Monthly Bulletin of the Mineral & Gem Society of Castro Valley, inc.



# Club Notes



<u>General Meeting</u>: May 19th. 2015 7:30 PM at the Church of Christ. Those with the last name that begins with **I-L** please bring finger foods for the meeting.

New Members: Unless otherwise stated, General Meetings are on the third with Tuesday of the month at the church at 7:30 pm. You are invited and encouraged to attend! There is a silent auction and door prizes at every meeting.

Next Board Meeting: Monday May. 11th Board Meeting at the shop 7p.m.



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Monthly Bulletin of the Mineral & Gem Society of Castro Valley, inc.

This publication is the bulletin of the Mineral and Gem Society of Castro Valley, Inc., a member of the California Federation of Mineralogical Societies, Inc., the American Federation of Mineralogical Societies and the North Bay Field Trip Association.

# **Bulletin Submission Policy**

Submission deadline is the second Friday following the General Meeting (normally the second Wednesday of the month.) Anonymous contributions will not be considered for publication in the Petrograph; however, if requested at the time of submission, the contributor's name can be withheld. Members are encouraged to submit articles that may be of interest to the general membership. The bulletin editor reserves the right to edit any submitted articles or omit any submission from publication. Source must be cited for material quoted from other authors. Permission to reprint Petrograph articles is hereby granted provided properly cited.

## 2015 MGSCV Officers

#### <u>Elected</u>

President - Bonnie Andrade <u>President@mgscv.org</u>

Vice President - <u>VP@mgscv.org</u>

Secretary - Sheryl Cooper <u>Secretary@mgscv.org</u> (510) 589-8858

Treasurer - Betty Milam

1st Year Director - Jodi Minshall

2nd Year Director - Norm Hodgson

3rd Year Director - Mike Cox

Federation Director - Mike Mc Bride

Treasurer@mgscv.org

Director1@mgscv.org

Director2@mgscv.org

Federation@mgscv.org

Federation@mgscv.org

Federation Director - Mike Mc Bride Federation@mgscv.org
Shop Manager - Beth Farmer ShopManager@mgscv.org

2014 Show Chairman - Cathy Miller

ShopManager@mgscv.org
ShowChair@mgscv.org

Membership - Tony Coopermembership@mgscv.org510-589-5292Editor - Diana CohoonEditor@mgscv.org925-348-3000Past President - Ron Millerpastpresident@mgscv.org

<u>Appointed</u>

Scholarship Chair - Mary Howell

Librarian - Mary Howell Historian - Jamie McDonald Purchasing Agent - Beth Farmer

Education Coordinator - Shirley Buschke

Field Trip Coordinator-Brian Gray

Parliamentarian - Doc Buschke

Reception/Host - Jim Ewing

Sunshine Reporter - All members

Door Prizes - Bonnie Andrade

Web Master - Tony Cooper

webmaster@MGSCV.org



**Publication Staff** 



♦ Contributors: Shirley Buschke, Betty Milam, Sheryl Cooper, Mike McBride

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BOARD MEETING
April 13th 2015
Submitted by Sheryl Cooper

The meeting was called to order at 7:00 pm. In attendance were Bonnie Andrade, Betty Milam, Cathy Miller, Sheryl Cooper, Mike McBride, Norm Hodgson, Mike Cox, Beth Farmer and guest Rennie Castelino

Treasurer: We reviewed the March treasurer's report presented by Betty Milam. Norm Hodgson moved to accept the report as presented. Mike Cox seconded the motion and it carried unanimously.

Federation: Mike McBride has nothing to report at this time. No one has contacted him regarding CFMS cases.

Shop: Beth Farmer thanks everyone who volunteered for the Saturday cleanup. At the Open House on Sunday there were not many people but we did bring in \$700. She has ordered a batch of oil. She has a potential buyer from Richmond for the casting machine. Scott Griffin is a promoter of numismatic (coin collecting) shows and wants to be a part of our show. It is something to keep in mind. The men's bathroom is fixed. The shop is clean, let's keep it that way.

**Show:** The next show meeting is Thursday, August 20, 2015 at 7:00 pm at the shop.

Membership: We have 139 current members. Don't forget to pay your dues to be covered by the insurance and keep your name in the general meeting drawing.

Minutes: Mike Cox moved to accept the March board minutes as printed in the Petrograph. Mike McBride seconded the motion and it carried unanimously.

Field Trips: Mike Cox went to the Northern California Field Trip meeting. There are a lot of upcoming trips. See the field trip binder at the shop for details. On May 23-24 to Austin, NV for snake skin agate, jasper and more. In July to Davis Creek, CA for obsidian. In Sept to Apache Creek, AZ for pink topaz. We have been asked to host the September 2015 meeting.

