

Bulletin of the Mineralogical Society of Southern California

Volume 86 Number 12 December, 2013

The 904th meeting of the Mineralogical Society of Southern California

With Knowledge Comes Appreciation

December 13th, 2013 at 7:30 pm

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

Program : Gemology in Tanzania Presented by Charles Carmona

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

About the Program: Gemology in Tanzania presented by Charles Carmona

The December 13 program will be presented by Charles Carmona. Charlie is a highly respected gem expert and appraiser who owns and operates Guild Laboratories, Inc. in downtown Los Angeles. He is also a World Bank gemology consultant, having coordinated the establishment of a government-run gem laboratory in Madagascar and now doing the same in Tanzania. The latter was the focus of his program.

Tanzania is rich in minerals and other natural resources, and has established itself as the most prolific producer of gemstones (other than diamonds) in the East African region. The country extracts a variety of these colored gemstones, from its eponymous tanzanite, to ruby and sapphire, tourmaline, emerald, opal, iolite, and its many unusual colors of garnet. Although Tanzania banned the export of rough gem material several years ago in order to promote the growth of the gem cutting industry in Tanzania, the infrastructure to develop gem cutting expertise has just not been there. Thanks to a concerted effort by the World Bank, the Government of Tanzania, private sector advocates of value addition, and gemologist Charles Carmona, the above scenario is set to change over the next five years.

From the Editor:

What to write.... This is the end of my first year as Bulletin Editor! I made it! I've never done a bulletin before in my life and this has been a very challenging year for me. I want to thank all of the members who so graciously contributed articles for the bulletin. Starting with Rock Currier and including Bob Housley, Kay Robertson and Dee Trent, we have all enjoyed getting to know these contributors a little better. Now that we are moving on to a new year, we need more member-contributed articles. You know you have enjoyed what others have done-- let's hear from you too! If you want help writing an article, let me know, I can help you.

I also want to thank those individuals that are not MSSC members but allowed me to use their articles from other sources to entertain and enlighten our members. These generous individuals have helped keep this publication interesting and educational for all of us. Linda Elsnau

MEANDERINGS FROM THE PRESIDENT by Ann Meister

Thank you, MSSC members, for a successful 2013! And a bigger thank you to the MSSC officers and directors for completing the re-write of the Bylaws and Operating Rules which we, the membership, enacted at the September meeting. In August, we observed a monumental event, celebrating the 900th meeting of MSSC at the Picnic-Potluck at the Carter's backyard. The Pacific Micromount Conference in January is not only doing well, but is growing and thriving with attendees from across the USA, Canada and Europe. (Plan to attend the 2014 event on January 31, February 1 at the San Bernardino County Museum in Redlands.) In November, we drooled over the fantastic minerals and gifts at great bargains at the annual JTI Open House.

For the "nth" year, Dr Bruce Carter has provided us with an interesting and enlightening selection of speakers. Thank you, Bruce, for many years of service to MSSC. I congratulate Linda Elsnau for completing a fantastic first year as bulletin editor. (Please help her with your literary contributions.) Thank you Rock Currier for donating new door prizes for our dwindling supply. And I want to thank Laura Davis for providing the coffee hour refreshments. All in all, it has been a very good year.

We're re-cycling and re-using (though not re-purposing) the current set of officers and directors. And I thank them for continuing in their jobs. Beware, we'll aim to find "new blood" for 2015. ;-) This year's "new-comer" is Rudy Lopez who has accepted the position of Program Chairman. Please assist him in finding speakers or other activities as programs for meetings. (Hint: Micromounters, how about an evening with your microscope showing the non-micro folks what looking through a microscope is like? Images projected on a screen are not the same as finding that unbelievably perfect crystal, or odd crystal habit, or vug that would never exist as a macro specimen...) Now, if we could just find someone to plan a few field trips...

