

April

## CLUB NOTES



Next Board Meeting and Show Meeting will be **Saturday April 10th. at 3:00 PM** via **Zoom virtual room**. If you have not received a link to the meeting, and would like to attend, please email [president@mgscv.org](mailto:president@mgscv.org) and request an invitation.virus

**. the General Meeting for April 20th via Zoom at 4:00**



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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, but if requested, the contributor's name can be withheld. Members are encouraged to submit articles that may be of interest to the general membership. The Editor reserves the right to edit or omit any submitted articles. Sources must be cited for material quoted from other authors. Permission to reprint Petrograph articles is hereby granted provided properly cited.

### 2020 MGSCV Officers

#### Elected

President - <b>Jodi Minshall</b>	<a href="mailto:President@mgscv.org">President@mgscv.org</a>	
Vice President - <b>Greg Croft</b>	<a href="mailto:VP@mgscv.org">VP@mgscv.org</a>	
Secretary - <b>Sheryl Cooper</b>	<a href="mailto:Secretary@mgscv.org">Secretary@mgscv.org</a>	(510) 589-8858
Treasurer - <b>Sheryl Cooper</b>	<a href="mailto:Treasurer@mgscv.org">Treasurer@mgscv.org</a>	
Director - <b>Pete Bergeron</b>	<a href="mailto:Director1@mgscv.org">Director1@mgscv.org</a>	
Director - <b>Norm Hodgson</b>	<a href="mailto:Director2@mgscv.org">Director2@mgscv.org</a>	
Director - <b>Michelle Bennette</b>	<a href="mailto:Director3@mgscv.org">Director3@mgscv.org</a>	
CFMS Director - <b>Beth Farmer</b>	<a href="mailto:Federation@mgscv.org">Federation@mgscv.org</a>	
Shop Manager <b>Neil Delfino</b>	<a href="mailto:ShopManager@mgscv.org">ShopManager@mgscv.org</a>	
Show Chairman - <b>Cathy Miller</b>	<a href="mailto:ShowChair@mgscv.org">ShowChair@mgscv.org</a>	
Membership - <b>Tony Cooper</b>	<a href="mailto:membership@mgscv.org">membership@mgscv.org</a>	510-589-5292
Editor - <b>Diana Cohoon</b>	<a href="mailto:Editor@mgscv.org">Editor@mgscv.org</a>	925-348-3000
Past President - <b>Bonnie Andrade</b>	<a href="mailto:pastpresident@mgscv.org">pastpresident@mgscv.org</a>	

#### Appointed

Scholarship Chair - **Greg Croft**  
Librarian - **Mike Mc Bride**  
Historian - **Norm Hodgson**  
Purchasing Agent - **Beth Farmer**  
Education Coordinator - **Lily Johnson**  
Sunshine Reporter - **All members**  
Door Prizes - **Neil Delfino**  
Web Master - **Tony Cooper**  
[webmaster@MGSCV.org](mailto:webmaster@MGSCV.org)



Publication Staff



✧Contributors: **Sheryl Cooper, Jodi Minshall**

## BOARD MEETING MINUTES

March 13, 2021

By **Rosita Alvarez Croft**

The meeting was called to order at 3:00 PM by **Jodi Minshall**.

There were 12 Board members in attendance: **Jodi Minshall, Bonnie Andrade, Greg Croft, Beth Farmer, Sheryl Cooper, Michelle Bennett, Neil Delfino, Pete Bergeron, Cathy Miller, Diana Cohoon, Lily Johnson, Norm Hodgson.**

Meeting minutes from the previous Board of Director's meetings for January and February were reviewed. **Beth Farmer** moved the minutes be accepted as printed in the Petrograph with **Neil Delfino** seconding the motion. A vote on the motion was taken and was passed unanimously.

Committee Reports:

**Vice President: Greg** has prepared a presentation on Zircons for the General Meeting on March 20, 2021.

**Treasurer:** A Treasurer's report was presented to the Board and accepted.

**Shop Manager:** We are still having occasional issues with *Genies #2 and #5*. The machines need to be rolled back and forth a couple of times before being used. He is currently working on the 20" saw. The Shop supervisors should check the machines every time they come into the shop. The new bearings for the 14' saw have been replaced. The 18" saw is used for training because it does not have a vise on it.

