

# **Bulletin of the Mineralogical Society of Southern California**

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**Volume 80 Number 11**

**November 2009**

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## **The 859th Meeting of The Mineralogical Society of Southern California**

### **Mineral Deposits of Bolivia and Chile**

**By**

**Rock Currier**

**Friday, November 13, 2009 at 7:30 p.m.**

**Geology Department, E-Building, Room 220**

**Pasadena City College**

**1570 E. Colorado Blvd., Pasadena**

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#### **Featuring:**

- Review of October Program**
- Why Micromounts?**
- Selecting and purchasing a microscope**
- Two pictures of micro specimen**

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## November Program

### Mineral Deposits of Bolivia and Chile

**Date: November 13, 2009 0730 pm**

**Geology Department, E-Building, Room 220**

**Pasadena City College**

**1570 E. Colorado Blvd., Pasadena**

The presenter of the November program will be long time member of the Mineralogical Society of Southern California (MSSC) Rock Currier. As a long time MSSC member who has frequently given programs describing his world travels, Rock Currier needs no introduction. Our group has often enjoyed visiting his business, Jewel Tunnel Imports where many fine mineral specimens are on display.

At our November meeting Rock will describe some of his experiences visiting the mineral deposits of Bolivia and Chile. He has visited this region on a number of occasions and will give us an overview of the deposits and the fine mineral specimens from the region. He will describe how the mining industries have developed over time, the current status of mining there and how the contrasting policies of these two countries have resulted in different outcomes for their mining industries and for the local workers.

#### **Submission deadline**

Due to editor by the 20<sup>th</sup> of the month, unless the 20<sup>th</sup> is on the weekend, then the 18<sup>th</sup> is the due day. Email to [shoulin.lee@yahoo.com](mailto:shoulin.lee@yahoo.com)

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### Minutes of the October 9, 2009 Meeting

The 858th meeting of The Mineralogical Society of Southern California was held on Friday, October 9, 2009, at Pasadena City College, Pasadena, CA. President Geoffrey Caplette brought the meeting to order at 7:40 p.m.

Vice President Bruce Carter then introduced the speaker of the evening, Mr. Brendan Laurs, who gave a presentation entitled: "Gemstone Journey to Tanzania and Kenya: Ruby, Tanzanite, and Chrysoptase."

Mr. Laurs, who has both a BS and an MS in geology, was an exploration geologist for Kennecott Exploration Company at the red beryl deposit in the Wah Wah Mountains of Utah, and, later, at the benitoite gem mine in California. He has worked at GIA since 1997, and is currently the Editor of Gems and Gemology

(he kindly provided copies of a recent issue to MSSC members at the meeting).

Mr. Laurs first discussed the Winza ruby deposit in Tanzania, where there are primitive workings in a sometimes “free for all” environment. As with most promising gem locations in foreign countries, governmental permission is needed to gain access to the site. Heat treatments are not usually required to enhance the color of the rubies.

At the Haneti, Tanzania chrysoprase locality, some miners at least had access to an excavator and mucking machines. The chrysoprase is colored by nickel.

The Merelani, Tanzania site produces mostly broken crystals, from colorless to those rich in blues and greens. About 85-90% of the stones are brown; they are heat-treated to a blue color. Mining techniques run from primitive to mechanized.

The John Saul ruby deposit in Kenya is located within the boundaries of a national park. The gems are rarely of “facet” quality; however, there is apparently a significant market for ruby beads.

Jim Imai announced that a symposium, sponsored by the Friends of Mineralogy, would be held at Copper Mountain Community College in Joshua Tree on October 24 and 25. A field trip will also be conducted in connection with the symposium.

President Caplette announced that officer nominations (or volunteers) were needed for the positions of Secretary and Field Trip Chairman. Please submit your recommendations

or, better yet, volunteer for one or both of the positions.

The meeting was brought to a close at 8:40 p.m. by President Caplette.

Respectfully submitted, Pat Caplette, Secretary

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## Nominations for Officers

Patricia Caplette and James Imai announced their intention to resign from the post of MSSC secretary and Field Trip Chair leaving two positions vacant for 2010 in addition to the already vacant Show Chair. Below are brief descriptions of the responsibilities for these posts:

**Secretary** is responsible for attending the monthly general member meetings and board meetings, taking minutes of these meetings, and submitting the minutes to the bulletin editor before the deadline via email.

**Field Trip Chair** is responsible for scouting potential field trip locations, organizing field trips, on a regular basis.

**Show Chair** is the lead person to organize the annual show that includes getting a show location, getting vendors to fill the show space, ensure all vendors had valid resale permit, arrange advertisement and security of the show, and post show survey with the vendors etc. This post requires a considerable amount of time. Although this position was vacant for the past several years it is still available for anyone who is interested in it.

