



BRECCIA

Santa Clara Valley Gem and Mineral Society

Volume 70 Number 7, July 2022

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SCVGMS Information

Coming Events

July 19 Smithies

July 26 General Meeting will feature a presentation on Zoom by **Dick and Mary Pat Weber**, "The Geology of California's National Parks". The **Bragging Rights** theme is "Something You Have Made". Email pictures of your entry to **Alan Achor** at **kayakbb7@gmail.com**.

July 28 Board Meeting on Zoom.

September 18 Founder's Day Picnic. See page 6, fill out the form, and volunteer! It's fun, and Stephen May needs your help!

Please pay your membership dues now.

President's Message

This club is all about satisfying the geology desires of the members.

We have a **Smithies group run by Pat Speece**, with an abundance of tools to use. Smithies is for folks who want to make jewelry using metal and learning how to combine the metalwork with a specimen they have collected. If you aren't sure of yourself, someone at the Smithie shed will be glad to teach you. Pat puts time into teaching folks how to cut, solder, shape and create items, such as copper cuffs and the way to make a working hinge.

This Saturday, July 9, there is a **field trip to Monastery Hill and Field Road, in Yerba CA**. This is part of the Mojave Desert. There is the promise of Jasper, Agate, Jasp-Agate, Petrified Wood, Manganese, Bubbly Psilomeline, and Quartz on this field trip. You stay at the site for one day and it is free. The drive up and an overnight, the day spent there and the overnight before the drive back make it three days. The gas and hotel will be the only cost and if you carpool, it is even less costly. It is always fun to hear about the trip from the folks that go. It is even more fun to go there yourself.

Stephen May is sharing his research and passion with us as our field trip point of contact. Read more about upcoming field trips in an article in this Breccia.

We have two members, **Jose Sul and Stephen May who will cut slabs for you** from your own rocks. The price for the cut is that they get to pick some slabs from the cuts they made.

We have a **Donation Receiving Committee (DRC)** that accepts donated rocks, minerals, jewelry findings, and tools. Then the club members sort the items and have rock sales about once a quarter.

Every meeting we have a time for **Member Displays** where people can bring in their own specimens to share or to ask the experts questions about the specimen.

And now **here is my plug for the Santa Clara Valley Gem and Mineral Society (SCVGMS)**: pay your membership dues, get involved as an officer or Board member, participate in some way by giving a presentation, bringing goodies or helping to set up.

These actions will make the SCVGMS a more valuable experience for you and your family.

Respectfully,
Madame President Michele Smith

Field Trips July – October, 2022

July 9 (Sat.) Monastery Hill and Field Road, Yerma CA, (Mojave Desert).
Jasper, Agate, Jasper-Agate, Petrified wood, Manganese, Bubbly Psilomeline, Quartz
One Day Free! (Way South)

July 16, (Sat.) Plush Oregon.
Sunstones, Sponsored by Shasta Gem & Mineral. (Way North)

Aug. 5-7 and Aug 12-14 (Fri-Sun) Silver Pick Field Trip, Pittsburg, CA
(Rock Sale) Dick & Betty Pankey (Close,)

Aug. 5-14, Meet Aug. 7 (Sun.) Union Flat Campground, HWY 49, Downieville, CA
gold mining, , Sponsored by Valley Prospectors.
4 hrs. 15 min. (North East)

Aug. 20 (Sat.) Tuledad NV.
Tuledad Jasper, Sponsored by Shasta Gem & Mineral. (North East)

Oct. 8, (Sat.) Onyx Springs, Ca Death Valley, highway 190, 7 hrs. 23 min
Honey Onyx, pay per lb. Dig your own, private owner,
Sponsored by Lone Pine Gem & Mineral Society. (Way-South East)

Oct. 15, (Sat.) Pollard Flat, CA,
Pyrite Cubes. Sponsored by Shasta Gem & Mineral. (Way North)

Oct. 15-16, (Sat. - Sun.) Greenhorn Mountains
Sponsored by Yucaipa Mineral Society. (Way-South)

Oct. 29-30, (Sat. - Sun.) Tonopah, NV, Tonopah Museum.
Variscite, Turquoise, Apache Tears, Chalcedony, Opalite Multi-Colors.
\$100 per person paid dig for the Variscite and Turquoise.
Sponsored by Yucaipa Mineral Society. (Way-East)

Contact Stephen May for details. Email: Stephenmay0990@gmail.com, Phone: 669-248-3993

Proposed Co-op Field Trips

November 11-13 (Veterans Day Weekend): Stoney Creek
Sponsored by Field Trip Fanatics
More details will be available in future Breccias.

August: Babcock Creek
More details will be available in future Breccias.