The 24" saw has been tagged out by **Pete** because the set screws that lock the carriage are missing.

Items stored in the faceting room, library and other parts of the shop could be stored in the back part of the Mezzanine and secured with a chain link fence. This would free up space towards the front for other uses. Work parties need to be formed to move stored items up to the mezzanine. **Neil** is willing to bring his truck to move the cases from storage to the shop.

There was a discussion regarding the Club's Facebook pages. **Norm** and **Chloe** took pictures of the shop to post on the Facebook page she is managing for the shop but are

reluctant to post them for security reasons. **Neil** suggested showing a photo of one *Genie* and one facet machine only. Other members mentioned that there were already many shop photos posted on other older shop Facebook pages that we might want to remove. **Jodi** offered to contact Facebook regarding removal of two unsponsored pages.

**Librarian:** The library is highly cluttered and needs to be cleaned up.

**CFMS Representative:** Nothing to report at this time.

**Show Chairman:** County Health has to approve the indoor show. It may be June, July or August before we know when we can schedule an indoor show. We have reserved the Newark Pavilion for Oct. We need to find a new Exhibit Chair for the Exhibit Hall at the Pavilion. **Norm** will continue to assist.

**Membership Coordinator:** Membership fees have been deposited. There are 7 new members.

**Treasurer's Report:** The bounced dealer check was received and deposited. We don't have a replacement yet for the other dealer

who didn't pay. All monthly expenses have been paid. **Neil Delfino** and **Greg Croft** moved to accept the Treasurer's report.

**Sunshine Report:** The Church of Christ Has renamed the Main hall Robertson Hall in recognition for Mr. Robertson's donations to the church. He is currently in Santa Rosa.

**Procurements Report:** Nothing to report at this time.

**Purchasing Agent:** **Beth** says we have more than enough dealers interested in doing the show In October. If we have no shared tables and no dealers back to back, we can have 14 dealers in each of Halls 1 and 4. We don't need curtains and we can have the dealers put up their own signs. We can use the drop frames to separate the dealers. Users need to remember to twist and snap the frames to secure them.

**Education Coordinator:** We are currently looking for a new Lost Wax instructor and a Wire Wrapping instructor. **Lily** suggested we could have classes using training videos.

**Editor:** She is adding bench tips to the Petrograph to make it more

interesting. If anyone has any suggestions, please send them to her.

**New Business: Rosita Croft** will be taking over the Secretarial duties for **Sheryl**.

The Shop will remain open for member work sessions at the hours below. **Beth** will update the hours on the board at the Shop.

Monday: Closed, looking for a lapidary instructor

Tuesday: Closed, need daytime supervisor,

Closed, Lapidary

Wednesday: 11AM to 2:00PM, Lapidary

Library open 10AM to noon.

Kirk, teaching faceting in the evenings.

Thursday: 10:00 AM to 2:00 PM, Lapidary

Friday: Closed

Saturday: 9 AM to 12:00 PM, Faceting Class 9-12, Juniors, w/supervisor's approval, lapidary

Library open 10AM to noon. Sunday: 9:30AM to 12:30 PM, Lapidary

## **GENERAL MEETING**

March 27, 2021

**By Rosita Alvarez Croft**

The meeting was originally supposed to take place on Saturday, March 20th at 3:00 pm but due to miscommunication of the time was rescheduled for today at 3:00 pm.

The meeting was called to order at 3:10 pm by **Jodi Minshall** via a Zoom meeting space.

There were 9 club members and no guests in attendance.

Presentation:

**Greg Croft** gave a presentation called "Zircons are Forever".

Meeting Minutes:

Meeting minutes from the previous Board and General meetings were reviewed. **Mike McBride** moved the minutes be accepted as printed in the Petrograph with **Bonnie Andrade** seconding the motion. A vote was taken and passed unanimously.