In closing, to start a successful 2014, we need **donations for the silent auction** at the annual January banquet (January 18, 2014 at the Oak Tree Room). This is our primary money raising activity. Please help by donating

your minerals, books, mining artifacts, jewelry, show posters and memorabilia, and other items of mineralogical, geological, or gemological interest. Think of it as re-cycling, re-using and re-purposing your collectables. Hmmm, I remember someone who used show posters as wall paper – in a bathroom. Thank you all for your support.

MINUTES of the November 8th, 2013 Meeting

The 903rd meeting of the Mineralogical Society of Southern California (MSSC) was held on Friday, November 8, 2013 at Geology Building of Pasadena City College. The meeting was called to order by President, Ann Meister at 7:30 p.m.

Regular Business

- **Minutes** for October 2013, as published in the November 2013 Bulletin: *A motion to approve the Minutes* was seconded and carried (MSC) by unanimous vote of the membership.
- **Announcements:** (a) The West Coast Gem and Mineral Show is this weekend in Santa Ana. A few members said they had already attended and that it was fun. (b) Open house for Jewel Tunnel Imports is next Saturday from 10am – 4pm. Please sign up if you are planning to go, (c) The (Installation of Officers) Banquet is January 18, 2014. Plan now for your donations to the Silent Auction: minerals, books, jewelry, whatever is appropriate. (d) The CFMS show, sponsored by Pasadena Lapidary Society will be held at FairPlex in Pomona May 30, 31 and June 1, 2014. This is a closed show, we talked before about getting minerals in the show, let's see if we can get any exhibits into this show. (e) If anyone one needs information on Bill Lawrence, husband of Jaye Smith, please let Ann Meister know, who was really sad writing about the accident that killed one of our fellow hobbyists. [Please refer to the November 2013 Bulletin for further details regarding this tragic accident.] (g) Regarding officers and committees for next year, Rudy Lopez has volunteered to work with others to do Programs. Let's help provide him with names, contacts and other information he needs for prospective presenters.

Elections: The nominations for the slate of officers for next year (2014) are:

President	Ann Meister
Vice President	George Rossman
Secretary	Angie Guzman
Treasurer	Jim Kusley
CFMS Director	Jo Anna Ritchey
Director	Pat Caplette (2-year term 2014-2015)
Director	Pat Stevens (2-year term 2014-2015)

The floor was opened for nominations, seeing and hearing none, President Meister requested a motion to close the nominations. *Motion to close the nominations as stated* made by Linda Elsnau and seconded by George Rossman. Motion voted on by the members was unanimous to close the nominations.

President Meister requested motion for vote by acclamation to approve the (slate of) officers. *Motion to approve slate of officers by acclamation* made by Angie Guzman and seconded by George Rossman. Vote to approve slate of officers by acclamation was called and unanimously passed.

President Meister asked if there were any show and tell items and there were none.

President Meister asked if anyone made it to Trona this year. Stephen Milqueen, our speaker, told us how well it was attended, there were 506 cars in the caravan to the lakebed, totaling about 1500 people. It was one of the most successful field trips of all time. There were comments about how much the club makes, the good weather, crystallization variances, good collecting. One collected specimen was 2", a new acknowledged record!

As there were no further announcements or business, the meeting was turned over to Bruce Carter who introduced our guest presenter, Stephen Milqueen. Steve is a geologist who began at Pasadena City College,

earned his Bachelor Degree from Cal Poly Pomona and has worked in mining and petroleum for his entire career. He has a diverse knowledge in these fields.

Petroleum Seeps, Structural Setting, Energy Drive and Path Migration. When analyzing seeps in their natural setting, it is important to understand that petroleum has taken a complex journey from source rock to the Earth's surface. This presentation is based on field observations of petroleum seeps in California including in the counties of Fresno, Kern, Los Angeles, Orange, Santa Barbara and Ventura. Steve gave an intensive presentation on petroleum seeps, structural setting, energy drive and path migrations. He began with some basics about asphalt, crude oil and gas, the first being methane which is burned in gas stoves. When it burns it forms CO₂ and water vapor. Steve showed straight chain and other configurations of elements, brought crude oil samples and demonstrated how oil seeps through sand grains, for example, by gravity. Oil migrates to the surface of the earth in this way.