Sunshine: In late March Joe Herrera's wife passed away. Our thoughts are with you Joe.

New Business: Rennie Castelino is involved with the US Faceters Guild and they would like to hold a Bay Area Faceters Frolic around the same time of our annual show. We do not have room at the Pavilion for them but if it was held nearby, we could advertise for both. We gave several suggestions of places to look into and figured we could help with permits. It is something we will continue talking about and getting more information on.

The next board meeting will be May 11, 2015

The meeting adjourned at 9:00 pm.

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#### GENEREAL MEETING

April 21 st. 2015

Submitted by Sheryl Cooper

Bonnie Andrade called the meeting to order at 7:40 pm. There are 22 members and 2 quests present.

Guest: Tim found us online and has a question regarding a stone he bought for suiseki. He wants to get it cut it to make a flat side.

Minutes: Jodi Minshall moved to accept the March minutes as printed in the Petrograph. Betty Milam seconded the motion and it carried unanimously.

**Program:** Starla Turner the president of the Golden Gate Chapter of the GIA is here tonight to talk about her trip to "The Ruby Fields of Burma"

Burma is now called Myanmar. Starla went to Ruby Land in October 2014 when the area was opened to visitors again. The last time anyone was allowed in was 1962. Rubies are the second hardest stone. Heat, pressure and passing fluids transformed the limestone to marble and created rubies. The Burmese rubies are a deep blood red color. When synthetic rubies hit the market it really cut into the Burmese ruby trade. Heavy rains during the same time hindered the mining process. In the Mogok area lives 500,000 people in a 10 mile long valley. They have no unemployment. Everyone has a 2 story house. When it floods and the bottom story fills with silt they just build another story.

They visited a traditional hard rock mine. The bion layer is really hard so when you find a cave then you know gemstones are in the bottom. You follow the water flow to find the gems. Workers get \$70 - \$80 a month and some get 10% of the profit to keep stealing from happening. To get light into the tunnels tin foil is used to reflect the sunlight. Some miners can afford head lamps. Both men and women work side by side in the mines. The safety standards are not quite the same as here. Dynamite is set off six feet away from the group. Ladders are made from whatever material is available. At one mine they employee 400 people during the wet months. They live on site the whole time and get everything they need - meals, TV, electricity, etc and better safety standards. But you cannot leave the site until the time is up.

In other areas they move whole mountains to get to the gem layers. A lot of the removed material is used to fill valleys to extend a village. The marble weathers to black because of acid rain. The untreated sapphire stones coming out of the mines are a brilliant blue. 99% of the sapphires in the market today are treated to get the best color. Most of the sapphires mined here go to Bangkok or Rangoon, but everything is cut locally.

At the next stop bion is dumped and water ran through it break it up. Then it goes through a pulsating jig because the gems are heavier. The last stage is where people comb through the remaining material. Tailings from the mine end up in

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the valley where the locals look for gems (mainly spinel) that got by the machinery.

Not many rubies are found anymore. A 2 carat ruby may be found every 2-3 years. They only saw 5 rubies in Ruby Land during the whole trip. The gemstones that are found are sapphire, spinel, peridot and moonstone. The machinery is foot powered to cut the gems. There are different kinds of markets to purchase rough or cut gemstones. They also saw blue fluorescent amber and blood amber.

In response to the military regime in Burma the US does not allow the import of Burmese Rubies and Jadeite.

**Starla Turner** brought lots of pictures, videos and stories to share. Thank you for a wonderful program.

Federation: There are CFMS show applications available at the shop for you to put a case in the show. If you have any questions talk to Mike McBride.

**Shop**: The shop cleanup was the weekend before last. No one from the public joined us, but we brought in \$700. Thank You Horace Robertson for your donation.

Mark Montgomery let us know that people are not cleaning up and turning things off. When he opened the shop one day he found lights left on, the heater came on so it was not turned off and the flat lap was not cleaned out. In the past he found an exploded soda can in the freezer, the door between the office and shop was locked (it should not be) but the back door was not locked. The coffee pot has been left on also. By the way the grit containers near

the dopping station are getting mixed up. You might say "So". Well if you plan to use 600 grit and it has 220 grit in it, you will put scratches in your rock instead of taking them out. Pay Attention

**Show**: There are a few things in the works. The next meeting is Thursday, August 20, 2015 at the shop at 7:00 pm. Remember everyone is invited.

