

Bulletin of the Mineralogical Society of Southern California

Volume 91 Number 10 - October, 2018

The 961st meeting of the Mineralogical Society of Southern California

With Knowledge Comes Appreciation

October, 12th, 2018 at 7:30 P.M.

Pasadena City College Geology Department, E-Building, Room 220 1570 E Colorado Blvd., Pasadena

Program: "Halophiles in Minerals" Presented by Dr. Aaron Celestian In this Issue:

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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: "Halophiles in Minerals" Presented by Dr. Aaron Celestian, Minerals Curator at the Natural History Museum of Los Angeles County.

Learn about Dr. Celestian's work in collaboration with JPL scientists hunting for signs of ancient life preserved in minerals on Earth. Using non-destructive analytical methods to measure biosignatures, like beta-carotene, in crystals that are thousands or possibly even millions of years old. These findings may be applied to remote NASA missions targeting Mars and Europa, which are places in our solar system that may have life-harboring environments.

Dr. Aaron Celestian's research interests are inspired by how minerals function on Earth and other terrestrial bodies. How do marine invertebrates control the precipitation of calcium carbonate to create their shells? Why do zeolites let some molecules in to their cage-like frameworks, but exclude others? How does water alter the process and products of mineral weathering on Earth and other planets? The answers to these questions lie at the intersection of geology, chemistry, and biology. As a mineralogist and geochemist, Dr. Celestian's ultimate goal is to uncover the secrets behind such processes. More specifically, the overall theme of his research is the molecular-scale



characterization of Earth materials to understand their roles in a variety of environments. Dr Celestian seeks to quantify mineral surface reactivity, chemical evolution of minerals over time, and the capacity of minerals to sequester ions, crystallize, and survive in a variety of environments and on a variety of time scales. In deciphering mechanisms at the atomic and molecular level, he hopes to understand, predict, and even manipulate mineral behaviors and properties at the macroscopic scale.

From the Editor:

Happy October everyone and that also includes Happy Holloween too!

I was unable to attend the September Board Meeting (we should have the minutes in next month's Bulletin) but I understand my Editors comments from last month about being an absentee editor were discussed. I have not heard if any conclusions were reached, but I will go along with whatever the Board decides. Being your Bulletin Editor is definately a mixed blessing! So, until next month...enjoy

Linda Elsnau

FROM THE PRESIDENT: Interesting Minerals, A to Z. Installment 10, the letter "J": by George Rossman

Jeremejevite

Jeremejevite is an uncommon aluminum fluoro-borate with the chemical formula, $Al_6(BO_3)_5F_3$. It is an attractive collector mineral and also a collector gemstone.

The named first appeared in 1883 in an article in the Société Minéralogique de France by M.A. Damour in honor of Павел Владимирович Еремеев [Pavel Vladimirovich Eremeev (Jeremejev in German)], a Russian mineralogist and professor at St Petersburg who collected the first specimens of this species. The discovery was from Mt. Soktui in the Adun-Cholon mountain range of Transbaikalia, Russia (Figure 1). You pronounce the name "yehr a me yehv' ite" according to one of my Russian students. (or listen to the pronunciation at Webmineral.com)



Figure 1. Colorless jeremejevite from the Adun-Cholom Mountains,
Russia

The more commonly available specimens come from the Erongo Mountain region of Namibia where attractive blue crystals occur in granitic pegmatites (Figure 2). They occur in a feldspar, tourmaline pegmatite (Figure 3). You can see a picture of the mountain range where the mineral occurs at

http://www.realgems.org/edelsteine_liste/pic/erongo%20mountains%2002.jpg

Like many blue minerals, jeremejevite has a minor amount of iron replacing the aluminum. It is strongly pleochroic from blue to colorless in

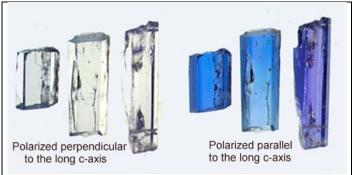


Figure 4. Jeremejevite can show a spectacular color change when viewed in linearly polarized light in two different direction of polarization

A more recent find of this mineral was in Myanmar where fine crystals were obtained in the Mogok region (Figure 5). Bill Larson at Palagems in Fallbrook, CA, has been to Myanmar numerous times and has established the connections to obtain a variety of minerals from this country.