In 1991, Steve began by giving talks and field trips on oil seeps. Several cities in various counties in California show oil seeps to the surface. For instance, in Santa Paula, oil seeps show residue left behind by water vapor and anaerobic bacteria. In coastal Santa Barbara some experts estimate there are over 200 barrels equivalent in volume of oil that end up in the Santa Barbara Channel from natural seeps. One of the great places to see oil seeps is Carpinteria State Beach where there are active seeps out of the sea cliff and onto the beach – a fantastic place to look!

Seeps may include crude oil poking out of the ground, asphalt mounds, bitumen, and others. There is also sulphur springs, a sulphur water or brine. Mud volcanoes build up as a result of the gas lifting some of the mud up. Yellowstone has mud volcanoes but those are associated with geothermal hot water. There are hot springs that have small amounts of crude oil and rocks that have hydrocarbons in them. At times sand can be mobilized because of seeps. Hydro seeps are places where you know seeps are there because no plants grow around a certain area or places where instrumentation has proven that there are seeps in the area. And, there are areas that have seeps but you cannot see them – they're invisible.

Steve included many slides that showed fine examples of surface oil seeps. He also spoke of tar sand and oil shale found on beaches, dikes and veins of asphalt in other areas and cavities where oil seeps back into the earth. He told of the Brea Olinda area where housing construction did not cease because of oil seepage. At a site Steve looked at, gas and oil were bubbling up and the developer still built in the area near the seeps and placed equipment to dissipate the material but still today, the odor remains. Steve talked about the anticline structure that is a reservoir of oil, as much as 60,000 feet deep. The oil can seep to the surface by means of floating up through ground water and other forces, mixing with gases that assist it to reach surface.

Steve's presentation was enhanced by his knowledge and experience. In conclusion, Steve fielded some questions about fracking, La Brea tar pits seeps, offshore platforms and the like. We thank you, Steve, for enlightening us about these interesting oil seeps, how they are formed and how they affect us.

The meeting was adjourned at 8:55 p.m. Refreshments were served at the social afterward. The drawing was won by Laura.

Respectfully submitted, Angie Guzman, Secretary

Editors Note: Our speaker, Steve Milqueen is MSSC's newest member! Please make him welcome.

REMINDER: January is MSSC Membership Renewal Month, but you don't have to wait until then to renew your membership for 2014. You can download a PDF 2014 membership form from our website and send it, with your dues to our Treasurer at the address on the form. Also, don't forget that there is an additional \$20.00 annual cost for black & white USPS mailed bulletins. (the emailed bulletins are included for the basic membership dues paid.) Membership forms will also be attached to the December bulletin.

Hold the Date, our Annual Banquet is January 18, 2014

January 18th is our Annual Banquet. Our speaker for the banquet is Nathan Renfro from GIA. and he will present "The MicroArt of Gems," blending the science and the art of inclusions in gemstones. Like last year, the cost is \$37.00 per person and reservations will be required. Mark the event on your calendar and look for more information in the January, 2014 bulletin. Also start looking for your contributions to the annual Banquet silent auction. See you there!

CFMS Board Meeting, Visalia 11/8-11/10/2013

Keith Olivas, a vendor, spoke to us on Friday evening at the Cracker Barrel. He was saying that we needed to more in the way of advertising. He recommended Jay Conrad Levinson's book *Guerilla Advertising*. That opened up a general discussion about how to increase attendance at our Shows. Many said that by reaching out to children and getting schools to attend the Show really increased their attendance. One club worked with the Boy Scouts to have them complete a merit badge at the Show. The idea is that kids will bring their parents to the Show. Turlock has done many of these ideas and in 2013 they had 4,682 adults and 3,200 kids.

On Saturday I attended the Board of Directors Meeting. The CFMS pays the subscription to *Diamond Dan*. Editors and others in the club can use up to 6 pages for free each month for club related publications. The subscription was renewed for another 2 years.