Membership: We have 139 current members and still getting new members. Be prepared to start bringing your membership card with you to the shop. If you haven't picked yours up yet, they are in a holder above the sign in book at the shop.

Education: Shirley Buschke says she is getting ready for classes. Some people are asking for an opal carving class.

New Business: The Alameda County Fair is coming soon. Is there anyone who wants to display this year? Last year we had 12 cases. Can we get more this year? You get passes to the fair and a parking pass. They give you 3 days to set up. If you have questions contact Norm Hodgson 510-582-5954 or norm2@earthlink.net

Announcement: Shirley and Doc Buschke wanted a way to say thank you to three outstanding members and presented them with plaques in appreciation for their many years of service and leadership. In no particular order she pulled the plagues from the bag. First up, Norm Hodgson Did you know he has owned and co-owned several businesses? He is an appraiser and has appraised several raffle items for us. He is a hard worker and always willing to

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lend a hand. Next up Cathy Miller She started out skirting for our shows and then jumped right into being Show Chair when we needed someone to take over. Last up Sheryl Cooper She is one person that runs around the whole show helping where she can. Thank you!

**Sunshine:** Joe Herrera's wife passed away last month and his sister passed away this month. Keep Joe in your thoughts.

Money Drawing: The name drawn tonight for \$110 is Jamie DeSpain, but she was not here. In May the amount goes to \$115.

Guest drawing: Starla Turner

Ticket Drawing: Charles Meyers, Shirley Buschke, Stephen Caudill-Merida, Maya Caudill-Merida (yes twice), Doc Buschke, Charles Meyers, Mike Cox, Jodi Minshall, Maya Caudill-Merida, Sheryl Cooper, Stephen Caudill-Merida, Peggy Lew, George Kozakura, Mark Montgomery, Stephen Caudill-Merida, Cathy Miller and Cheryl Gullak

The meeting adjourned at 9:15 pm and the silent auction commenced.

The next general meeting will be on May 19, 2015 and it's our birthday.



#### **ROCK RUMBLES**

# By Shirley Buschke

Hurrah, we have a new micro wave oven.
Clean up any spills when you use it. Try that electric tea kettle if you want hot water.
It's great and fast.

The auction case is lonely. Doc Buschke put in a crystal pendant as the first entry in the auction case, and a week later he donated his turquoise tree. We also got donations from Beth Farmer, Jodi Minshall, Cheryll Gullak and Shirley Buschke. Hope next year's auction does as well or better than this year, which was more like it used to be.

President Bonnie Andrade, Doc and Shirley Buschke exhibited at the San Jose show. One of the exhibits was of pottery inlaid with stones, mostly turquoise. Leo Lu a San Jose member, had a fantastic display of small jade carvings he had made.

There was a very upset Mark Montgomery at our meeting and rightfully so. It seems someone put a can of coke in the freezer and it exploded. What a mess. Hope the perpetrator cleans it up. It's a week later, as this is written, and the mess is still in the freezer

We have many members who are experts in some field of lapidary who are always ready to help us. **Bill Luna** is a fixer of watches, bracelets, soldering, etc. **Ed Rigor** is always doing something for us and many others also help. If these services were done at a retail establishment, costs would be several dollars. Since none of the

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helpers accept money, why not drop a buck in the safe for the club as a thank you to them and a way to insure the shop will continue to be open.

The program at the April meeting was outstanding. Norm Hodgson was able to invite Starla Turner of the Golden Gate chapter of the GIA in San Francisco. She described, with slides, mining for rubies in Burma. Burma is now known as Mynmar. Along with rubies, spinel is found in quantity and several other gems, sapphire included. Natural rubies have always been expensive and even after the invention of synthetics about 1900 per carat prices have held. She said employment seems to be 100%. After the commercial mining, the dregs are left for the local people, who can sell what they find. Occasionally they find a large stone, but this is very rare.

Cheryl Gullak is going through her dad's things and we are the recipient of many items. She brought in three polished slabs ready for a clock mechanism; these and other of his things are available for sale to members.

Watch the bulletin board in the shop, we anticipate two garage sales of elderly members. One is selling her home and the other is cleaning out stuff, No details yet. This is a good reason to come to the shop.

#### **ANNOUNCEMENTS**

People were asking what the auction items sold for at the 2015 show.

I finally got the list done and it is in the case down at the shop.

(Someone please let Annemarie know - she doesn't have email)

Recap

68 items in total

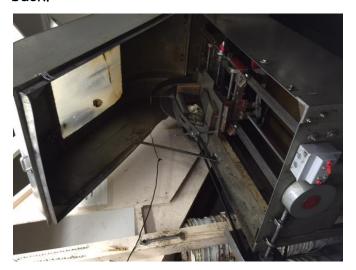
7 of them brought in 3 digit amounts.