In spite of the many beryllium pegmatites in Southern California, no jeremejevite has been reported from California, or from the United States for that matter. Who knows, maybe a member of MSSC will become the first to find a jeremejevite in the USA.



Figure 2. Jeremejevite from Usakos, Karibib District, Namibia.



Figure 3. Blue jeremejevite crystals in a matrix of mostly feldspar

linearly polarized light (Figure 4). This is another example of intervalence charge transfer between two different oxidation states of iron such as was previously discussed in my euclase discussion.

Occasionally, jeremejevite is cut into a faceted gemstone. It is certainly one of the less-common gemstones. The website https://www.gemdat.org/gem-2090.html has more information about the jeremejevite gems.



Figure 5. Jeremejevite from the Mogok region of Myanmar (Photo credit, PalaMinerals)

[All uncredited photos from GR Rossman]

MINUTES of the September 12, 2018 Meeting

On Friday, September 14, 2018, the 960th Membership Meeting of the Mineralogical Society of Southern California (MSSC) was called to order at 7:30 p.m. by President George Rossman.

Dr. Rossman stated no new minerals were approved by IMA, there are still 5,357 mineral species recognized. However, he did tell us about a mineral that was announced recently, Jahnsite (Na Mu Mg₂), named after Richard Jahns, a mineralogist and pegmatite expert who was a Cal Tech professor (1946-1960) and even a MSSC speaker in 1947. Jahnsite is actually a member of the Jahnsite Group. In that group, Sodium (Na) could be occupied by either Manganese (Mn), Phosphorus (P) or Calcium (Ca).

Regular Business

Minutes: Dr. Rossman asked for approval of the Membership meeting minutes as written and published in the August 2018 *Bulletin* for July 13th, 2018 meeting and in the September 2018 *Bulletin* for the August 12th, 2018 meeting. The **Motion to approve the Membership Meeting Minutes**, as above, was made by Dr. Bob

Housley and seconded by Laura Davis. Dr. Rossman asked if there were any additions or corrections to the published Minutes and seeing none, asked for approval of the motion. The vote was cast by voice, and the **motion passed unanimously**.

Announcements:

MSSC Board Meeting will be Sunday, September 16, 2018 at Carter residence. Guests are welcome to attend;

Cal Tech has a large extensive collection, over 5,000, of *American Mineralogist* from 1920's -1980's. If anyone is interested, please see Dr. George Rossman;

Gem-O-Rama at Searls Lake will be October 13-14. Memorable crystal collecting is an experience at the annual Trona event. There will be pink halite crystal collecting on day 1 then various other crystals on day 2. Rudy offered that it is nasty and, you get dirty – lots of salt plus mud. Bring water for drinking and enough to wash off. You will probably need other clothes to change into later, too;

Treasurer Jim Kusely said he received announcement cards for the Gem Faire which will be held Oct 12th, 13th and 14th in Costa Mesa, Orange County;

Cheryl Lopez announced new members in attendance tonight, Maria and Lucas. They joined us on the Palos Verdes field trip. Also attending tonight is Maria's husband, Craig.

Other Guests are Tim Dirk, Pasadena Lapidary Society, Mary Kirmil from Shadow Mountain Club, Palm Springs and Saraliza Anzaldua, a UCLA student;

Rudy Lopez announced October 13th will be the Clark Regional Park event in Orange County. For the kids, there will be rock tumbling, 500 rock specimen give outs and MSSC mineral cut-outs. Volunteers are welcome.

Field Trip Report: Rudy gave a brief report of the barite field trip to Palos Verdes. New members Maria and son Lucas joined us while Marek Chorazewicz led the way down to the collecting area. The day was hot, but the collecting was great! Everyone came away with wonderful specimens and memories of a fun time! Check our website, **www.mineralsocal.org**, for the full report and photos.

