Bulletin of the Mineralogical Society of Southern California

Volume 85 Number 9 October 2012

The 890th Meeting of the Mineralogical Society of Southern California

October 12, 2012 7:30 pm

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

In this issue: ***Program:*** Multicolored silica coatings on fresh Hawaiian lava flows. by Steve Chemtob

Program
Multicolored silica coatings on fresh Hawaiian lava flows by Steve Chemtob

Chemical weathering is a major contributor to the chemistry of the Earth's rivers and oceans, the minerals observed at the surface, and the appearance and morphology of landscapes. Understanding how chemical weathering operates in modern environments informs our interpretations of weathering products in the ancient terrestrial or Martian rock record. In this talk, we will examine weathering products of young lava flows on one of Earth's most active volcanoes. Young basalts from Kilauea, on the big island of Hawai'i, frequently feature brightly colored white, yellow, orange and red surface coatings. The coatings, composed mainly of opaline silica and containing rutile, hematite, and jarosite, form through interaction of the basalt surface with sulfur-rich acidic vapors. We will visit lava flows of a variety of ages, including still-active lava channels, to document the rapid development of these coatings, and we will discuss larger implications of the coatings for the evolution of the Hawaiian landscape.

Steven Chemtob is a Ph.D. candidate in geochemistry at the California Institute of Technology, working with Prof. George Rossman. His research interests involve interpretation of the chemical and mineralogical signatures of water-rock interaction in terrestrial and planetary environments. He received his bachelor's degree in Earth and Planetary Science in 2006 from Washington University in St. Louis and his Master's degree in geochemistry from Caltech in 2008. Mr. Chemtob will defend his Ph.D. dissertation in November and will return to Washington University as a postdoctoral scholar in January 2013. Outside of the sciences, Mr. Chemtob is an active vocalist and chorister and has performed with the Los Angeles Master Chorale and Los Angeles Philharmonic

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MEANDERINGS FROM THE PRESIDENT by Ann Meister

As I was standing on the rim of the Arroyo Seco overlooking JPL and waiting for the space shuttle Endeavour fly-over, I started thinking about what the space program has contributed to mineralogy and geology. Way back in 1969 and the early '70's, the Apollo missions brought back rocks from the moon: 2,415 samples weighing 842 lb. That was exciting even though they were "just rocks," not fine crystals. But they did discover three new minerals on the moon including

armalcolite (for **Arm**strong, **Al**drin and **Col**lins, the Apollo 11 astronauts), tranquillityite and pyroxferroite. Much of the lunar crust appears to be composed of rocks with high concentrations of anorthite. The mare basalts have relatively high iron values and some of the mare basalts have very high levels of titanium in the form of ilmenite. I've included a picture of an olivine basalt from Apollo 15.

Caption: Lunar Olivine Basalt from Apollo 15. Now at the National Museum of Natural History in Washington, D.C. (Wikipedia)

Much exploration has been accomplished as unmanned fly-bys of planets and their moons. Spectrometers and other instruments are needed to study each surface. There are volcanoes on Jupiter's moon Io that may eject sulfur. Sulfur crystals from Io would be a neat addition to any mineral collection. MSSC has had several speakers who have discussed extraterrestrial mineralogy and geology.

Can you imagine field collecting remotely? For unmanned exploration on Mars, there have been three rovers which are remote mineralogists and geologists. The first two were Spirit and Opportunity who tested soils and rocks and took pictures of geologic features that will keep scientists busy for years. Now we're reading every day about what the rover, aptly named Curiosity, is doing on Mars. Curiosity has instruments such as the Mars Hand Lens Imager (MAHLI) which is like a hand lens that we might use in the field, but with a camera. It has calibration tools, including a 1909 Lincoln penny, so we know the scale of what were are looking at. Instead of a rock hammer, Curiosity has a

laser to get beneath the surface of a rock with the ChemCam to analyze the composition of vaporized materials. (Lots more info on NASA Mars Science Laboratory website.) What about bringing rocks back from Mars? I attended a lecture at JPL a while back that discussed the problems, a major one being: how do you get the samples from the Mars surface to the vehicle that will bring them back to Earth? Hmmm...