Total for all items is \$3701.

# Thank you to everyone who contributed items.

This saw has been left open for the past week. There is a rock in it that also inside, notice there is no cutting note hanging next to the saw. This rock doesn't appear to be in the saw book as one that a member has asked for slabbing, therefore it must belong to one of us trained and trusted saw operators.

I am removing this rock and holding it for the owner. Please come and see me to get it back.



The California Federation of
Mineralogical Societies annual Jewelry,
Mineral & Gem Show will be held June 12, 13
& 14, 2015 at the Lodi Grape Festival &
Harvest Fairgrounds, 413 E. Lockeford St.,
Lodi, Ca. Part of the show's program will be

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what is called "Club Central". This will be an area where all clubs in the CFMS can meet with people attending the show to present what their club is about and to hand out club applications, as well as meeting other club members. Anyone wanting to volunteer to represent our club for a shift during this show please contact: Mike McBride, E-Mail at federation@mgscv.org. If you are interested in putting a case in this show contact Mike McBride for the application. The deadline is May 11, 2015.

All club members.

Maureen Bankhead, Exhibit Chairman at the Alameda County Fair - Hobby Hall has been happy to work with our club the past few years to display our exhibits at the Fair during the June/July show. It's a lot of fun, entrance fee is \$2.50 (or was last year) and there is an opportunity to win a cash prize for your case. Exhibitors also receive passes to the fair and parking pass. Last year we had 12 Exhibits and I hope we can put in more this year. Maureen's mother-in-law was the lady who started the Mineral Hall at the Pleasanton Fair Grounds back when God was a little Girl. I am not in charge of the Fair but I told Maureen I would spread the word and help coordinate cases. Deadline to enter is this coming May and date to put in display is sometime in mid-June with tear-down the end of the show around July 7th (I think). Let me know if this is something that will work for you and your friends. All the fair provides is an exhibit case which is locked and security on the fair and building site is very very very tight!

## Norm Hodgson

Exhibit Chairman MGSCV 510-744-1564

# Education May 2015

On April 25, the following students enjoyed a class in enameling under instructor Betty Milam's expertise: Zakyra Alawdi, Natasha Taran, David Lee and David Dai.

Ken Panico was instructing two students in sphere making. Sorry, I did not catch their names, but they will be back. Just shaping the sphere takes forever, or so it seems.

We have enough students for another lost wax class. The class is limited to 5 and there is a charge. The class will be on a Sunday AM. Because the number of students is limited, show up if you say you will be there. It has been suggested we collect in advance and the shop should keep the fee if you are a no show. You have kept someone else out.

#### HONORING OUR OWN

At our April 21st meeting three of our members were honored for their outstanding service to our club for more than 5 years by going the extra mile.

Norm Hodgson is a local who was born to be a leader. He was student body president at his Hayward High School and graduated from U.C. Berkeley. While a student there he also owned and operated a coffee shop. He is married and has a daughter. He is a

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certified museum appraiser. He likes to facet and he has arranged for outstanding displays at our shows. He does lots of little things and at the recent open house I feared for his health the way he was everywhere at once checking on sales, etc. He has encouraged displaying at the Alameda County Fair and has greatly increased our club's participation there.

A second honoree was our show chairman Cathy Killer. Cathy also likes to facet. Prior to her taking on the job of show chairman her only show experience at the show had been skirting and working where ever she was told a need existed. When our show chairman left she stepped in and we were off to the races. She learned very fast and the show went on. We really know she is a superwomen. How else could any one but a superwoman handle a wedding of her daughter and the show not in the same year but just months apart.

Sheryl Cooper only took minutes at the meeting were surprised to hear of her other accomplishments. She works, helps put out bulletins via e-mail, helps with membership, belongs to other clubs, helps at the schools of her children and handles the auction details. That means deciphering my writing, packing up and labeling everything, deciding the order of the auction, preparing the auction program and collecting money of bidders. Before the auction she was everywhere, including before and during the show. She must have needed a new pair of shoes by Sunday night.

Someone at the meeting suggested we buy roller skates for her next year.

#### CLEAN UP CREW

The following members showed up for the clean up at the shop. If your name is not here, it is because you forgot to sign in or I could not read your writing.