Show & Tell:

Rudy received a call about a 45-year-old rock collection donation. He followed up by picking up $3\frac{1}{2}$ truckloads (78 crates) of material from South Gate. There are a variety of slabs, rocks and mineral crystals but it all needs to be cleaned up. Rudy brought in two specimens that we can look at after the meeting in the refreshment room.

Program

Program Chair, Rudy Lopez said his speaker list is good through September 2019. He is always glad to have referrals. Next month's speaker is Dr. Aaron Celestain, Minerals Curator at the Natural History Museum of Los Angeles County.

Program Chair Rudy Lopez introduced Eric Scerri, author of several books including "A Tale of Seven Elements", "The Periodic Table, Its Story and Its Significance" and "A Tale of Seven Scientists and A New Philosophy of Science". He has also written several articles on topics in his expert field. Dr. Scerri is a chemist, writer, philosopher and lecturer at UCLA. His presentation is: *What is this Thing Called Science?* (An Introduction into the Philosophy of Science).

Dr. Scerri starts by asking: What is science? Almost everyone agrees that science is very important. Sciences' power and importance is undeniable. "Science" adds virtue and value. But how is it different from other disciplines like say religion, politics and humanities? The answer: Proof.

Here's a premise to consider: All swans are white. Is this statement true?

If swan 1 is white, swan 2 is white and so forth to swan $10^{10,000}$ is white does this make all swans white? This is an *invalid* statement. Why? Because swan $10^{10,001}$ may be black. How do we know this? People travel and

eventually someone saw a (rare to some people in the world), black swan in Australia. While many may never have seen a black swan, a black swan exists, and that fact refutes the premise that all swans are white.

Should scientists care about this? Yes, because scientific statements, laws and theories have these characteristics – generalities as a result of individual observations. The conclusion is logically endowed.

Karl Popper (1902-1994), a philosopher of science, said: "If all premises are true the conclusion is valid". Popper would argue: If swan 1 is white, swan 2 is white and so forth to swan $10^{10,000}$ is white and swan $10^{10,001}$ is black, then statement, "all swans are NOT white" is *valid*. Popper exploits by capitalizing on the asymmetry between proof and refutation. Popper is saying: Don't achieve <u>proof</u> because you never can, it is impossible. On the other hand, achieve <u>disproof</u>, or refutation. So, it becomes disproving theories because <u>disproof</u> is valid. Who wants a refuted theory? As scientists research, their theories come under scrutiny and someone refutes it, that spawns new theories which get refuted and so on. Refute theory is basically a survival of the fittest; conjecture and refutation. The way we think involves conjecture (idea and imagination) and refutation.

Popper claims science makes refutable statements and other fields such as Marxism, psychoanalysis and astrology do not make refutable statements. Political systems, Popper claims, are like this. World views claim to explain everything but actually explain very little. Science claims to explain.

Who refuted Popper's theories? Scientists are not so keen to refute their theories. They've worked on them over a period to time and don't want to see their work refuted. Popper's influence was a huge contribution to science. Maybe he's not a science hero like Einstein but his work is nonetheless an important building block.

A physicist, Thomas Kuhn (1922-1996) was also a philosopher of science. Any science starts out in a prescientific stage then eventually through the chaos comes a framework. Kuhn's thoughts on the progress of scientific knowledge revolved around a sort of pattern, as follows: paradigm to anomalies to crisis to revolution and around again until ultimately it settled out to paradigm to paradigm, the so called "paradigm switch". Later Kuhn changed his original thoughts. There are things that cannot be explained using the paradigm, like a **green** swan, for example! When the paradigm changes, the new one does not have the old information. It is a new paradigm.

Switching from one paradigm to another paradigm is referred in psychoanalysis as activating the Gestalt Switch. It is demonstrated like this: Dr. Scerri displayed two drawings, one of a rabbit/duck and one of an old woman/young woman. These drawings do not allow your brain to see both images at the same time. You either see the rabbit or the duck, or, you see the old woman or the young woman. How is this important? Switching from one paradigm to another is something like the Gestalt Switch, either you see it, or you don't. There is no rational argument to go from one to the other.