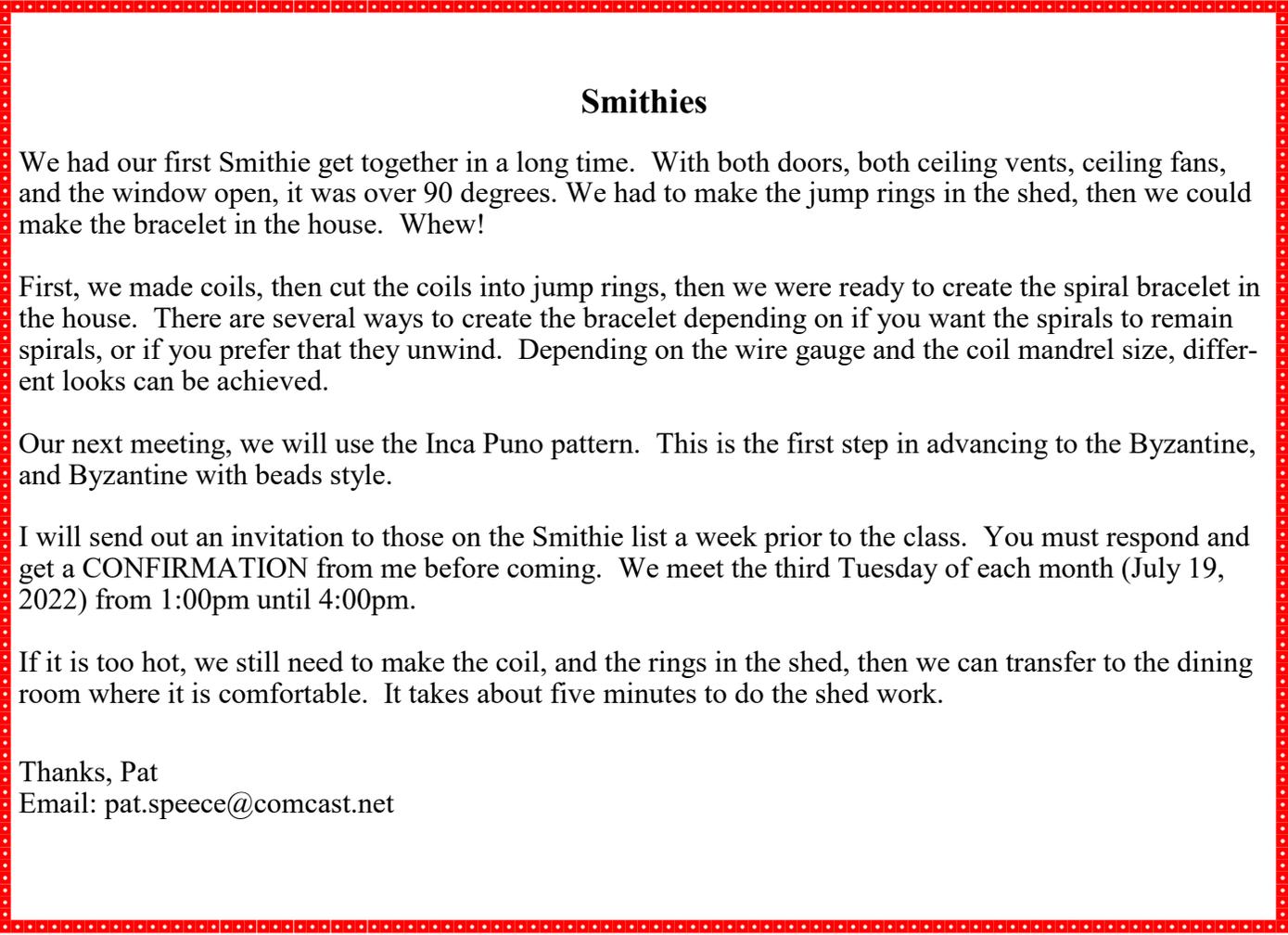


Membership Dues Are Due!

SCVGMS membership dues are due for the year 2022. Your dues are essential to the operation of SCVGMS. They are \$5.00 for Junior, \$20.00 for an individual, and \$30.00 for the household.

Please send your check to **Treasurer, Santa Clara Valley Gem and Mineral Society, Box 54, San Jose, CA 95103-0054, or to Frank Mullaney, 5705 Begonia Drive, San Jose, CA 95124**

Thank you.



Smithies

We had our first Smithie get together in a long time. With both doors, both ceiling vents, ceiling fans, and the window open, it was over 90 degrees. We had to make the jump rings in the shed, then we could make the bracelet in the house. Whew!

First, we made coils, then cut the coils into jump rings, then we were ready to create the spiral bracelet in the house. There are several ways to create the bracelet depending on if you want the spirals to remain spirals, or if you prefer that they unwind. Depending on the wire gauge and the coil mandrel size, different looks can be achieved.