The 2014 CFMS Show will be held in Pomona on 5/30-6/1/2014 and we will have the 2016 CFMS Show in Placerville. No one has come forth to host the 2015.

The CFMS Dues and Insurance fee has not changed. It is still \$8.00 per member as of 1/1/2014. We were also reminded to have our Treasurer respond to California and IRS with their annual paperwork.

Jo Anna Ritchey: CFMS Director

MSSC HISTORICAL NUGGETS from the files of Ann Meister

Did you know that in 1968, MSSC published *A Dana Type Classification of Silicates* as Special Report No. 1. (To my knowledge, there has never been a Special Report No. 2.) Robert Pedersen is the author. I have one copy in my hands and found two copies available on Amazon.com for \$9.99 and \$10. At that time when the special report was published, no systematic Dana classification of the silicate minerals existed. Now on-line, you can find the new Dana classification on www.mindat.org and www.webmineral.com or as *Dana's New Mineralogy: The System of Mineralogy of James Dwight Dana and Edward Salisbury Dana* in book form for \$500 (new), published in 1997. Pedersen's current project is the *X-Dana Mineralogical Spreadsheet* that is available for download on our website.

FORTY YEARS AGO: Some gleanings from the December 1973 MSSC *Bulletin*.

- * The speaker that month was H. Stanton Hill, a charter member of MSSC, on "Great Books of the Mineral World: A Look into Herbert Hoover's Collection on the Sciences." Mr. Hill was cataloging the books of President Herbert Hoover which related to the earth sciences, particularly mining, geology and mineralogy, for a reference library at Claremont College, Pomona. The meeting was held on a Monday night at the McCurdy Nature Center.
- * At the previous meeting, Rock Currier stumped us with one of his infamous mineral identification quizzes. "The program was embarrassing in that it pointed up deficiencies in mineral knowledge and sight recognition ability on the part of the contestants. However, participants agreed that it was a worthwhile activity and conceded that it was an evening of genuine fun." First place winner was Mike Kokinos; second Dona Leicht; third Tony Jones.

- * The January banquet was to be held at the Altadena Town and Country Club serving a steak dinner “with all the trimmings” for \$6 per person. Bill and Elizabeth Moller would share their recent adventures in search of epidote on the Prince of Wales Island, Alaska. I remember that was a great talk.
- * Single member dues was \$5; Family \$7.50
- * The MSSC President was Mike Kokinos; Vice-President, Robert Pedersen; Secretary, Dona Leicht; Treasurer, Gene Reynolds; Past President, Wayne Leicht; Bulletin Editors Bill Moller and Gerhard Muehler.
- * There is a show report from the 1973 Show Chairman, Paul Hartman. The show was held at Pasadena City College. Nearly 4 pages were devoted to special mention of each exhibitor and listing the best minerals in the display, especially the “self collected” displays.
- * The President’s Message from Mike Kokinos included the following, which is true for me today: “I ran through the names on my copy of the membership roster recently and realized I can recognize the names of more people than I was able to do a year ago. Yet it was a disappointment to realize some of the local people listed are unknown to me. In many instances, I have never seen the person at a regular meeting. I recognize it is impossible for some to attend, but what about YOU? Your attendance and support are absolutely necessary for the existence of your Society. Every vacant seat can be interpreted as a vote against the speaker, the workers in the Society and the goals of the founders of MSSC. Sure, we have a fine *Bulletin* that keeps you informed; but what about the fellowship? Do you not value opportunity to meet a few members whose interests are similar to yours? Have you no curiosity about the new mineral-collecting location which is somewhat secretive? I would presume, too, that most collectors want to hear about new minerals that have become available. Our next meeting is Dec. 10. Why don’t you resolve to join us.” Mike Kokinos

Tips and Tricks For Rockhounds by KenO James

By spending some time in the bush, I have gained a few tricks and techniques that have worked for me that I will pass along to you. These could assist you in having a safe and rewarding trip.