He continues to explain paradigm rationality about revolutionary theories such as quantum mechanics, Einstein's theory of relativity and Darwin's theory of evolution. Relativism's "science wars" over the past 30 years, is where scientists claim to have a method different from anything else just as some people in humanities think poetry is just as much a true science as physics, chemistry or biology.

Ultimately Kuhn changed the meaning of a paradigm from the whole discipline to say a smaller sample number of the discipline. So, progress went to sub-disciplines then on to no communication. Kuhn says science is not aiming at something in particular, as example, evolution. Evolution is not evolving, it's not pre-ordained. Whatever happens happens! Does Kuhn go far enough? Scerri says no as there are priority disputes. Who really discovered evolution, calculus, oxygen, the periodic table, the HIV virus? In his book, "Tale of Seven Elements", Scerri examines 7 exotic elements and their discovery. What matters is that someone discovered them. Science says, that they were discovered is important! Only science, as a whole, benefits.

Dr. Scerri continues on and spoke of other scientists and their theories: a) John Nicholson, a mathematician, (1889-1955) who believed in proto-elements and, based on astronomical spectroscopy of nebula, proposed as yet undiscovered elements, b) Max Planck, a physicist, (1858-1947) whose constant, h, had an atomic significance in quantum theory and c) Niels Bohr (1885-1982), a physicist who got ideas from Nicholson, contributed to understanding atomic structure and quantum theory.

Scerri says biology revolution of science occurs. He mentions Donald Campbell, a social scientist; (1916-1996) who says science is like groping, blindness and haphazard stupidity. Scerri says scientists take ideas then the ideas get modified, just like biology revolution. But, Scerri thinks revolutions do not happen in science, he also says that logic, language and rationality come later in the process. The origin of ideas comes later not at the onset. The idea of a theory is rogue rationality.

Scerri concludes by bringing us full circle. Popper used logical attention, whereas Kuhn was more historical and today we have modern approaches.

Thanks to Dr. Eric Scerri for our introduction to the philosophy of science. It was a "thinking cap" evening that included some ahhha moments! Well done!

A lively Q&A session followed the presentation. Comments and discussion included contributions from Dr. Bob Housley, Dr. George Rossman, guest Saraliza, Cheryl Lopez and others. Dr. Scerri brought a selection of his published books for sale.

<u>Door Prize:</u> The drawing was won by Jim Kusely who donated it to a guest.

Adjourn: The meeting was adjourned following the Q & A.

Refreshments and interesting conversations followed the meeting. Thanks to Laura Davis for bringing and setting up the refreshments and to Rudy Lopez for home baked goodies.

Reminders:

Submissions for the *Bulletin* are due to Editor Linda Elsnau by the 22nd of the month.

List of Upcoming MSSC Events: Mark your Calender!

Event	Date	Comments / Scheduled Program (if known)	
Meeting Dates:	November, 9, 2018	Renee Newman: "21st Century Jade: Why It's Prized, and How It's Tested and	
		Valued"	
	December 14, 2018	Walton Wright: Plate Tectonics 2	
February 15. 2019		Karin Rice: Geology of Rancho La Brea/ LA Brea Tar Pits	
Board Meeting	December ?	Board Meeting at Bruce Carter's house	
Annual Banquet	January 12, 2019	Denise Nelson - "Treasures of Poland, Amber and Salt":	

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

Mineral Donation From Araujo Family By: Rudy Lopez

MSSC has received a very nice mineral donation from the Araujo family of South Gate. We are very lucky to receive this donation. The minerals are mostly rough rock, some quartz crystals and slabs. There will be lots for kids, silent auction and even some nice slabs for those of us that are into lapidary work.

I have not gone through the milk crates and boxes as of yet. We have at least 30 small quartz crystals that will go to the kid's giveaways.

I would like to thank the Araujo family for contacting MSSC.

There will be more information by our next meeting

Still Looking For Help At The Upcoming MSSC Event: By: Rudy Lopez

What: Prehistoric OC event at Clark Regional Park **When:** Saturday October 13, 2018 from 10am-3pm at

Where Clark Regional Park in Buena Park

Like years past, we will have 2 table/4 chairs/2 canopys provided for us. We are going to give a rock tumbling demonstration during this event. We also have 500 bags of minerals or mineral cutouts to hand out to every child that comes to our booth.