Experience is not required for the above posts, as past officers and chairs will be available to give advice. Knowledge of mineralogy is not required either. The most important qualification is enthusiasm and commitment of a job well done.

Anyone interests in filling the posts please contact Geoffry Caplette at (626) 798-0664 before the November meeting or come to the November meeting and speak to Mr. Caplette.

**January 29 and  
30, 2010  
Mark your calendar  
for  
Pacific  
Micromount  
Conference**

### **Why Micromounts?**

by David Brand, New York Mineralogical Club

From: *Bulletin of the New York Mineralogical Club*, 7/08

(6th Place – AFMS Original Adult Articles)

Many amateur mineralogists begin their interest in collecting as a hobby by being fascinated by a beautiful crystal, Maybe it was a hand-held specimen of Arkansas quartz that could be taken home and shown to admiring friends and relatives. Curt Segeler, a noted NYMC micromounter, once remarked that only about 400 out of the total of over 4,000 known mineral species are available in hand-sized specimens. The opportunity to collect good specimens in the field has been limited. Many localities have been denuded of fine specimens or have been closed to collectors because of liability concerns. It has become an expensive investment to obtain hand-held or cabinet-sized specimens. Not so with micromounts. They offer a less expensive alternative means of collecting and offer a greater variety of minerals to collect.

What is a micromount? Neal Yedlin, another NYMC micromounter, defined them as “any specimen which requires magnification to see it properly.” Smaller crystals have a better chance of achieving perfect crystallization in the more common minerals, as well as the rarer mineral species. In addition to their beauty there is the benefit of saving space. Many micromounters might add to that definition by pointing out that the specimen fits or is made to fit in small paper or plastic boxes. Typically these boxes are an inch or less square; however, the size of the box, paper, or plastic is a matter of personal preference. By using one-inch boxes, 144 specimens will fit into a square foot. So even a very large collection can be stored in a relatively small space. Another big advantage is that the many specimens can be purchased at prices that won’t strain the pocketbook.

The major deterrent that keeps collectors from becoming micromounters is the high cost of a stereo-binocular microscope. Initially, a magnifying glass or jeweler’s loop will suffice, but the investment in a good scope with zoom lenses and good illumination becomes a necessity. Used scopes are available, but are still relatively expensive. With the high resale value, the expense of a microscope can be justified as an investment. Another Curt Segeler quote: “The pleasure derived from its (microscope) use will repay the buyer many times over. One look at a good micromount usually makes a convert.” The savings in buying smaller and cheaper crystal specimens will make the collector an enthusiast.

Part of the joy in collecting micros is concentrating on minerals of a particular theme. There are collectors specializing in collecting all species, just zeolites, or just sulfides. Others collect lead or silver minerals, or they might select a particular locale such as Franklin, New Jersey, or Tsumeb, Namibia, or New York State. To some enthusiasts, collecting type localities or just trying to accumulate as many specimens of a particular species that become available can be a goal. It was reported that Lou Perloff, a NYMC micromounter, had 1400 diamond mounts in his collection. The point is that by collecting small specimens, many common or obscure species become available from a variety of localities. Many micromount collectors may be pursuing one or more themes in their collections at any given time.

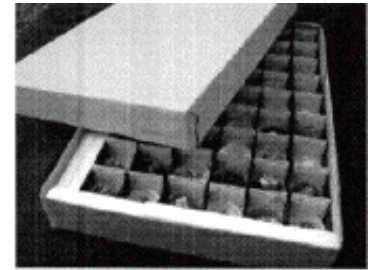


Parts of a Micromount

You don't often see micros for sale at mineral shows because they are too inexpensive. It would be difficult for a dealer to cover his initial expenses at setting up his display at mineral shows. Micromounters have their own meetings, symposiums, or workshops where mounts are freely traded or are available at little cost. There is also an "International Directory of Micromounters" published by the Baltimore Mineral Society. It is complete with names and addresses of individual collectors from every state and from over 30 countries. Many of the individuals listed are more than willing to swap specimens via the mail.

Micromounters have their own "Hall of Fame." It was organized and is still run by the Baltimore Mineral Society. Its purpose is to honor those who have served this hobby to the highest degree. They may have built up large collections, but more importantly, have earned and deserve a worldwide reputation among micromounters. Some familiar names of NYMC members in the Hall of Fame include Lazard Cahn, Clarence Bement, Lou Perloff, Neal Yedlin, and Curt Segeler.