Caption: The Mars Hand Lens Imager (MAHLI) camera at the end of the robotic arm of NASA's Curiosity rover will use a calibration target attached to a shoulder joint of the arm. (NASA/JPL-Caltech)

For us on Earth, perhaps one of the most useful contributions of the space program is satellite mapping and the ability to use GPS to accurately locate anything on Earth. How often do we turn to Google Earth or other sources to find a location or analyze geologic features? I know I do a lot. Also, we can now get precise images and measurements of the results of natural catastrophes such as earthquakes, tsunamis and volcanic eruptions.

For me, the Endeavour fly over signaled the end of a proud era in our history. I hope there are lots more to come...

From the Newspapers: The California Mining and Minerals Museum , Mariposa, California, was robbed of an estimated $2 million in precious gems and gold on Friday, 9/28/2012 at 4 pm.. They did not get the nearly 14-pound Fricot Nugget..

CALL FOR VOLUNTEERS!

MSSC NEEDS YOU to volunteer for the fall elections - no, I don't mean that weird and wacky free-for-all between Democrats and Republicans - I mean our own Society elections. We need a Vice-President and Directors. At least we don't have debates among Presidential candidates since Ann Meister is willing to serve another year, unless someone is urgently interested in having the position.

We also need a Bulletin Editor. Jo Anna has done a great job, but needs recovery time. WHO WILL SERVE?

Mineralogical Society of Southern California
MINUTES September 14, 2012

The 890th meeting of the Mineralogical Society of Southern California was held on Friday, September 14, 2012 at Pasadena City College, Pasadena, CA. President Ann Meister brought the meeting to order at 7:35 p.m.

The following business and announcements were made:

- Minutes - N/A,
- No meeting in August 2012;
- Announcements: 8/11/12: Fallbrook Pot Luck and Mineral Show/Sale attended by a few MSSC members, good food, good company and good fun, lots of goodies on sale and their museum was open for business. There ware plenty of exhibits including the "florescent room".
- 10/13/12 Searles Lake Gem and Mineral Society's Gem-O-Rama, Trona, CA
- Geo-Literature Resources: President, Ann Meister, brought Handbook of Crystal and Mineral Collecting by William Sanborn, Pasadena native and, also by Sanborn, Oddities of the Mineral World. These books are two interesting resources for our members and collectors.
- Show & Tell: Bob Housley brought quartz he collected a few years ago from Peterson Mountain. Samples on display in refreshment room after the meeting.

- Elections: Please consider running for office on the Board of MSSC. Elections are coming up soon. Kindly contact Ann Meister for information or if there are any questions.
- Program: Ann Meister introduced the evening's presenter, Bryan Wernicke. Wernicke is from the Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA. Dr. Wernicke presented "The California River and its role in carving Grand Canyon." He explained how measurements of certain minerals, apatite,(U-Th)/He, in particular, is integral in determining how the incision of a large canyon from a plain of low elevation and relief to a canyon of roughly the length and depth of a modern Grand Canyon occurred roughly 80- 70 million years ago. Incision was caused by NE flowing antecedent river with headwaters on the NE slope of the North American Cordillera in California herein referred to as the California River. Dr. Wernicke's presentation was interesting and informative. Afterward, there was a Q & A period, at which Dr Wernicke gladly responded to all questions and ended with handouts for anyone interested. The discussion continued after adjournment in the refreshment area.