I need volunteers to help with this event. There were 5 of us last year and we were busy. I would like to see some new faces help out at this event. Please contact me through e-mail, at the next meeting, or call me. I can answer any questions you might have or put you on the volunteer list.

E-mail: programs@mineralsocal.org or call, Cell: 626 993-7989

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

The Von Kármán Lecture on *Thursday/Friday* October 4 and 5 at 7 PM. The speaker is Sue Owen, Section Manager, Earth Science Section at JPL. The title of the talk is "Mapping Disasters from Space." Learn how we are using GPS and space-based radar to respond to earthquakes, volcanic unrest, floods, and fires. Spacebased geodetic measurement techniques such as Interferometric Synthetic Aperture Radar (InSAR), Differential Global Positioning System (DGPS), and SAR-based change detection have recently become critical additions to our toolset for understanding and mapping the damage caused by earthquakes, volcanic eruptions, landslides, hurricanes and floods. The ability of space-based SAR to see through clouds to image changes on the ground made it a valuable data set in FEMA's response last year's Hurricane Harvey, Hurricane Irma, and Hurricane Maria. The large footprint of some of the current SAR missions enables a synoptic view of the damage, both in urban and more remote areas, helpful in identifying damage outside of the main city centers following the 2015 Nepal earthquake and 2017 Mexico earthquakes. The Advanced Rapid Imaging and Analysis (ARIA) project is focused on rapidly generating higher level geodetic imaging products and placing them in the hands of the solid earth science and local, national, and international natural hazard communities by providing science product generation, exploration, and delivery capabilities at an operational level. Analyses of these data sets have been largely handcrafted following each event and are not generated rapidly and reliably enough for response to natural disasters or for timely analysis of large data sets. The ARIA project, a joint California Institute of Technology (Caltech) and Jet Propulsion Laboratory (JPL) venture, has been capturing the knowledge applied to these responses and building it into an automated infrastructure to generate imaging products in near realtime that can improve situational awareness for disaster response. ** Thursday is at the Von Kármán Auditorium at JPL and Friday is at Ramo Auditorium at Caltech.

The **Watson Lecture** at Caltech's Beckman Auditorium is on Wednesday, **October 31** at 8 PM. The speaker is Sergio Pellegrino, Professor of Aerospace and Civil Engineering at Caltech, Senior Research Scientist at JPL, and Co-Director of the Space-Based Solar Power Project. The title of his talk is, "**Space Solar Power: A New Beginning.**" In 1968, Peter Glaser, the father of space solar power, envisaged kilometer-scale space systems comprising solar collectors and transmitting antennas that would beam power to the earth from geostationary orbit, but that dream has remained elusive. Until now. In his talk, Sergio Pellegrino will discuss the Caltech Space Solar Power Project's pursuit to conceive, design, and demonstrate a scalable vision for a constellation of ultralight, modular spacecraft that collect sunlight, transform it into electrical power, and wirelessly beam that electricity to the earth. The basic module of this future solar power system is a giant coilable structure that elastically deploys after launch into orbit and is made of paper-thin materials of high stiffness.

The UCLA Meteorite Gallery lecture for October was not yet available. Check the website http://meteorites.ucla.edu/. You can also find the UCLA Meteorite Gallery on Twitter (@UCLAMeteorites) and Instagram (uclameteorites) and Facebook (https://www.facebook.com/UCLAMeteorites). The Meteorite Gallery in Geology room 3697 is open with a docent present every Sunday from 1 till 4. The lecture, which is always on a Sunday afternoon at 2:30 pm, is in room 3656 near the Meteorite Gallery.

With Knowledge Comes Appreciation

Orthoclase Featured Mineral:

Formula: K(AlSi₃O₈)

Crystal System: Monoclinic

Name: Name Named "orthose" in 1801 by Rene Just Haüy from the Greek orthos - "right" in allusion to the mineral's right angle of good cleavage. The sense of Haüy's name was that the mineral was a feldspar, but he did not specify a type-locality, nor did Haüy give a chemical analysis. The name was changed in 1823 to orthoklas by Johann Friedrich August Breithaupt. Although petrologists had used twinning as a method of distinguishing orthoclase from microcline, Wright and Stewart (1958) used the difference in certain d values to calculate a degree of disorder of a sample and thus have a quantitative method to identify the structural state of a potassium feldspar. Despite the enormous number of reports of orthoclase in granite pegmatites, orthoclase is extremely rare in such deposits.