I have a full time job with a company that takes safety very seriously with a very active safety program. This has taught me that safety is the first thing you should address before any adventure. Thus I have prepared a list of rock hound equipment that I pack for my trips. This is constantly changing and being upgraded as I run into new encounters. Continued safety improvements are very important as a safe successful trip means a return trip. Now remember what works for me might not work for you but I will include my list at the end and you can modify it as you wish.

Your best bet at a new site is to look for signs of mineral extractions. An example would be an imprint of where an apatite crystal was located or fragments of minerals scattered on the ground. Then you know that the mineral was found there and that there is probably more located very close by. My experience has taught me that minerals develop in a line so just find the next point. It is also common for collectors to run short on time leaving early before exhausting the spot, giving you the opportunity to find a great sample. I have found one mineral type that led to a different mineral which led to another. Stands to reason that if the conditions were ideal to produce one mineral, then other minerals could form too. Most of my collection was acquired this way.

I have found that my first trip to a site is not as successful as consecutive trips. Return trips seem to reap more benefits as greater knowledge and experience of the site are gained with each visit. So plan a second visit to the area if possible.

Time management is the key to successful collecting. I set my alarm for every hour and when it goes off, I take 5 minutes to make some important decisions First I grab a bottle of water and rehydrate and use this 5 minutes to re-evaluate the situation and if necessary change my plan of attack. If I have been productive, I will continue for another hour. If I’m not having much luck, I may choose to try a different spot or maybe just 30 more minutes then move on. Without the alarm I have spent a whole day at a spot only finding myself at sunset dehydrated, frustrated and wishing I had tried another spot. At each alarm point I will judge if I have accumulated a lot of material and whether I need to make a trip to load the vehicle, and then return to continue

collecting. I find trips throughout the day easier than many trips at the end of the day when you are extremely tired. The alarm on a cell phone is very handy.

On my first adventure, I had loaded up my backpack with every tool imaginable and carried a shovel, crowbar, and large sledge hammer to the site located deep in the woods. Wore down and tired after collecting for a good part of the day, I was ready to return to my truck. After loading up my backpack, 2 pails, and pockets with new found rocks, I found it was impossible for me to carry it all and I still had all those tools. It actually took me 3 trips to retrieve all my tools and loot for the day. But I never used most of the equipment I had taken in and should have known that from the research I had done. So don't take excessive weight and items into a site that requires a long hike to reach, as you will have it all plus those great specimens to haul out.

I touched on research earlier and have learned that this is a must. There are many resources available and it would be foolish to venture into a site without investigating it first. This is a great website which will save you time and effort in your hunt for that special find. Knowing ahead, the different available minerals to look for and reading stories of what you may experience in advance is invaluable. Close proximity sites can make planning a trip easier and may help with mineral identification. Take the time to use the internet, books, maps, and word of mouth to educate yourself about the area and minerals before visiting the site.

Listening to sounds can be a great tool to find excellent specimens too. Instead of using just eyesight, try tapping the rock walls with a hammer while listening carefully. A vug (hollow cavity) behind the wall will make a dead hollow sound which is distinctively different than a solid rock sound. And vugs can result in you collecting some amazing crystals.

Hopefully, some of this has been insightful and might assist you on finding that gem of a find that will centre in your collection.

Basic Collecting Equipment List

1. First Aid Kit
2. Water
3. Hat
4. Steel toed boots
5. 2 Pails – 1 for specimens and 1 for tools
6. Assorted sizes of Ziploc bags, newspaper and paper towels to wrap and protect your specimens
7. Backpack with a noise device (bell, clanging device) attached to announce your presence,
8. Bear repellent spray
9. 2 pair work gloves and safety glasses
10. Collecting tools – rock hammers, large and small chisels, wedges, trowels, hand shovel, magnet, toothbrush etc
11. Cell phone with alarm and camera for notes and pictures
12. Bug spray
13. Whistle
14. Compass
15. Flashlight
16. Rain suit