## Committee Reports:

### Shop Manager:

Sharon brought in some stock that needs to go into storage at the shop;

**Cathy Miller** has started to reorganize the shop. **Cathy** is having problems with the shop keys.

Sometimes they work and other times they don't. **Neil** will lubricate the locks on Monday.

**Teresa C. Iokova** has been trained on the slab saw. She cut several slabs that can be used for cabochons.

The 18" and 24" saws are working now and the faceting jigs and dops have been honed.

**Neil** reminded everyone that the shop managers need to roll the Genies back and forth a couple of times when they open the shop. **Phil** suggested that someone post a sign to remind people.

**Mike McBride** is considering returning to teach the Beginning Cabochon class on Monday nights but only if we have an EP Filter in the shop and only 3 students at a time. No one else should be in the shop at the same time because it is too

difficult to teach the class and to watch what other members are doing at the same time. **Jodi** and **Lily** moved that **Mike's** conditions be put up for a vote at the next Board Meeting.

**CFMS Representative:** Not present

### Show Chairman:

We are still waiting for Alameda County Health to approve the indoor show in October. It may be June, July or August before we know when we can schedule an indoor show. We will be cutting back on the number of vendors so **vendors will not be sharing tables or be back to back.** We will not be providing dealer sign apparatus which should simplify the setup. The fluorescent display will also be eliminated.

So far, we have 24 vendor confirmations for October and they are willing to return for our regular show in March.

**Mark Isaacs** sent an email regarding 2 more fluorescent vendors. He also has some fluorescent specimens that he wants to give away. He thinks these will be valuable for the club.

**Membership:**

7 new Members

**Education Coordinator:**

We are currently looking for a new Lost Wax instructor and a Wire Wrapping instructor. Lily suggested we could have classes using training videos. Jodi asked Lily to send her an email and she will ask Sheryl to send something out to members.

**Historian:** Not present

**Editor:** Not present

**Junior Mentor:** N/A

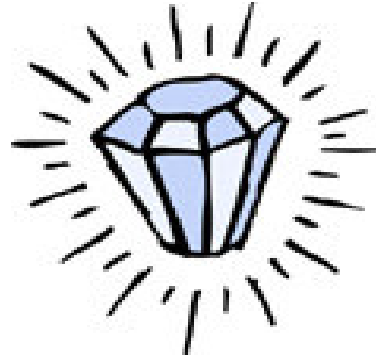
**Field Trip Coordinator:** Nothing to report

**Sunshine Report:** Nothing to report

**Unfinished Business:** None

**New Business:**

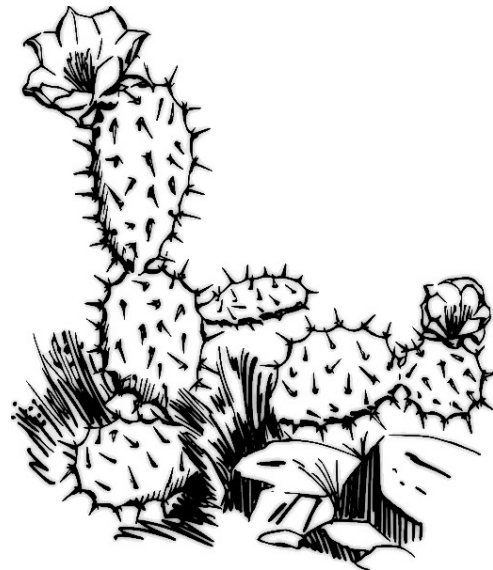
Bonnie mentioned that the Alameda County Fair is sending out emails regarding the upcoming competition and was asking if anyone else received them.



**GEM OF MONTH**

We have no gem this month

**BRAD SMITH BENCH TIPS**



**Updated Letter From The Prez  
By Jodi Minshall**

Nothing to report this month

**Gemstone for the month of April**

Diamond is a [solid form of the element carbon](#) with its atoms arranged in a [crystal structure](#) called [diamond cubic](#). At [room temperature and pressure](#),

another solid form of carbon known as [graphite](#) is the [chemically stable](#) form of carbon, but diamond almost never converts to it. Diamond has the highest [hardness](#) and [thermal conductivity](#) of any natural material, properties that are utilized in major industrial applications such as cutting and polishing tools. They are also the reason that [diamond anvil cells](#) can subject materials to pressures found deep in the Earth.