Polymorph of: Kokchetavite, Microcline, Sanidine



irocks.com photo Orthoclase: K(AlSi₃O₈) Carlsbad-

twinned form.

Locality: Paços de Ferreira, Porto

District, Portugal

5.4 cm x 3.8 cm x 1.5 cm



irocks.com photo

Orthoclase: K(AlSi₃O₈), Pseudomorph after Leucite: K(AlSi₂O₆)

Locality: Kamam-Kalehövük, Kırşehir Province, Central Anatolia

Region, Turkey

5.4 cm x 5.4 cm x 4.8 cm



irocks.com photo

Orthoclase: K(AlSi₃O₈), Muscovite: KAl₂(AlSi₃O₁₀)(OH)₂,

Albite (Var: Cleavelandite): Na(AlSi₃O₈),

Quartz: SiO₂

Locality: Linópolis, Divino das Laranjeiras, Minas Gerais, Brazil 16.4 cm x 11.4 cm x 10.4 cm



irocks.com photo

Orthoclase: K(AlSi₃O₈) Locality: Baveno, Verbano-Cusio-Ossola Province, Piedmont, Italy 3.9 cm x 3.5 cm x 2.5 cm



irocks.com photo

Orthoclase: K(AlSi₃O₈) Locality: Organ District, Organ Mts, Doña Ana Co., New Mexico, USA 4.5 cm x 3.8 cm x 2.9 cm



irocks.com photo

Orthoclase: K(AlSi₃O₈) Naegi district, Nakatsugawa City, Gifu Prefecture, Chubu Region, Honshu Island, Japan

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8 cm x 7 cm x 4.3 cm

Ride Share Listing

Can You Provide A Ride? Would You Like Company On The Drive To Meetings?

We have heard from several of our members that they would like to ride-share with someone to the meetings. We will list the names, general location and either a phone number or an email address of anyone who would like to connect for a ride-share. If you would like to catch a ride or would like company for the trip, let me know at msscbulletin@earthlink.net and I'll put the information in this section of the bulletin. After that, any final arrangements made are up to you. Also, If you make a connection that works for you, let me know so that I can remove your information from the bulletin. The Editor

Looking for	Who	Where	Contact at
A ride	Richard Stamberg	North Orange County, near Cal State Fullerton	See emailed bulletin