Extra Equipment Brought in my Vehicle

1. Larger First Aid Kit
2. Extra water and food
3. Extra clothes and shoes
4. Large tools – pry-bar, shovel, sledge hammer
5. Large jug of water and towel for clean up at the end of the day
6. Extra pails
7. Sunscreen

Good luck and be safe

*Editor's Note: My thanks to the author, KenO James for is generous permission to use his article. His article can be viewed on mindat at: <http://www.mindat.org/article.php/1782/Tips+and+Tricks+For+Rockhounds>
Also: In light of the recent death of Bill Lawrence as reported by Ann Meister in last month's bulletin, it does not seem overly cautious for there to be more than one individual on the field trip with cell phone and keys to the car!*

Turquoise by D. D. Trent

The word turquoise comes from the French word “turquie” for the country Turkey, as the original stones arrived in Europe through Turkey from Persia. Turquoise is a hydrous phosphate of copper and aluminum, $\text{CuAl}_6(\text{PO}_4)_4(\text{OH})_8 \cdot 2\text{H}_2\text{O}$, for those who care about chemical formulae, with the small amount of copper (Cu) imparting the desirable blue color. Trace amounts of ferric iron can substitute for aluminum in which case the color becomes green. Chrysocolla, a hydrous copper silicate mineral of similar color, is easily confused with turquoise, but turquoise is harder, usually about 6 on Mohs’ hardness scale, whereas chrysocolla is softer, ranging from 2 to 4.

Turquoise seems to be most common in arid climates, such as the Old World deposits of the Sinai Peninsula where it was mined as early as 3200 BC, and in the American southwest. It is a secondary mineral, formed by surface water percolating downward thru cracks and fissures in rocks containing copper minerals and the mineral apatite, $\text{Ca}_5(\text{F,Cl,OH})(\text{PO}_4)_3$, the source of phosphate. It usually forms as small vein lets and stringers cutting thru weathered and somewhat decomposed volcanic rocks.

Turquoise may vary in color from a bright, electric blue to pale blue to sea-green. An unusual variety, spider-web turquoise, is laced with a network of thin chestnut-brown vein-lets anastomosing thru the blue turquoise. It is highly esteemed and occurs at various localities in the southwestern U.S., Colorado, New Mexico, Nevada and Arizona, especially Bisbee and Morenci. Crystals of turquoise are extremely rare, thus are highly valued. Spectacular micro crystals occur in schist and quartz near Lynch Station in Campbell County, Virginia. Turquoise is found in Persia (Iraq), and also Russia, Germany, and France. In California, turquoise has been mined in San Bernardino County at several sites around Turquoise Mountain, north of Halloran Springs off I-15. I have identified thin veins of turquoise at one of the historic mines in Joshua Tree National Park.

Many of you reading this are probably interested in turquoise jewelry, perhaps owning one or more pieces crafted by Zuni or Navajo jewelers. Such interest in using turquoise for adornment is nothing new, the owning of turquoise jewelry dating back to antiquity. In ancient times it was mined on the Sinai Peninsula some 7,000 years ago and used for adornment in that region. Interestingly, it was not used by the ancient Greeks or Romans. Beginning in the Middle Ages the fine-quality robin’s egg blue turquoise of Persia was mined and exported, between 1766 BC and 221 AD Chinese turquoise was worked into stunning artistic pieces used by royalty.

In the New World, the Indians of South America made little use of turquoise, in spite of the many enormous copper deposits (with which turquoise is commonly associated) in Chile and elsewhere. In Mexico, however, Aztecs used turquoise for gems, and crafted inlaid ritual objects for ceremonial use. The source of the Aztec turquoise was from Arizona and New Mexico where it was mined by Indians. Many turquoise artifacts have been found at an Aztec site at Alta Vista, near Mexico City, that date to 700 AD, Neutron activation techniques used to analyze the chemical “fingerprint” of this Aztec turquoise reveal that the major source was from the Cerrillos mining district, southwest of Santa Fe, New Mexico. Thus it appears that Cerrillos turquoise was mined at least 1,300 years ago. Furthermore, the earliest evidence of turquoise as a gem appears to be from a burial site in Guerrero State, Mexico, which is dated archeologically at 600 BC. Should this turquoise prove to be from the Cerrillos area in New Mexico, it would allow pushing the date of mining back 26 centuries and make the Cerrillos mining district the site of the earliest mining in North America.