GEO-LITERATURE RESOURCES by Bruce Carter

De Re Metallica by Georgius Agricola

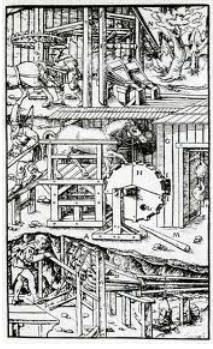
De Re Metallica is one of the great works of early scientific literature. It is an extensive treatise on minerals, mining practices and smelting techniques as practiced in the 16th century. Agricola's De Natura Fossilium was the first systematic study of mineralogy and his Ortu et Gausis was the first work on physical geology. He was perhaps the first writer to advocate building the foundation of science by deduction based on observed phenomena as opposed to fruitless inductive speculation. Some 60 minerals were recognized prior to his work-he added 20 more to this list and recognized the existence of many more.

Very little is known about mining practices prior to this publication. Practitioners probably closely guarded most information and most of them probably were not writers anyway. It is clear that Agricola wrote from personal experience; he evidently visited many mining and

smelting operations himself and took extensive notes. One of the delightful features of the book is the numerous illustrations (about 400) that have no captions but are abundantly labeled. The woodcut artist is unknown but clearly followed Agricola's notes carefully.

Georg Bauer was born in 1494 in Saxony and his name was Latinized to Georgius Agricola by his teachers, a common custom at the time. He published De Re Metallica in 1556, writing in Latin (1000 years after the end of the classical language) so he follows a corrupt Germanic form of Latin and actually coined several hundred Latin expressions himself. The book was translated by Herbert Hoover, formerly a mining engineer, with extensive footnotes and published in 1912.

Kathy and I recently visited a large silver mine in Morocco that has been operating since the 7th century. We observed ancient graphite crucibles and deep holes of varying sizes drilled in granite slabs and when we got home it was fun to look at De Re Metallica to try to get an idea of how they were used. If you don't own a copy of this book, a few hours perusing it in a library will be a rewarding experience.



Hematite and Battleship Paint by Kreigh Tomaszewski

Hematite from the Great Rock Mine, Hennock, Bovey Tracey area, UK, Devon was mined (by hand) from 1820 to 1969 and exclusively provided the pigment for the battleship grey paint used by the Royal Navy. The mine is known for micaceous hematite that is uniquely suited for making paint. http://tomaszewski.net/Images/0140a.jpg

Some time before 1565 (some sources say as early as 1500), an enormous deposit of graphite was discovered on the approach to Grey Knotts from the hamlet of Seathwaite in Borrowdale parish, Cumbria, England. The locals found that it was very useful for marking sheep. This particular deposit of graphite was extremely pure and solid, and it could easily be sawn into sticks. This remains the only large scale deposit of graphite ever found in this solid form. Chemistry was in its infancy and the substance was thought to be a form of lead. Consequently, it was called plumbago (Latin for "lead ore"). The black core of pencils is still referred to as lead, even though it never contained the element lead. The value of graphite was soon realized to be enormous, mainly because it could be used to line the moulds for cannonballs, and the mines were taken over by the Crown and guarded. When sufficient stores of graphite had been accumulated, the mines were flooded to prevent theft until more was required. Graphite had to be smuggled out for use in pencils. Because graphite is soft, it requires some form of encasement. Graphite sticks were initially wrapped in string or sheepskin for stability. The distinctively square English pencils continued to be made with sticks cut from natural graphite into the 1860s. The town of Keswick opened the first pencil factory, near the original findings of block graphite, and still manufactures pencils, the factory also being the location of the Cumberland pencil museum. The first attempt to manufacture graphite sticks from powdered graphite was in Nuremberg, Germany, in 1662. It is claimed that graphite from the mine in Cumbria gave rise to an interesting term to the English vocabulary. When it was discovered that you could make writing instruments from the processed graphite, the discovery was a major advance in communication and espionage. The Crown forbids the unauthorized mining and exportation of graphite. From the dumps of the graphite mine, intrepid souls secretly would try to collect and extract the graphite and bring the material to the big city, London, where they would surreptitiously try to sell their contraband. The authorities would easily be able to arrest the miscreants because of the graphite stains on their hands; from these soiled hands we get the term "black market". I really do have type locality specimens for Battleship Grey and Pencil Lead (and the 'black market' ;-). And both of them were acquired by trades of self collected specimens. Both specimens are pretty ugly,