Norm Hodgson Judith H
Sub Nishimoto Jim Ewing
Sheryl Cooper Cheryl Gullak
Betty Milam Chuck Meyers
Lyle Schoeff Doc Buschke
Horace Robertson Ann Marie Korchendorf
Beth Farmer Jodi Minshell
Victor David Doi
Kathy Miller Kelly Reinbolt

The Friday before Mark Montgomery and George Kozakura and Jim Ewing showed up to clean the silt from the barrels under the sanders. Yes, we recycle water and someone has to clean the barrels regularly. They were foiled as the airport was installing a new security fence so they had to come back a week later to finish the job.

The shop looks great. Keep it that way. If you did not do your part, **Beth** has several suggestions on how you can help. Clean the dregs in the saws, paint the table legs, sweep the floors, etc. And CLEAN UP YOUR WORKING SPACE BEFORE YOU LEAVE --all of it.

#### SHOW SCHEDULES

PARADISE GEM & MINERAL SOCIETY

NORTH ORANGE COUNTY GEM & MINERAL SOCIETY

La Habra, Ca

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May 1, 2, 3<sup>rd</sup> fri. 4-8pm; Sat, & Sun. 10-5pm

La Habra Community Center

101 La Habra Blvd.

Dan Warthen 562-330-8974

odwarthen@verizon.net

nocgms.com

SEARCHERS OF ANAHEIM

Anaheim, Ca

May 2<sup>nd</sup> & 3<sup>rd</sup> 10-4pm

Brookhurst Community Center

2271 Cresent Ave.

Margaret Hogarth 909-815-3045

Hogarth.m@gmail.com

www.seachersrocks.org

RENO MINERAL AND GEM SOCIETY

Reno, Nv.

May 9<sup>th</sup> & 10<sup>th</sup>; Sat. 10-5pm; Sun. 10-5pm

Reno Livestock Convention Center

1350 North Wells Ave

Steve Norman 775-358-7322

Snorm11@hotmail.com

www.renorockhounds.com

PALOMAR GEM & MINERAL CLUB

Escondido, Ca

May 9<sup>th</sup> & 10<sup>th</sup> Sat. 10-5pm; Sun. 10-4pm

California Center For The Arts

340 Escondido Blvd.

Gayle Hamilton 760-743-0809

gaylehamilton@yahoo.com

www.palomargem.org

The CFMS 2015 Jewelry, Mineral and

Gem Fest

June 12th & 13th; Fri. 10-5pm; Sat. & Sun.

10-4pm

Lodi Grape Festival & Harvest Fair

413 E. Lokyard St

www.cfmsinc.org

CONTRA COSTA GEM & MINERAL

SOCIETY

Concord, Ca

August 29<sup>th</sup> & 30<sup>th</sup>; 10-5pm daily

Centre Concord

5298 Clayton Rd. (near Ignacio Rd.)

Harry Nichandros 925-289-0454

Show-c@ccmgs.org

wwwccgms.org/gem\_show/

Field Trips

A "CO-OP MEMBER" FIELD TRIP TO TOPAZ MT. & DUGWAY GEODE BEDS

WHEN: May 2nd through May 4th

COLLECTION MATERIAL: Topaz Crystals,

Bixbite (Red Beryl), Pseudobrookite

crystals, and Hematite crystals.

LEADER & CONTACT INFO: Please contact ahead of time: Jim Hutchings, Home 530-

367-5108, Cell 916-995-7380

jhutchings22@hotmail.com

Hi, rockhounds!

The Itinerary for the 2015 RFTF!
Central California Rockhound Odyssey is

finally ready.

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Here's the link.(not available go to website)

I hope that you'll be able to join us for part or all of the trip. If you'd like to do one of these in your area, and want a hand, feel free to message or call me.

Kris Rowe Admin, RFTF! (559) 250-5057

Visit Rockhound Field Trip Fanatics! at: http://rockhound-field-

trips.ning.com/?xg\_source=msg\_mes\_netwo
rk

The CFMS Co-Op has several field trips upcoming visit their website under co-op.



#### GEM OF THE MONTH

This month's gem was born in China. He did a lot of traveling especially in the northern area near Russia. He was a math teacher there and worked in air conditioning here. He is a new member and was already doing his part on clean up day. He said he and his wife married late in life. They have two sons, one is 49 and born in China. The other son was born in the US. He just graduated as a pharmacist and they missed the open house because they were celebrating the graduation.

Our gem said he emigrated to the US in 1980. He said Americans do not appreciate the blessings of the freedoms we have in this country. This was the main reason they left China. Our gem is a member of the Sequoia club. He heard about us because he wanted to learn how to carve, along with other techniques of lapidary. His favorite stones are jade and opal. He is retired now from DeAnza College. He is looking forward to learning new things.