Because the arrangement of atoms in diamond is extremely rigid, few types of impurity can contaminate it (two exceptions being [boron](#) and [nitrogen](#)). Small numbers of [defects](#) or impurities (about one per million of lattice atoms) color diamond blue (boron), yellow (nitrogen), brown (defects), green (radiation exposure), purple, pink, orange or red. Diamond also has relatively high [optical dispersion](#) (ability to disperse light of different colors).

Most natural diamonds have ages between 1 billion and 3.5 billion years. Most were formed at depths between 150 and 250 kilometres (93 and 155 mi) in the Earth's [mantle](#), although a few have come from as deep as 800 kilometres (500 mi). Under high pressure and

temperature, carbon-containing fluids dissolved various minerals and replaced them with diamonds. Much more recently (tens to hundreds of million years ago), they were carried to the surface in [volcanic eruptions](#) and deposited in [igneous rocks](#) known as [kimberlites](#) and [lamproites](#).

[Synthetic diamonds](#) can be grown from high-purity carbon under high pressures and temperatures or from [hydrocarbon](#) gas by [chemical vapor deposition](#) (CVD). [Imitation diamonds](#) can also be made out of materials such as [cubic zirconia](#) and [silicon carbide](#). Natural, synthetic and imitation diamonds are most commonly distinguished using optical techniques or thermal conductivity measurements.



The slightly misshapen octahedral shape of this rough diamond crystal in matrix is typical of the mineral. Its lustrous faces also indicate that this crystal is from a primary deposit.



## **Metalsmithing: Annealing or**

## **Softening Metal -Jane Panico A**

former Member I know when I first started in silversmithing I was confused about how to make silver more manageable or bendable. I knew you had to heat it to make it softer, but I really didn't understand the procedure. I work with .999 fine silver bezel & sterling silver sheet. When I heated the bezel, I usually had a melt down. After I did some research, I realized why I had almost constant meltdowns. Well, I found the answer! First, when you want to start annealing a piece of metal, or a bezel to make it go around a stone easier and hold its shape you need to heat the entire piece with a dull flame. The larger/thicker your piece the larger the flame you will need. Sometimes dimming the lights help because you need to be able to see the metal glow a dull red color (for silver). If you get it too hot past that = melt down. If you are going to anneal wire, form it into a coil loosely and use an iron wire to keep it in the coil. Heat the coil evenly by moving the flame about the coil. If you stay in one spot too long = melt down. If you're going to anneal a dome of metal (commonly made by dapping

tools) you must heat the dome from the top of the dome so the flame moves down the sides. If you heat the dome from underneath it, the heat collects under the concave and will alter/melt the dome. If annealing a bezel wire you must place the bezel on a firebrick. I only anneal what I will use for an item, not all of my stock. I then use a small dull flame to heat over the length of the bezel a few times. I make sure the flame does not get too close = melt down. After you anneal anything you must let the item sit in the air and let it cool to a grey color. Once its grey, you can put the annealed item in the pickle pot to clean it up (oxides on the surface) and make sure it's cool. When you heat up a piece of metal, the molecules that make up that metal start to spread apart. That occurrence is what makes the metal more malleable, bendable or softer. If you hammer a piece of annealed metal or burnish it with metal (steel) it will harden a little bit. If you work with .925 silver you need to heat the metal up to a light red color and put in the pickle pot. If you were working with any colored golds, you would heat to a dull red and quench in alcohol. If you were working with

copper, you would heat to a brighter red color and place it the pickle pot when cooled down. When you start this process you might have a few more melt downs, but sooner rather than later, you will experience the right way to anneal the metal you're working on and know when you have heated it enough.

