forms: the on-line application in our Pay Pal and to the Xcel Membership Spreadsheet. She thanked Leslie Ogg for simplifying all areas of the on-line form, including the donation section. As for the spreadsheet, there were some technical questions about the workbook and sharing information with Linda (Bulletin) and Carolyn (Treasurer). Leslie was able to assist with these items.

4) Secretary Remarks (Angie Guzman)

a) 1,000th Anniversary Meeting update: Angie reported she sent e-mails to 16+ people regarding the April 8, 2022 meeting. Response has been disappointing, but they will be sent to Rudy (only 2 replies). Angie suggested that she is willing to go out to interview members if the member is willing to be recorded. If so then the video and/or audio files could be included in the PowerPoint presentation; Angie will send the photo of the 900th celebration cake to Rudy.

5) Field Trip Report (Marek Chorazewicz)

Field trip people are out scouting for our next trip so there is no report at this time.

6) Federation Director (Angie Guzman)

No report at this time.

7) Programs and Education (Rudy Lopez)

a) There was discussion regarding Diamond Dan publications (which is geared toward youngsters), a possible plan for family day trip, suggestions for collection sites including Silver City, NM and Rudy reported that a family with a young son renewed their membership;

b) Planning for our 1,000th meeting is still in the works, and he is coordinating with Dr. Rossman on the project.
REMINDER: All member contributions will be helpful!

8) Webmaster Report (Leslie Ogg)

a) Thinking about adding a link for kids and families on the website;

b) Field page still leads in driving most “hits” (views), in the last 3 months Field Trips has had over 400 of the 694 views (some looked as far back as a 2019 trip). Some of the views are from upcoming MSSC member meeting posts Leslie enters on Facebook and Instagram (no views). Speaking of Facebook, we have 573 “likes”. And, on the webpage, there was a spike in views (200+) for the January 2022 meeting;

c) Membership form: some changes for next year’s membership form will be added;

- d) Discussion about posting speaker's recordings on the website and the copyright materials legal issues. It would be possible to post on the website for those speakers whose materials, including photos, that are their own and they give permission. We could require a disclaimer but, truth is, we need legal advice for waiver or a hold harmless agreement before we proceed.

Board discussion included Mineral Talks Live (Internet program) which is very much an international forum as compared to MSSC's which is mostly local. We need to increase our impact and membership before we become irrelevant and wither.

9) Pacific Micromineral Conference (PMC) (Al Wilkins)

This segment was led by Dr. Rossman as Al was excused. There was talk of moving the PMC to another timeframe due to Covid, etc. Spring or early Fall is possible but, if so, perhaps the Fallbrook space is not adequate - given Covid restrictions. Discussion included: (a) PMC event has been followed by Quartzite then Tucson. The late January show is convenient for out-of-towners to flow from one to the next to the next, (b) MSSC may be hard pressed to find a meeting space that could accommodate PMC whether it is Huntington Hospital or the Masonic Lodge. The Arboretum is expensive, even Eaton Canyon Nature Center may not work. The Board discussion on this item will be carried over to the April 2022 Board meeting.

10. Next Meeting Date: April 3, 2022.

Adjournment at 2:30 p.m.

Respectfully submitted by Angela Guzman, MSSC Secretary

Upcoming Field Trip Information by Marek Chorazewicz

Hi, fieldtrip friends!

Let's get out into the desert together in mid-February for a trip to the Red Hill prospect (a.k.a. L. Shouse mines) on the southern tip of the Ord Mountain south of Barstow. We will meet on Sat, Feb 19th, 9:00AM at the Harrod Rd turnoff from the Camp Rock Rd north of Lucerne Valley at the following coordinates: 34°33'40.9"N 116°46'55.9"W (34.561352, -116.782205). It is 106 miles, less than two hours of drive from Pasadena. Here is the Google Maps directions link:

<https://goo.gl/maps/dkbAwCAgHHXwSNX39>

Then we will continue 7 miles NNW towards the Ord Mtn to the Red Hill prospect on a dirt road. It has some washboard and some deeper ruts, but there is a parallel set of tracks on the side, even a good-size sedan will make it. Mid-February weather usually is very nice for a desert trip. However, in case of rain, I would have to reschedule for the next weekend, Feb 26th, to avoid fighting a muddy dirt road.