A comedian once noted about food that rice is great when you are hungry and want 2000 of something. Well, collecting microminerals is a great hobby when you feel like collecting a lot of something. Micromounting opens the way for the greater enjoyment of collecting by offering a huge variety of minerals from many localities. With the lower acquisition cost of micromount specimens, a beginner can compete with the expert on an equal footing in building an extensive and varied collection



Storage of a Micromount Collection

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## Selecting and Purchasing a Microscope for Micromount Study

By Shou-Lin Lee



The kind of microscope used in micromount is called stereomicroscope (see picture at left). A stereomicroscope has two eyepieces (ocular eyepieces) and its magnification power is generally lower than those used in biology, from 10x to 40x. Depending on the models and attachments, such as overhead fluorescent light source and light source under the stage, the price of a stereomicroscope can go from under two hundreds dollar to several thousand dollars. Microscopes require a strong light source to light up the object under observation. The models that do not have an overhead light source would need an external light source, such as a fiber optic light box (price range from three to six hundreds dollars) to illuminate the specimen.

With the increasing popularity of gemstone collecting, I noticed that several jeweler supply catalogs also carry several models of stereomicroscope. Some are under two hundreds dollars. As a frequent window shopper, I observed that some jeweler supply stores in the Downtown Los Angeles Jewelry District have stereomicroscopes in their window display.

As digital technology has improved, a digital hand held microscope is a nice alternative to an old fashioned microscope. In the MSSC Bulletin of May 2009 issue, Lesile Ogg had an informative review on a handheld digital microscope that she owns. The advantage of a digital microscope is that the image can be captured and stored digitally without the need of a camera.

If money is really tight, a 10 power or 20 power jeweler's loupe with a built-in led light source is an inexpensive alternative. A jeweler's loupe is different from a magnifying glass of the same power. A jeweler's loupe has a built-in lens, so the shape and color you see through the loupe is not distorted.



*The hand held digital microscope attached to a laptop computer. Photo by Leslie Ogg.*

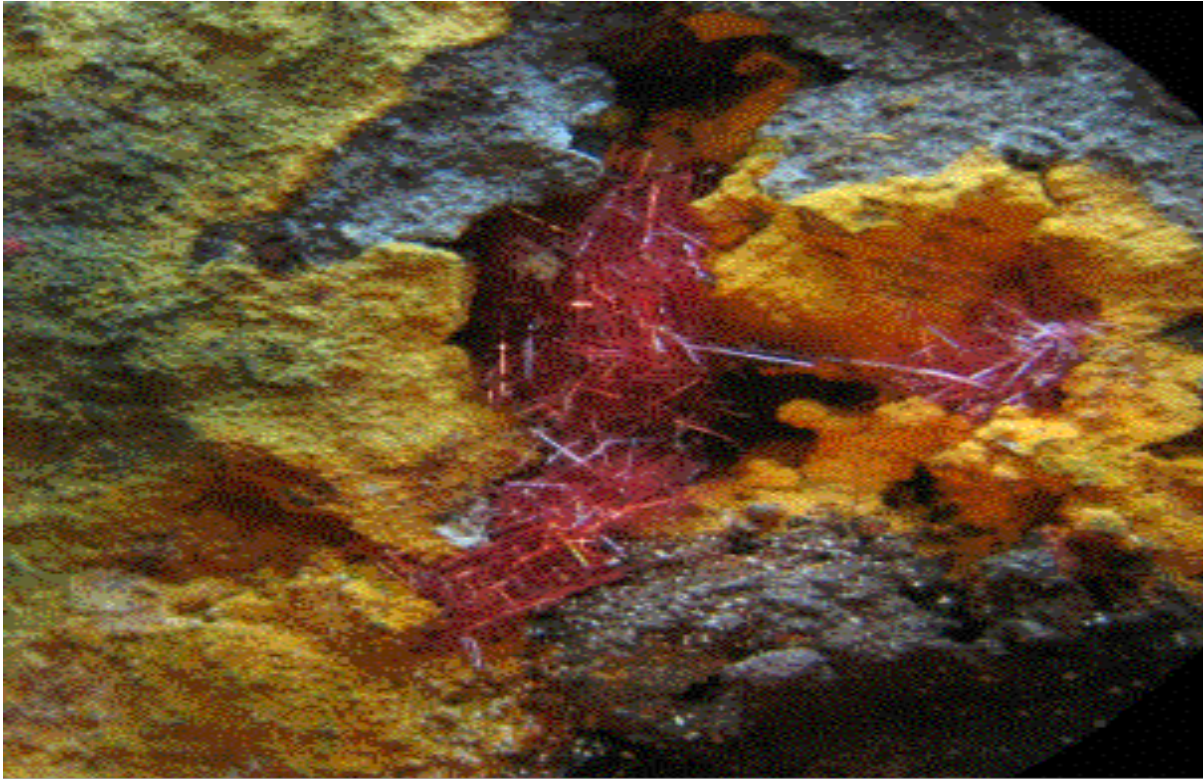
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## Some Pictures Taken through a Microscope

By Shou-Lin Lee

Taking pictures through a microscope using traditional film camera is a major undertaken. With digital cameras it is easier. The following two pictures were taken by holding a digital camera against one of the eyepieces of a stereo-microscope.