Who is our gem? **David Dai**. Welcome to our club and thank you for helping in shop clean up.

#### BRAD SMITH BENCH TIPS

An easy way to keep all your files organized at the bench is to use a magnetic tool strip. They're not expensive and help keep a lot of small tools from cluttering the bench top. I got a couple of them from Harbor Freight for about \$5 each. See http://www.harborfreight.com and search on-"magnetic-holder"

My only regret was putting some of my small drills on the magnets. The drills got a little magnetized and now stick together when I carry them in a bottle in my tool box.

#### SILVER DISCOLORATION

Working with jewelry involves an ever increasing number of skills.

Chemistry is one of them that comes into play when dealing with a

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discoloration on the metal caused by a chemical reaction between it and the environment.

In the case of Sterling silver there are three discolorations we typically encounter: a tarnish, a firescale, and a firestain. Each is different in its cause, in its cure, and in its prevention. All three have to do with the metals in the Sterling alloy (92.5% silver and 7.5% copper) and how they react with oxygen and the heat of soldering or with pollutants in the air over the long term.

Tarnish is a grayish coating that builds up slowly on the surface as a result of a reaction of the silver with sulfur-based compounds in the air. Typically these are pollutants from the burning of petroleum fuels, but they can come from other sources as well. I once tarnished all the silver in my display case by putting a pretty specimen of iron pyrite in with the jewelry. Turns out pyrite has sulfur in it! Sulfur combines with the silver to form a grayish silver sulfide film on the surface.

Preventing tarnish involves keeping sulfur away from the metal. Plastic bags will help, and anti-tarnish strips are available from jewelry supply companies to pack near your items. Tarnish is easily removed by hand polishing with a jeweler's cloth or with one of the products sold for cleaning the good silverware for holiday dinner.

Another way is to remove it chemically. Put a piece of aluminum in the bottom of a dish large enough to contain your piece. Heat enough water to cover the silver. Mix in 2 tablespoons of sodium carbonate per cup of water and pour into the dish. Be sure

the silver touches the aluminum. Sodium carbonate is the main ingredient in washing soda. Read the labels in grocery and hardware stores.

The second type of tarnish is called firescale. It is the dark gray to charcoal colored film that forms on Sterling or other copper alloys like brass or bronze when we heat it with a torch. The copper in the alloy reacts with oxygen in the air to form a dark cupric oxide coating on the surface. Luckily, the oxide is easily removed by dissolving it in a mild acid generally called a pickle. It's important that we not let firescale form on a solder joint because it will block the flow solder over the joint.

There are two ways to prevent firescale. Most common is to use a flux, a borax-based solution applied to the metal before soldering. When melted, borax forms a thin glassy layer that keeps oxygen away from the metal. A second way is to do your soldering on a charcoal block.

Together with the flame, charcoal greatly reduces the amount of oxygen in the area being soldered. In either case, oxygen is prevented from reaching the metal, so no cupric oxide firescale is formed.

A second oxide can also be formed when soldering copper or a high copper content alloy like bronze or brass. It's called cuprous oxide and is reddish in color. That's why a black looking piece you put in the pickle

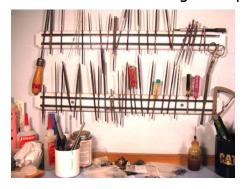
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sometimes comes out red. Problem is that while the black cupric oxide is dissolved by a pickle, the red cuprous oxide is not. The discoloration can be sanded or polished off, but an easier way is to use a "super pickle". This is a mixture of fresh pickle with a healthy shot of hydrogen peroxide from the local store.

I've saved the worst form of discoloration, firestain, for last. Think of firescale (above) as like getting dirt on your shirt that you have to wash off. Firestain is like getting ink on it. The discoloration is not just on the surface, it seeps down and stains the material. Firestain happens when we heat a piece of silver too hot, too long, and/or too many times. Firestain occurs when the oxides start to build up below the surface of the metal. You generally don't notice it until after polishing. It appears as a darker area of the surface and is easy to spot when viewed under light bounced off a piece of white paper. Because firestain is below the surface, there's no easy bench tip solution. Depletion guilding may work for some pieces. Otherwise, removing it calls for sandpaper and aggressive polishing.

A much better approach for a piece that will require a large number of solderings is to protect the metal from developing firestain by applying liberal amounts of a firecoat. Regular soldering flux will provide some protection but is not as effective as preparations made specifically for the task. Jewelry supply companies offer several commercial solutions,

but my favorite is the Prips mixture in alcohol. I use it every time I intend to do more than two solderings on a piece.