The mine has good molybdenite platelets, which oxidize into yellow SW UV fluorescent powellite. There are rare gemmy powellite crystals in vugs as well, up to a few millimeters in size. Also present are dark green malachite, blue chrysocolla, hematite, mm-size octagonal magnetite crystals, and pale green and tan stilbite crystals up to a cm size. The Mindat location is here:

<https://www.mindat.org/loc-89353.html>

More fluorescent pics on the fieldtrip invitation webpage!

Hope to see you all there, Marek C

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



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

The Watson Lecture is on Wednesday, February 9. Each Watson Lecture will begin at 5:00 p.m. Pacific Time. Each lecture runs approximately 40 minutes, followed by live audience Q&A. Advance registration is required: [Watson Lecture - Artificial Intelligence: the Good, the Bad, and the Ugly | CaltechLive!](#). The speaker is Yaser Abu-Mostafa, Professor of Electrical Engineering and Computer Science at Caltech. The title of the presentation is, “Artificial Intelligence: the Good, the Bad, and the Ugly.” Artificial Intelligence (AI) is a remarkable technology that has profoundly impacted our lives. It now beats humans at some of their own games. How did we get here? In this lecture, Abu-Mostafa will describe the scientific journey of AI since the 1980s, as well as Caltech's foundational role in its development, providing examples of AI's achievements and its potential. He will also address the hype that surrounds AI, both positive and negative, and put it in scientific perspective. Find more past Watson Lectures on [Caltech's YouTube channel](#). NOTE: The January 19 lecture, “When Earth Breathed Deeply,” was canceled and will be rescheduled at a later date.

The Von Karman Lecture is on Thursday, February 17 at 7:00 PM. Available live on YouTube at [NASA Jet Propulsion Laboratory -YouTube](#). The speakers are Jennifer Trosper, Mars 2020 Project manager and Kathryn Stack Morgan, Deputy Project Scientist, Mars 2020, both NASA/JPL. The title of the presentation is “Roving with Perseverance: Findings from One Year on Mars.” After a year on the planet, what can Perseverance teach us about Mars' watery past and our potential future?

The UCLA Meteorite Gallery is now open. Check the website for hours. The monthly lecture will be presented on Zoom on Sunday, February 20 at 2:30 PM. The speaker is Dr. Phil Bland, Curtin University, Perth, Australia. The title of the presentation is not available at this time. Phil has research interests in several distinct areas in planetary science: using primitive meteorites to explore the origin and early evolution of the Solar System; understanding asteroid and cometary impacts, and the impact rate. Zoom Registration: https://ucla.zoom.us/meeting/register/tJEqduyupj0vGd3S0_52FsbHTbPjYr0sZQUj If you need detailed instructions on [how to join a meeting](#) via Zoom please contact our Curatorial Assistant, Juliet Hook, at jahook@ucla.edu. Note: Registration is only needed once as this is a recurring meeting in Zoom. The speaker and topic will be announced on the website. Visit the website and check on events and videos and other neat things about meteorites, go to <https://meteorites.ucla.edu>

MSSC Advertisement Policy:			
Mineral-related ads are allowable in the MSSC bulletin. Below is the price per month			
	Business Card	\$5.00	
	1/3 page	\$10.00	
	1/2 page	\$20.00	
	Full Page	\$35.00	
In addition, any advertiser who purchases 12 months of space in advance will receive a discount of 12 months for the price of 10 months. The copy for the ads should be mailed to the editor at bulletin@mineralsocal.org and the payment should be sent to the MSSC Treasurer, 1855 Idlewood Road, Glendale, CA 91202			

Calendar of Events:

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

2022 Shows

March 5-6, 2022 – Ventura, CA

Ventura Gem and Mineral Society
Ventura County Fairgrounds, 10 W. Harbor Blvd.,
Ventura