### **BENCH TIPS BY BRAD SMITH**

**BEZEL SETTING PROBLEMS** When bezel setting a cab that has rather sharp corners, have you ever had problems pushing the metal down at the corners? It's a common problem often causing a wrinkle in your bezel and a grimace on your face. In order for a bezel to capture the stone, the top edge of the bezel must be compressed and become shorter to lay down onto the stone. With a round or oval stone this naturally happens as you push and burnish the bezel. But when setting a stone with corners, the tendency is to push the long sides of the bezel down first. No compression occurs along the sides, and all excess metal is left at the corners. Compressing everything there is difficult. Often the only way to remove the extra metal at the

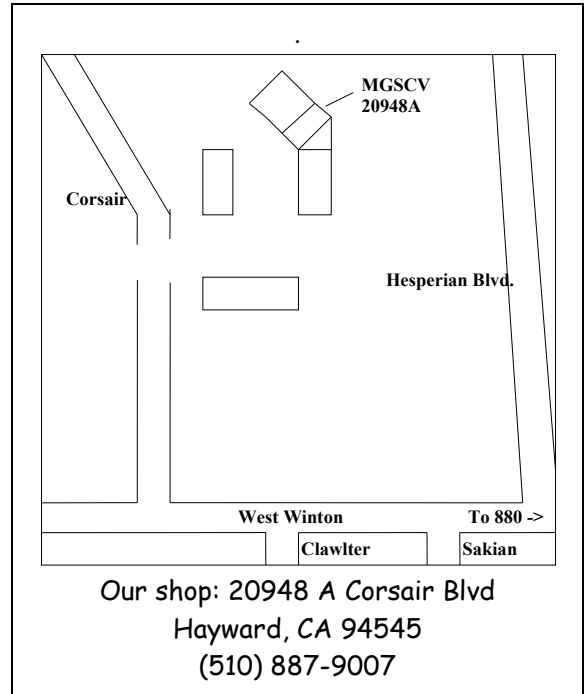
corner is to make a saw cut and fold the two sides in to touch. If you want a smooth bezel all around the corners, the simple solution is set the corners of the bezel first. Then push in and burnish the sides. In this way the necessary compression is distributed along the length of all sides and not forced to occur at the corners. With the corners set first, the top edge of the bezel can easily be compressed along the side.