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/

OCTOBER, 2018

October 6: BORON, CA

Mojave Mineralogical Society Boron Community Center

26998 John Street

Hours: 9 - 4 daily

Web Site: Facebook page

October 6 - 7: VISTA, CA

Vista Gem & Mineral Society

Antique Gas & Steam Engine Museum

2040 North Santa Fe Avenue Hours: Sat 10 - 5; Sun 10 - 4 Website: www.vistarocks.org

October 14: FALLBROOK, CA

Fallbrook Gem & Mineral Society Fallbrook Gem & Mineral Building

123 West Alvarado Street

Hours: 9 - 4

Website: www.fgms.org

October 13 - 14: TRONA, CA

Searles Lake Gem & Mineral Society

Gem Show Building 13337 Main Street

Hours: Sat 7:30 - 5; Sun 7:30 - 4

Website: www1.iwvisp.com/tronagemclub

Show Flyer/Details

October 20: WEST HILLS, CA

Woodland Hills Rock Chippers First United Methodist Church

22700 Sherman Way

Hours: 10 - 5

Website: www.rockchippers.org Show Page

October 20 - 21: WHITTIER, CA

Whittier Gem & Mineral Society Whittier Community Center 7630 Washington Avenue

Hours: 10 - 5 daily

Website: www.wgmsca.com

October 27-28: LANCASTER, CA

Palmdale Gem & Mineral Club

Palmdale Elks Lodge 2705 E Avenue Q Hours: 10 - 5 daily

Website: www.palmdalegemandmineral.com

NOVEMBER

November 3 - 4: ANAHEIM, CA

American Opal Society Business Expo Center 1960 S. Anaheim Way

Hours: Sat 10 - 6; Sun 10 - 5

Website: www.opalsociety.org Show Page

November 17 - 18: OXNARD, CA

Oxnard Gem & Mineral Society Oxnard Performing Arts Center

800 Hobson Way

Hours: Sat. 9 - 5; Sun. 10 - 4

Website: http://oxnardgem.com Show Page

DECEMBER

December 1 - 2: BARSTOW, CA

Mojave Desert Gem & Mineral Society

Cora Harper Community Center

841 S. Barstow Road Hours: 10 - 5 daily

Website: www.mdgms.net

Nominations Are Open for Officers and Directors For 2019

The nominations will be open at the October and November meetings if you would like to submit a name for an additional candidate for any office. Make sure you have that person's permission before making the nomination. Directors serve a two-year term; other officers NORMALLY serve a one-year term, though two years is customary. The election takes place at the November meeting. The positions up for election for 2019 are currently held by the following individuals:

President Dr. George Rossman
Vice-President Renee Kraus
Secretary Angie Guzman
Treasurer Kim Kusely

CFMS Director Jo Anna Ritch Directors 2019-20 Bruce Carter

Jo Anna Ritchey Bruce Carter Bob Housley Leslie Ogg

2018 MSSC Officers:

OFFICERS		
President	George Rossman	president@mineralsocal.org
Vice President	Renee Kraus	vicepresident@mineralsocal.org
Secretary	Angie Guzman	secretary@mineralsocal.org
Treasurer	Jim Kusely	treasurer@mineralsocal.org
CFMS Director	Jo Anna Ritchey	
Past President	Ann Meister	
DIRECTORS		
20162018	Bruce Carter	
20162018	Bob Housley	
20162018	Leslie Ogg	
2018-2019	Pat Caplette	
2018-2019	Pat Stevens	
COMMITTEE CHAIRS		
Bulletin Editor	Linda Elsnau	bulletin@mineralsocal.org
Hospitality	Laura Davis	
Membership	Cheryl Lopez	membership@mineralsocal.org
Micro Mount Conf. Chairman	Al Wilkins	
Program and Education	Rudy Lopez	programs@mineralsocal.org
Publicity	Linda Elsnau	bulletin@mineralsocal.org
Webmaster	Leslie Ogg	webmaster@mineralsocal.org

About the Mineralogical Society of Southern California

Organized in 1931, the Mineralogical Society of Southern California, Inc. is the oldest mineralogical society in the western United States. The MSSC is a member of the California Federation of Mineralogical Societies, and is dedicated to the dissemination of general knowledge of the mineralogical and related earth sciences through the study of mineral specimens. The MSSC is a scientific non-profit organization that actively supports the geology department at Pasadena City College, Pasadena, California. Support is also given to the Los Angeles and San Bernardino County Museums of Natural History. The Bulletin of the Mineralogical Society of Southern California is the official publication of the Mineralogical Society of Southern California, Inc.

The MSSC meetings are usually held the second Friday of each month, January, February and August excepted, at 7:30 p.m. in Building E, Room 220, Pasadena City College, 1570 E Colorado Boulevard, Pasadena, California. The annual Installation Banquet is held in January, and the annual Picnic and Swap Meeting is held in August Due to PCC holidays, meetings may vary. Check the Society website for details.

The Society also sponsors the annual Pacific Micro mount Symposium held at the San Bernardino County Natural History Museum during the last weekend of January.

Annual Membership dues for the MSSC are \$20.00 for an individual membership, \$30.00 for a family membership. Bulletins are delivered by email, there is an additional annual \$20.00 fee if you prefer paper bulletins mailed to your address. The Society's contact information:

Mineralogical Society of Southern California 1855 Idlewood Rd.,

Glendale, CA 91202-1053

E-mail: treasurer@mineralsocal.org

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

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To:



With Knowledge Comes Appreciation