Get all 101 of Brad's bench tips in

"Bench Tips for Jewelry Making" on Amazon

#### KIDS KORNER

#### Fluorescent Rocks

Isabelle Bennette: Age 10

One of my traditions when attending the Gem and Mineral Show is to visit the Fluorescent Room. This year, after I finished my volunteer shift at the Gemstone Wheel, I walked excitedly over to the Fluorescent Room. It was open and crowded, yet quiet and dark. Inside, the room was unlit allowing the many stones to sparkle. The only lighting came from inside the cases which were painted black inside and out. Ultraviolet lights shone from the top of each case down onto the stones. Each stone was positioned with the most brilliant side of the rock facing up. I could see the greens, reds, and other colors of the stones shining in the lights. Each stone was special and unique. Some of the stones looked clean and polished while others looked rough and dirty. Each stone had a different name and shape. Some were

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labeled fluorite, pink calcite, or eucryptite. Some of the fluorescent rocks were spheres while others were square or rectangular, or looked like they just came out of the ground. They all had one thing in common though. Parts of the rocks or the entire stone glowed in the light that shined on them. You could tell that some rocks looked plain and brown on parts that were not fluorescent. Some of the fluorescence of the rocks was a different color than other parts of the stone.

A scientist named George Gabriel Stokes was the first man to discover fluorescent rocks. He did so in 1852 when he noticed that the mineral fluorite would give off a bluish glow when exposed to invisible light. Stokes named the glow "fluorescence" after the mineral fluorite. There are certain elements in a rock that will activate fluorescence. If a stone has lead, boron, chromium or manganese, then they have fluorescence.

Many people have no idea how fluorescent rocks work. Without certain lights, the fluorescent glow of a rock will be invisible to a human eye. A fluorescent rock temporarily absorbs the light that shines on it and releases it so you can see its brilliance. You usually see this best under an ultraviolet light. About 15% of minerals are fluorescent. The ultraviolet lighting that you use is very vital because it makes the glow brighter and clearer.

Fluorescent rocks are a scientific wonder and one of my favorite parts of the Gem and Mineral Show.

## Make A Geode At Home

Geodes are geologic formations which are created when crystals form inside a vug or hole in an igneous rock. Usually quartz- (and some-times, calcite)-rich waters enter the hole and the quartz crystallizes. A geode looks like an ugly round rock on the outside. But crack it open, and you will discover beautiful crystals that sparkle and shine. Here's a recipe for making a geode at home.

You will need the following materials:

- 1. 3/4 cup of alum powder
- 2. White glue
- 3. Paintbrush (small)
- 4. Container (a large, clean mayonnaise jar or a kitchen bowl will work well)
- 5. Food coloring
- 6. Hot water
- 7. Serving Spoon
- 8. Plastic Easter eggs

Here we go . . .

Day 1

- 1. Paint the inside of 1/2 of a plastic Easter egg with a thin coating of white glue.
- 2. Sprinkle alum powder on the glue. Be generous you want to cover as much of the inside of the egg with alum powder as possible. Turn the egg over and shake out the excess alum powder. Set this aside and let it dry for one day so that the glue is completely dry and hard.

Day 2

1. Pour 2 cups of very hot water into your container. Caution: Have an adult help you so that you do not get burned by the hot water!

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- 2. Put 50 drops of food coloring into the hot water and stir it with a spoon.
- 3. Stir in 3/4 of a cup of alum powder into the hot water. You will see that not all of the alum dissolves in the water: you will have some alum powder on the bottom of the container. You can then put the container with the alum water in your microwave and heat it for 1 to 2 minutes. Remove the container very carefully (again, have an adult help you with this step) from the microwave and

stir the mixture again with the spoon.

- 4. Let the water cool for 20 to 30 minutes.
- 5. Carefully place your plastic Easter egg from Day 1 on the bottom of the container. Be sure the inside that you coated with glue and alum powder faces up.
- 6. Put the container in a warm place in your house for a full day. The water will begin to evaporate and alum crystals should grow on the inside of your plastic Easter egg. The longer you let the water evaporate, the larger the crystals will grow!
- 7. When the crystals are the size you like, carefully remove your geode from the container. Pour out any water that is still in the geode. Carefully place it on a paper towel and let it air dry.
- 8. You have created your very own geode. Try it again with many different colors and create your own home-made geode collection.

Suggestion: Try this with other soluble salts that you can buy at the local pharmacy. Try to make a halite (salt) geode. Via March 2015 Edition of the *Flint Flashes*, via *The Tumbler*, via 1/15 *The Quarry*, 9/14; from *Mini Miners Monthly*, 7/13

If anyone has any articles to publish please send them to the editor. I thought that this last article with the making of geodes, might be a good project for some of our juniors with the help of their parents. The parents might enjoy it as well.