**HAPPY EASTER TO EVERYONE  
STAY SAFE AND WEAR A MASK**

**Shop Notes**  
**(All shop session's members only)**

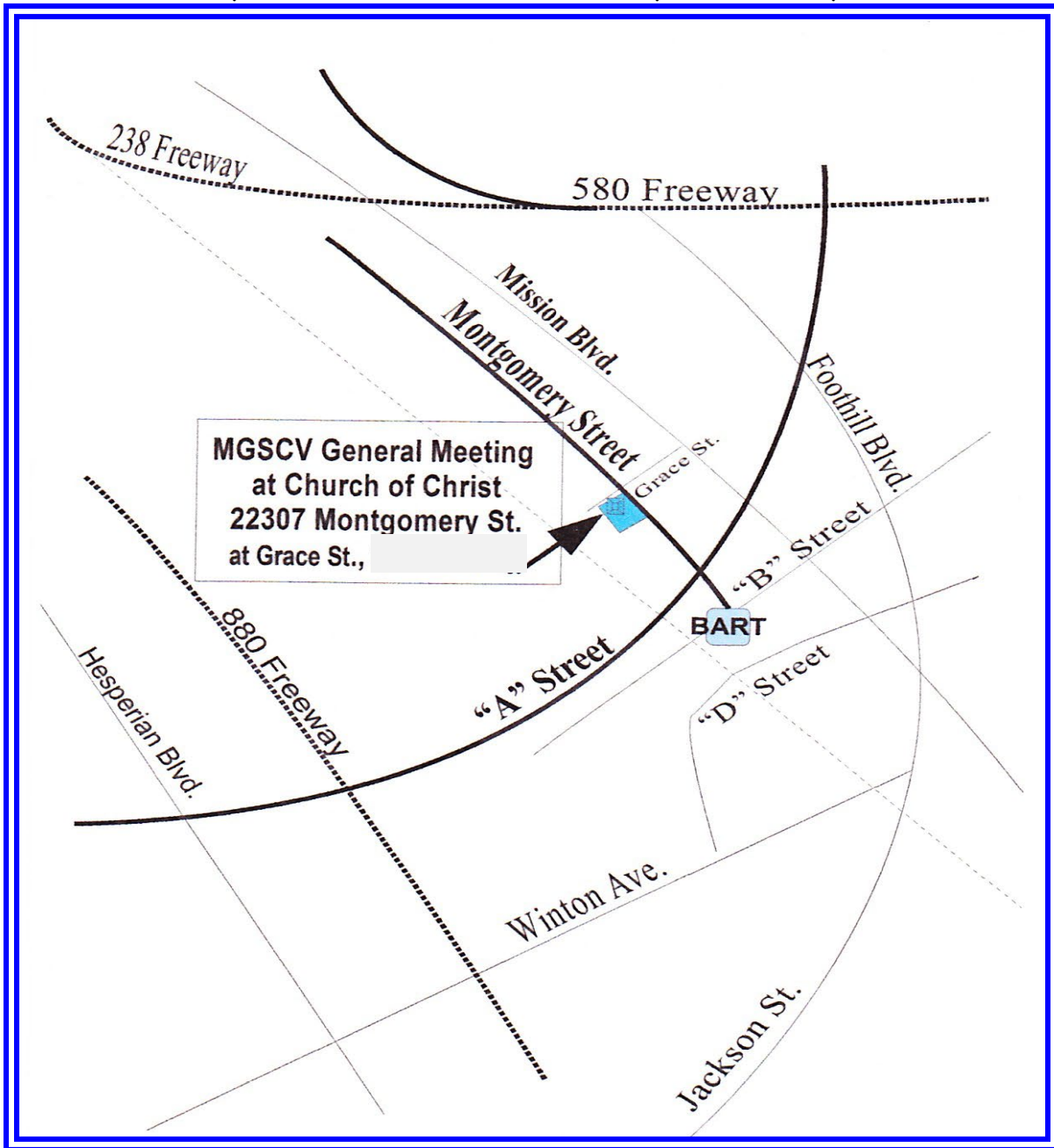
- Monday** closed, Lapidary
- Tuesday** closed, need daytime supervisor  
closed, Lapidary,
- Wednesday** 11AM to 2:00PM, Lapidary  
Library open 10AM to noon.
- Thursday** 10:00 AM to 2:00 PM, Lapidary
- Friday** closed
- Saturday** 9 AM to 12:00 PM, Faceting Class 9-12,  
Juniors,  
w/supervisor's approval, lapidary  
Library open 10AM to noon.
- Sunday** 9:30AM to 12:30 PM, Lapidary

**MAP TO THE SHOP**



**SHOP NOTICES:**

Email us at [info@mgscv.org](mailto:info@mgscv.org)



**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 and 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 at the shop 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. **No products produced in the shop can be sold for profit.** 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 [info@mgscv.org](mailto:info@mgscv.org).

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 [WorkShopManager@mgscv.org](mailto:WorkShopManager@mgscv.org) 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):  new membership  renewal membership  Lifetime (voted in by the board)

* With Shop privileges	Junior Membership	NO Shop Privileges
<input type="checkbox"/> Single - \$45	<input type="checkbox"/> Junior (11-17 with adult) - \$1	<input type="checkbox"/> Single - \$35
<input type="checkbox"/> Couple - \$80	<input type="checkbox"/> Junior (11-17 without adult) - \$5	<input type="checkbox"/> Couple - \$60

After July 1st all **new** membership dues are half (1/2)

Name(s) (Please print all the names.)

Adults: \_\_\_\_\_

Juniors: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Phone Number: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

(Our monthly newsletter, the Petrograph, will be emailed to this address.)

Occupational Skills: \_\_\_\_\_

(Sometimes we are in need of advice and/or help in regards to electrical, plumbing, mechanical, clerical or other skills.)

Confidentiality: (check all that apply) **I do not want** my  phone  email printed in the roster at the shop.

I agree with the By-laws and rules of the Mineral & Gem Society of Castro Valley (MGSCV).

Members Signatures: \_\_\_\_\_

Mineral & Gem Society of Castro Valley (MGSCV)  
Membership Application and Information