MICACEOUS HEMATITE
(Iron Ore) Also locally known as "Shining or Looking Glass Ore"
U.K. Devon
From" Great Rock Mine.
Henrock, Bovey Tracey area

CFMS PLAC (Public Lands Access Committee) - SOUTH by John Martin, Chair Clear Creek Management Area Closure

The Bureau of Land Management in a news release on August 27, 2012, has withdrawn about 29,000 acres of public land in Central California from public access. The withdrawal is in the portion of Clear Creek Management Area designated as the Serpentine Area of Critical Environmental Concern (ACEC) in southern San Benito County and western Fresno County. In the News Release the BLM stated "The BLM ordered the temporary closure of the public lands in the Clear Creek Serpentine ACEC on May 1, 2008, in response to a human health risk assessment by the United States Environmental Protection Agency." "Public Land Order 7795, approved on August 1, 2012, withdraws 28,953 acres, more or less, of public lands from location and entry under the United States mining laws to minimize impacts to human health and the environment from asbestos emissions from mining operations in the Clear Creek Management Area's Serpentine ACEC," said Rick Cooper, BLM Hollister Field Office manager. The area was temporarily withdrawn in 2010 while various studies and analyses were made to support a final decision. This withdrawal extends the temporary withdrawal to 20 years. This means Rockhounding in the Clear Creek area of Central California is off limits for another generation of Rockhounds.

Endangered Species: Sage Grouse or Rockhounds? Sage-grouse habitat covers millions of acres of Public Lands in 11 western states and portions of southern Canada. The habitat area under study covers parts of Northern California and large portions of Nevada. The U.S. Department of the Interior has given western states the option of developing a plan to preserve the sage grouse or the federal agencies would make the decisions. There is a fear the sage grouse might be listed as endangered and result in further restrictions on the public lands, including uses such as mining, grazing and rockhounding.

In Nevada, a legislative committee has endorsed a plan to preserve the habitats for the declining sage grouse population, but millions of acres of public lands continue to be open to grazing, mining development and energy projects. Debra Struhsacker of the Nevada Mineral Resources Alliance told the legislative committee the proposal of the Bureau of Land Management would prevent mining development on 14.6 million acres of public lands. This Nevada proposal may affect our amateur mineral collecting and rockhounding in large amounts of Nevada's Public Lands. The legislative committee agreed to send letters to federal officials, and a resolution will be introduced in the 2013 Legislature. They will emphasize the steps being taken by Nevada to preclude the listing of the sage grouse as an endangered species. The federal officials need to hear from Rockhounds who collect rocks and minerals in Northern California, Nevada and the other 9 Western States where the Sage Grouse Habitat covers collecting sites. The fate of the collecting areas is up to you as the stake holders in your Public Lands. If Rockhounds do not make their concerns known millions of acres of America's Public Lands may become off limits in favor of the sage-grouse.
Via CFMS Newsletter 10/2012

Russia reveals shiny state secret: It's awash in diamonds
'Trillions of carats' lie below a 35-million-year-old, 62-mile-diameter asteroid crater in eastern Siberia known as Popigai Astroblem. The Russians have known about the site since the 1970s.

Russia has just declassified news that will shake world gem markets to their core: the discovery of a vast new diamond field containing "trillions of carats," enough to supply global markets for another 3,000 years.

The Soviets discovered the bonanza back in the 1970s beneath a 35-million-year-old, 62-mile diameter asteroid crater in eastern Siberia known as Popigai Astroblem

They decided to keep it secret, and not to exploit it, apparently because the USSR's huge diamond operations at Mirny, in Yakutia were already producing immense profits in what was then a tightly controlled world market.

The Soviets were also producing a range of artificial diamonds for industry, into which they had invested heavily.

The veil of secrecy was finally lifted over the weekend, and Moscow permitted scientists from the nearby Novosibirsk Institute of Geology and Mineralogy to talk about it with Russian journalists.