*The power is set at 10x. The area of red crystals is about 10 millimeter long. Anyone who knows the name of the red mineral please email me.*



*The small tuft of golden brown crystals measures about two millimeters. The host rock is a slice of Laguna agate. Can anyone hazard a guess as to what mineral are the golden brown crystals? I suspect cacoxenite but had never see one inside a Laguna agate.*

**Membership dues are due next month**

**Please fill the attached form**

**And return it with your annual due to MSSC treasurer**



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## 2009 Calendar of Events

**November 7-8 2009, Anaheim,** American Opal Society, White House/West Wing Event Center, 12398 S. Beach Blvd., Hours: Sat. 10-6, Sun. 10-5

**November 7-8 2009, Concord,** Contra Costa Mineral & Gem Society Centre Concord 5298 Clayton Road (Cornern of Ygnacio & Clayton Rd) Hours: 10 - 5 both days Harry Nichandros Email: [show2009@ccmgs.org](mailto:show2009@ccmgs.org)  
 Website: <http://ccmgs.org>

**November 6-7-8 2009, Eureka, CA** Humbolt Gem & Mineral Society Redwod Acres Fairground 3750 Harrie Street Hours: Fri. 9-6, Sat. 10-6, Sun. 10-5 tony Tyson (707) 502-9574 Email: [bluiis911@msn.com](mailto:bluiis911@msn.com)

**November 7-8 2009, Lancaster, CA** Palmdale Gem & Mineral Society Antelope Valley Fairgrounds 2551 W. Ave. H, Hwy 14 Hours: 9 - 5 both days Susan Chaissin-Walblom (661) 943-1861 Email: [SLChaisson@yahoo.com](mailto:SLChaisson@yahoo.com) Website: [palmdalegemandmineral.com](http://palmdalegemandmineral.com)

**November 7-8 2009, Ridgecrest, CA** Indian Wells Gem & Mineral Society Desert Empire Fairgrounds 520 S. Richmond Rd. Hours: 9 - 5 both days John DeRosa (760) 375-7905 Email: [schiller@ridgecrest.ca.us](mailto:schiller@ridgecrest.ca.us)

**November 7-8 2009, San Diego,** San Diego Mineral & Gem Society Al Bahr Shrine Center 5440 Kearny Mesa Road Hours: Sat. 9:30-5, Sun 10-4

**November 14-15 2009, Victorville, CA** Victor Valley Gem & Mineral Society San Bernardino Co. Fairgrounds 17800 - 7th Street Hours: 9-5 daily Vigil Melton (760) 900-0507 Website: [www.vvgmc.org](http://www.vvgmc.org)

**November 14-15 2009, Yuba City, CA** Sutter Buttes Gem & Mineral Society Franklin Hall, Yuba/SutterFairgrounds 442 Franklin Ave. Hours: Sat. 9-5; Sun. 9-4 Bruce Roberts (530) 675-2864

**November 21-22 2009, Livermore CA** Livermore Valley Lithophiles At the "Barn" Pacific Ave. at So. Livermore Ave. Hours: Sat. 10-5; Sun. 10-4 Email: [info@lithophiles.com](mailto:info@lithophiles.com) Website: [www.lithophiles.com](http://www.lithophiles.com) Show Flyer: [click here.](#)

**November 21-22 2009, Oxnard, CA** Oxnard Gem & Mineral Society Oxnard Performing Arts Center 800 Hobson Way Hours: Sat. 9-5; Sun. 10-4 Norb Kinsler (805) 644-6450 Email: [info@oxnardgem.com](mailto:info@oxnardgem.com) Website: [www.oxnardgem.com](http://www.oxnardgem.com)

#### MSSC Advertisement Policy

Mineral-related ads have always been acceptable in the bulletin. Following is the price per month:

Business card size	\$5	1/3 page	\$10
1/2 page	\$20	Full page	\$35

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 email to the editor at [shoulin.lee@yahoo.com](mailto:shoulin.lee@yahoo.com) and the payment should be sent to the MSSC Treasurer at 14728 Nanry St., Whittier, CA 90604-18507. The Bulletin editor reserves the right to decline requests for space if material submitted is judged to be in appropriate.