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

Website: <http://www.vgms.org>

March 11-13, 2022 – Victorville, CA

Hours: 9 to 5 Daily

Victor Valley Gem and Mineral Club
46th Annual Stoddard Wells Rockhound Tailgate

Contact: smaquilter12@gmail.com

March 12-13, 2022 – Arcadia, CA

Pasadena Lapidary Society

Rescheduled to August 20 - 21, 2022

March 19-20, 2022, Lemoore, CA

Lemoore Gem & Mineral Club
Lemoore Trinity Association Hall, 470 Champion St.,
Lemoore, CA 93245

Hours: Sat, 10 AM – 6 PM; Sun, 10 AM – 4 PM

Website: <http://lemooregemandmineralclub.org>

March 25-27, 2022, Clovis, CA

Fresno Gem & Mineral Society
748 Rodeo Dr., Clovis, CA 93612
Fri & Sat 10 AM – 5 PM; Sun, 10 AM – 4 PM

[Central Valley Gem and Mineral Show](#) | [Facebook](#)

April 1-3, 2022, Vista CA

Vista Gem and Mineral Society
Vista Gem and Mineral Show
Antique Gas and Steam Engine Museum, 2040 N.
Santa Fe Ave., Vista, CA 92083
Hours: Fri/Sat 10 AM – 5 PM, Sun, 10 AM – 4 PM
Website: <https://vistarocks.org>

CFMS

Gems, Minerals, Fossils & Jewelry Show

MAY 6-7-8, 2022

Friday, Saturday: 9-5

Sunday: 9-4

Gems*Minerals*Fossils*Jewelry*Demonstrations
Exhibits*Dealers*Kid's & Family Activities
State Golden Bear Nugget on Display

Antelope Valley Fairgrounds
2551 W. Avenue H
Lancaster, CA 93536

FREE PARKING & FREE ADMISSION

April 9-10, 2022, Thousand Oaks, CA

Canejo Gem and Mineral Club
Borchard Park, 190 N. Reino Rd., Thousand Oaks, CA
Hours: Saturday 10 AM – 5 PM, Sunday 10 AM – 4 PM
Free Admission and Parking
Website: <https://cgamc.org>

April 30 – May 1, 2022 – Anaheim, CA

Searchers Gem & Mineral Society
Brookhurst Community Center, 2271 W. Crescent
Ave., Anaheim, CA 92801
Hours: Sat 10 AM – 5 PM, Sun 10AM – 4:30 PM
Website: <https://searchersrocks.org>



*Happy
Valentine's Day!*

2022 MSSC Officers:

OFFICERS		
President	George Rossman	president@mineralsocal.org
Vice President	Cheryl Lopez	vicepresident@mineralsocal.org
Secretary	Angie Guzman	secretary@mineralsocal.org
Treasurer	Carolyn Seitz	treasurer@mineralsocal.org
CFMS Director	Angie Guzman	
Past President	Ann Meister	
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2022-2023	Pat Caplette	
2022-2023	Ahni Dodge	
2021--2022	Rudy Lopez	
2021--2022	Pat Stevens	
2021--2022	Leslie Ogg	
COMMITTEE CHAIRS		
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Field Trip	Marek Chorazewicz	
Historian	Ann Meister	
Hospitality	Laura Davis	
Membership	Cheryl Lopez	membership@mineralsocal.org
Micro Mount Conf. Chairman	Al Wilkins	
Program and Education	Rudy Lopez	programs@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 held via ZOOM conferencing until further notice. The annual Installation Banquet is held in January, and the annual Picnic and Swap Meeting is held in August. Due to PCC holidays, meetings may vary. Check the Society website for details.

The Society also sponsors the annual Pacific Micro mount Symposium held at the 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 delivered 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

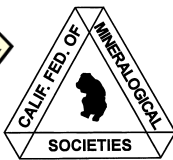
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To:



**With Knowledge Comes
Appreciation**

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