According to the official news agency, ITAR-Tass, the diamonds at Popigai are "twice as hard" as the usual gemstones, making them ideal for industrial and scientific uses.

The institute's director, Nikolai Pokhilenko, told the agency that news of what's in the new field could be enough to "overturn" global diamond markets.

"The resources of superhard diamonds contained in rocks of the Popigai crypto-explosion structure are, by a factor of 10, bigger than the world's all known reserves," Mr. Pokhilenko said. "We are speaking about trillions of carats. By comparison, present-day known reserves in Yakutia are estimated at 1 billion carats."

The type of stones at Popigai are known as "impact diamonds," which theoretically result when something like a meteor plows into a graphite deposit at high velocity. The Russians say most such diamonds found in the past have been "space diamonds" of extraterrestrial origin found in meteor craters. They claim the Popigai site is unique in the world, thus making Russia the monopoly proprietor of a resource that's likely to become increasingly important in high-precision scientific and industrial processes.

"The value of impact diamonds is added by their unusual abrasive features and large grain size," Pokhilenko told Tass. "This expands significantly the scope of their industrial use and makes them more valuable for industrial purposes."

Russian scientists say the news is likely to change the shape of global diamond markets, although the main customers for the super-hard gems will probably be big corporations and scientific institutes

via Christian Science Monitor 9/17/2012 http://www.csmonitor.com

SCFM OCT 20-21; 2012 SYMPOSIUM Tentative Agenda:

Iron Ore localities in the Southwest

9:30 am	Registration
10:00 am	Bruce Bridenbecker: Types of Iron Deposits: Example: Iron Hat Mine, Cadiz
10:20 am	Doug Shumway: Bessemer Iron, Johnson Valley: A history
10:40 am	Break
11:00 am	Kim Bishop: Southern Avawatz Iron Replacement Deposits
11:20 am	Dinah Shumway: Eagle Mountain Iron Mine: The Deposit and its History
Noon:	Grab fast food lunch at Gerald Ford Drive: Jack in Box, Carl's Jr., Sandwich shops.
En Route	R. E. Reynolds: Iron Replacement Deposits north of Bouse, AZ.

Twentynine Palms satellite campus directions:

Drive east from Redlands on I-10 to Palm Desert. Exit I-10 at Cook Street. Turn right (south) on Cook Street, pass Gerald Ford Drive signal light with ARCO on corner. Fill your gas tank now, as opposed to when the group is leaving you behind!

Turn left (east) at second signal light on Berger Circle Drive to enter small campus. Turn right onto inner drive into parking lot areas, proceed approximately 200 feet, then turn left entering into first parking area away from buildings.

Rogers Gateway (RG) building is first building in this small satellite campus of four buildings. It is parallel to the entrance of Berger Circle Drive off of Cook Street. Walk across the street from this parking lot away from buildings to enter the main lobby of a two story, glass front building with security guard station inside.
MEETING ROOM RG 205 is on the second floor inside the RG building, accessed by climbing the spiral staircase along the interior court yard or taking the elevator.

Directions to the Iron Replacement Deposits north of Bouse will be given at the Seminar. It is recommended that you have a full tang of gasoline before you arrive at the Seminar.

DESERT INSTITUTE at Joshua Tree National Park (Fall Class)
74485 National Park Dr. Twentynine Palms, CA 92277
Phone: 760-367-5535; e-mail: desertinstitute@joshuatree.org

Geology: Creation of the Joshua Tree Landscape

Information

Date/ Time:	Saturday, November 17, 8 am – 5 pm Sunday, November 18, 9 am – 5 pm
Meet at:	Oasis Visitor Center 74485 National Park Dr, Twentynine Palms, CA 92277
Instructor:	D. D. Trent, Ph.D., Geology, Professor Emeritus, Citrus College, Co-author of Joshua Tree National Park Geology

Overview
Investigate the natural architecture and origin of Joshua Tree National Park's landscape with D. D. Trent, Ph.D. and co-author of Joshua Tree National Park Geology. Starting in the classroom participants will be introduced to basic geologic principles including major rock groups, plate tectonics, mountain building, and the impact of weathering. Trent will discuss how these processes worked together to form the fantastic desert landscape of the park. The class will venture into the field on two excursions to observe and identify monzogranite, gneiss, aplite, and basaltic rocks as well as inselbergs, tafoni, and pediments. For those new to geology or experienced geologists, Trent will make learning about this complex and unique landscape comprehensible and fun.