# Monthly Bulletin of the Mineral & Gem Society of Castro Valley, inc.

# Shop Schedule

# (All shop session's members only)

#### MAP

Monday 10AM to 1PM, Lapidary

6PM to 9PM, Beginners only in lapidary

Tuesday 9:30AM to 12:30PM, need daytime supervisor

6PM to 9:00 PM, Lapidary,

Wednesday 9AM to 12:00PM, Lapidary

Library open 10AM to noon.

5:30 - 8:00 PM Lapidary

Thursday 10:00AM to 1:00 PM, Lapidary

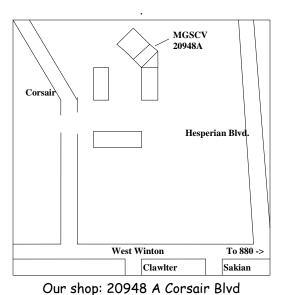
7PM to 9 PM, Lapidary

Friday 9-1 PM Lapidary, Faceting (experienced only)

Saturday 9AM to 3PM, Faceting Class 9-12, Juniors,

w/supervisor's approval, lapidary Library open 10AM to noon.

Sunday 9:30AM to 12:30PM, Lapidary



Our shop: 20948 *A C*orsair Blvo Hayward, *CA* 94545 (510) 887-9007

#### SHOP NOTICES:

Email us at info@mgs

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From I 580: Take the A Street exit and go west, turn right on Montgomery Street and go to 22307 Montgomery Street.

From I 880: Take the A Street exit and go East. Turn left on Montgomery Street and go to 22307 Montgomery.

From Jackson Street: Go north on Mission Boulevard, turn left onto A Street, then right on Montgomery Street and go to 22307 Montgomery Street.



# Monthly Bulletin of the Mineral & Gem Society of Castro Valley, inc. Mineral & Gem Society of Castro Valley (MGSCV) Membership Application and Information



Membership is good for one calendar year from January 1st through December 31st. Please fill out and sign the application. Mail the completed form, a check for the dues **payable to MGSCV**, and a self-addressed, stamped envelope to - **MGSCV**, **Attn: Membership Chair**, **P.O. Box 2145**, **Castro Valley**, **CA 94546**.

Your membership is active upon receipt of your check and application. It will be processed and membership cards will be mailed to you within 4 weeks. Your email will be added to the list for the Petrograph, our newsletter. Your name will be added to the roster in the lobby at the workshop and in the drawing at the general meetings for cash prizes, if present.

We are a non-profit club whose sole purpose is the education of lapidary arts and geological sciences for all who are interested. <u>No products produced in the shop can be sold for profit</u>. All members should have or be familiar with the MGSCV Handbook. A copy is available for review in the club's lobby or one can be emailed to you by sending a request to <u>info@mgscv.org</u>.

Before any member may operate any equipment or take any class they must have completed an orientation and their first cabochon. To schedule an orientation send an email to <a href="WorkShopManager@mgscv.org">WorkShopManager@mgscv.org</a> with your name, phone number, and a good time to call you. During the orientation you will learn about the club and get a tour of the workshop. Monday evenings are reserved for beginners only.

Membership dues cover less than 10% of our annual operating costs. It is our annual show that funds the club, workshop and all activities. A requirement of membership is that every member must work at the show for a minimum of 4 hours. The show is always held the first full weekend of March, so mark your calendars. The show is fun to work and is the reason we have the best workshop/club in Northern California. Shop services such as rock sawing, casting, special classes (faceting, wire wrap, metal work, etc...) will not be available to members who do not work at the show.

Membership Chairperson		
Type of Membership(s): (check all that apply)		
Single - \$35 Couple - \$60 Associate - \$17.50 (former member living me	Junior (11-17 with adult) - \$1 ore than 100 miles away)	Junior (11-17 without adult) - \$5Lifetime (voted in by the board)
After July 1st a Name(s) (Please print all the names.)	all new membership dues are half (½)	
Adults:		
Juniors:		
Address:		
City: State:	Zip: F	Phone Number:
E-mail Address:		
(Our monthly newsletter, the Petrograph, will be emailed t Occupational Skills:		
(Sometimes we are in need of advice and\or help in regard Confidentiality: (check all that apply)  I do not want my address printed in the I do not want my phone number printed in the confidence in t	e roster at the shop. ed in the roster at the shop. d in the roster at the shop.I agre	
Members Signatures:		