Editor’s Note: Thank you Dee for another excellent article.



Photo © Fred Elsna

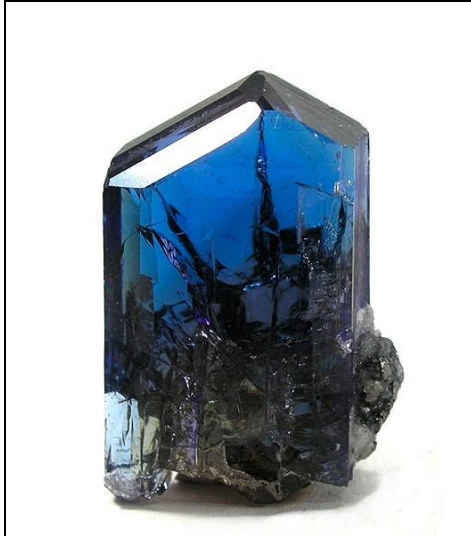
A fine one pound Turquoise nugget from Arizona

July Featured Mineral: Zoisite

Formula: {Ca₂}{Al₃}(Si₂O₇)(SiO₄)O(OH)

Crystal System: Orthorhombic

Name: Named after Sigmund Zois, Baron von Edelstein (1747-1819), Austrian scholar who financed mineral-collecting expeditions.



irocks.com photo

Zoisite

Locality: Merelani Hills (Mererani), Lelatema Mts, Arusha Region, Tanzania

2.2 cm x 1.6 cm x 1 cm



irocks.com photo

Zoisite

Locality: Merelani Hills (Mererani), Lelatema Mts, Arusha Region, Tanzania

1.7 cm x 1 cm x 0.8 cm



irocks.com photo

Zoisite (Var: Tanzanite)

Locality: Merelani Hills (Mererani), Lelatema Mts, Arusha Region, Tanzania

8.1 cm x 2 cm x 1.4 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 mssbulletin@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	714-524-3577 Please leave a message
A ride	Catherine Govaller	San Bernardino, CA	cgovaller@msn.com

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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/>

DECEMBER 2013

December 13 - 15: SAN BERNARDINO, CA
 Orange Belt Mineralogical Society
 Western Regional Little League Ball Park
 6707 Little League Drive
 Hours: 9 am to Dusk daily
 Website: <http://OBMSrocks.yolasite.com>

JANUARY 2014

There are no shows listed for January

FEBRUARY 2014

February 15 - 24: INDIO, CA
 San Gorgonio Mineral & Gem Society, Banning
 Riverside County Fair & National Date Festival
 46350 Arabia Street
 Hours: 10 - 10 daily

We Wish Everyone A Safe, Happy & Healthy 2013 Holiday Season

2013 MSSC Officers:

OFFICERS		
President	Ann Meister	president@mineralsocal.org
Vice President	George Rossman	vicepresident@mineralsocal.org
Secretary	Angie Guzman	secretary@mineralsocal.org
Treasurer*	Jim Kusely *	treasurer@mineralsocal.org
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Past Pres.	Geoffrey Caplette	
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2013-	Leslie Ogg	
2013-	Pat Caplette	
2013-	Bruce Carter	
2013	Pat Stevens	
2013	Bob Housley	
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Publicity	Linda Elsna	bulletin@mineralsocal.org
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Micro Mount Conf. Chairman	Al Wilkins	
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About the Mineralogical Society of Southern California

Organized in 1931, the Mineralogical Society of Southern California, Inc. is the oldest mineralogical society in the western United States. The MSSC is a member of the California Federation of Mineralogical Societies, and is dedicated to the dissemination of general knowledge of the mineralogical and related earth sciences through the study of mineral specimens. 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. The Society's contact information:

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MSSC Bulletin Editor

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