Itinerary
Saturday, November 17, 8 am – 5pm Oasis Visitor Center
 Lecture, discussion and multi-media presentation
 Lunch break, **bring your own food**
 Field class, Geology Tour Rd**, 4 wheel drive, high clearance vehicle required**
We will be car pooling. If you have any concerns about not having the required vehicle please call.
 Field class to Arch Rock

Sunday, November 18, 9 am – 5 pm TBA Saturday afternoon
 Field class to Pinto Mountain Fault
 Field class to Desert Queen Mine
 Field class to Wall Street Mill

DESERT INSTITUTE at Joshua Tree National Park (Fall Class)
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Phone: 760-367-5535; e-mail: desertinstitute@joshuatree.org

Geology of the San Andreas Fault

Information

Date/ Time: Saturday, December 1, 9 am – Afternoon
Meet at: Coachella Valley Preserve Visitor Center Parking lot
29200 Thousand Palms Canyon Rd, Thousand Palms, CA 92241
Instructor: Ted Reeves, B.A., Biology, Instructor: College of the Pacific

Overview
California is a state defined by plate tectonics, motion, continental drift, and subduction zones. Join geologist Ted Reeves as he demystifies fault systems and their effects. Reeves will unfold the geologic story of the Southern Californian landscape in this all-day field class. Participants will travel a total of approximately six miles walking to Pushawalla Palms to see evidence of the folding and uplift that formed Pushawalla Canyon. Reeves will illuminate fault- related features in the field with special emphasis on physical deformations of the landscape. Don't miss this unique opportunity to walk along the San Andreas Fault zone and touch the San Andreas Fault!

Itinerary
Saturday, December 1, 9 am – Afternoon
Coachella Valley Preserve
 9 am Meet at Coachella Valley Preserve Visitor Parking area
 9:15 am Start field class, hike away from parking area
 12 noon Lunch/snack break, bring your own food
 12:30 pm Continue field class
 3 pm Tour visitor center and Paul Wilhelm Grove

What to Bring to the Course
The 10 Essentials: Everyday in the Desert
 Day pack
 4 quarts of water
 Closed toe hiking shoes
 Lunch and snacks
 Clothing layers
 Hat

The 10 Commandments of Hiking:

- Never hike alone.
- Tell someone where you're hiking, the route you'll be taking and when you'll be home.
- Carry identification (driver's license, etc.) and the name and telephone number of whom to call in an emergency.
- Before you leave home, check the forecast, and pay attention to the weather while you're on the trail.
- Study the maps before you go, and always carry a compass, not just a GPS.
- On the trail, know where you're going and where you are in relation to the map you're carrying.
- Take plenty of food, and carry more water than you think you'll need.
- There's no such thing as too much sunscreen.
- Don't overestimate your abilities.
- Adhere to the Leave No Trace principles
- (see below).
- Plan ahead and be prepared
- Travel and camp on durable surfaces
- Dispose of waste properly and
- pack out all of your trash
- Leave what you find

via Desert Institute at Joshua Tree National park 2012 Fall Classes

Calendar of Events

October 3-8—JOSHUA TREE, CALIFORNIA: Annual show; Joshua Tree Sportsman's Club; JTSC; 6225 Sunburst Ave.; Thu. 1-7, Fri. 9-7, Sat. 9-7, Sun. 9-7; free admission; dealers, fine jewelry, loose colored gemstones, fashion jewelry, beads, mining equipment, lapidary supplies, discount prices.

October 7: FALLBROOK, CA Fallbrook Gem & Mineral Facility, 123 W. Alvarado Street
Hours: 10 – 4 daily

October 13 - 14: TRONA, CA Searles Lake Gem & Mineral Society, SLGMS Show Building, 13337 Main Street. Hours: Sat 7:30 - 5; Sun 7:30 - 4

October 13 - 14: VISTA, CA Vista Gem & Mineral Society, Antique Gas & Steam Engine Museum, 2040 North Santa Fe Avenue. Hours: Sat 10 - 5; Sun 10 - 4

October 20 -21: WHITTIER, CA Whittier Gem & Mineral Society, Whittier Community Center, 7630 Washington. Hours: 10 - 5 daily

October 20-21, 2012 Palm Desert Campus, 29 Palms plus Field Trips hosted by Southern California Friends of Mineralogy Seminar and Field Trip. Symposium will be Saturday morning, followed by field trip to Eagle Mountain. There is talk of a Field Trip to Iron King Mine #1 and #2 and Osborne Wash Mine. Plans are not completely set yet and are still subject to change. If interested respond to Bob Reynolds rreynolds220@verizon.net

November 3 - 4: LANCASTER, CA Palmdale Gem & Mineral Club, Antelope Valley Fairgrounds 2551 West Avenue H. Hours: Sat 10 - 5; Sun 10 - 4

November 3 - 4: RIDGECREST, CA Indian Wells Gem & Mineral Society, Desert Empire Fairgrounds
520 West Richmond Road. Hours: 9 - 5 daily

November 3 - 4: SAN DIEGO, CA San Diego Mineral & Gem Society, Al Bahr Shrine Center, 5440 Kearny Mesa Road. Hours: Sat 9:30 - 5; Sun 10 - 4

MSSC Advertisement Policy: Mineral-related ads have always been acceptable in the 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 e-mailed to the editor at bulletin@mineralsocal.org and the payment should be sent to the MSSC Treasurer at 1855 Idlewood Road, Glendale, CA 91202-1053. The Bulletin Editor reserves the right to decline requests for space if material submitted is judged to be inappropriate

OFFICERS

President	Ann Meister	*president@mineralsocal.org*
Vice President	Bruce Carter	*programs@mineralsocal.org*
Secretary	Angie Guzman	*secretary@mineralsocal.org*
Treasurer	Jim Kusely	*treasurer@mineralsocal.org*
CFMS Director	Jo Anna Ritchey	*bulletin@mineralsocal.org*
Past Pres.	Geoffrey Caplette	

DIRECTORS

2010-	Geoffrey Caplette	
2010-	Leslie Ogg	*webmaster@mineralsocal.org*
2010-	Linda Elsnau	*publicity@mineralsocal.org*
2010-	Fred Elsnau	

COMMITTEE CHAIRS

Facilities	**Vacant**
Publicity	Linda Elsnau (See Director)
Membership	Jim Kusely (See Treasurer)
Program and Education	Bruce Carter (See VP)
Show	**Vacant**
Webmaster	Leslie Ogg (see Director)
Bulletin Editor	Jo Anna Ritchey (See CFMS)

2012 PACIFIC MICROMOUNT CONFERENCE COMMITTEE

Chairman	Bob Housley
Speakers	Bob Housley
Pre-registration	Bob Housley
Electrical	Alan Wilkins
Sales Table	Garth Bricker
Give-away Table	Gene Reynolds
Food	Ann Meister & Sugar White

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 and collecting 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 Micromount 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: **Mineralogical Society of Southern California 1855 Idlewood Rd., Glendale, CA 91202-1053 E-mail: bgbrdpen@earthlink.net Web: http//:wwwmineralsocal.org The Mineralogical Society of California, Inc.**

DISCLAIMER: The Mineralogical Society of Southern California, Inc. is not responsible, cannot be held responsible or liable for any person's injuries, damages or loss of property at or traveling to or from any general meeting, board meeting, open house, field trip, annual show or any other MSSC event.