Our next meeting, we will use the Inca Puno pattern. This is the first step in advancing to the Byzantine, and Byzantine with beads style.

I will send out an invitation to those on the Smithie list a week prior to the class. You must respond and get a CONFIRMATION from me before coming. We meet the third Tuesday of each month (July 19, 2022) from 1:00pm until 4:00pm.

If it is too hot, we still need to make the coil, and the rings in the shed, then we can transfer to the dining room where it is comfortable. It takes about five minutes to do the shed work.

Thanks, Pat
Email: pat.speece@comcast.net

DRC News

On June 11th, we had a pretty good rock sale, making over \$411. We have made more in the past, but we had a clearance sale at the last rock sale so that the rocks could be moved more easily. So, we started out with fewer rocks and the weather was very hot. But we attracted a lot of neighbors, and our signage was good, so we had customers who were surprised that we really were selling rocks. They came to ogle and stayed to buy.

We got a lot of people who were interested in the jewelry findings, and I thank **Margo Mosher, Dave Mosher, and Missy Fox**, who sorted and bagged and priced the findings.

Bill Spence did his usual good job of going through the minerals, identifying, and pricing them. At the sale, he was very patient with one little girl who was interested in the minerals and spent a good hour asking him questions.

Almost everyone who came to help set up spent time lugging rocks and sorting the rocks into bins, especially **Jim Fox**. He was amazing. My neighbor children came over when we were setting up and Jim was very patient with them and spent time answering questions and explaining the rocks.

We had last minute gifts of a grocery sack full of one young boy's rock collection and **Dean and Karen Welder** brought twelve 5-gallon buckets of rocks. That really helped the sale out.

Margo and Missy created a massive set of signs that identified and priced the rocks.

We put up two canopies in the mineral, jewelry and sale area to keep us in shade as much as possible. The sale was also a time for members and neighbors to socialize and just have a good time.

By Michele Smith

Website Links

Your Window to the World of Important Websites

Click on the blue area of whatever site you want to visit!

Link to Our SCVGMS Website: <http://www.scvgms.org/>

Note: After you click on the above link, if you want to see the Breccia and other news items, scroll down and click on "Download", shown under the Newsletter option.

The American Federation of Mineralogical Societies (AFMS): <http://www.amfed.org>

California Federation of Mineralogical Societies (CFMS): <http://www.cfmsinc.org/>

To access the news from the **American Lands Access Association:** www.amlands.org

SCVGMS Facebook Page: <http://www.facebook.com/santaclaravalleygemandmineralsociety>

For Questions about the Facebook Page, send email to: contact.lts@tutanota.com

Founder's Day Picnic

September 18, 2022

Cabana Club, 100 Belwood Gateway, Los Gatos

We will be gathering at 11 am, and lunch will be served at noon. All members are invited and guests are welcome. are for an enjoyable time that includes lunch, bingo, and a raffle, There is a pool so bring a bathing gear if you wish to swim. Please volunteer to help. It's a great way to enjoy your fellow rockhounder's.



We need your help for this event.

We need volunteers to help with setting up tables, grilling meat, organizing the potluck table, and cleaning up when the event is over. To volunteer, please email Stephen May at Stephenmay0990@gmail.com.

If you plan to attend, please fill out the picnic signup form below and submit it by **September 4, 2022** either by email to Stephenmay0990@gmail.com or mail to

SCVGMS Founder's Day Picnic, c/o Stephen May
1092 Candlewood Avenue, Sunnyvale, 94089

SCVGMS Founder's Day Picnic Sign Up Form

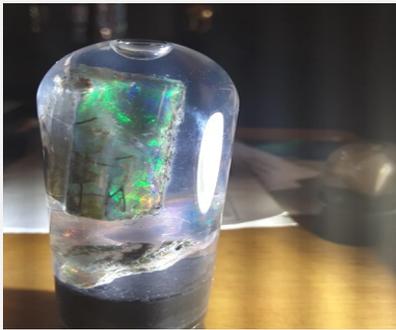
Name:	
Address:	
Number of Adults attending:	
Number of Juniors attending:	
Number of Chicken meals:	
Number of Tri-tip meals:	
Number of Hot Dogs:	
Will you be swimming?	Yes or No
Dish you will bring to share? (Please bring a serving spoon.)	Salad or Dessert (for 10-12 people)

Looking Forward to Seeing Everyone There !!!

Member Displays

Please email a photo of the items that you wish to display to Michele Smith by the Sunday before the general meeting, so that the people who attend the meeting on Zoom rather than in person can view your items and your photos can be displayed in the Breccia. Please bring your items with you to the Cabana Club, if you are attending the meeting.

Kyle Van Woerkom brought a very heavy rock from Utah that may be a lead ore.. He also brought a Rhodochrosite specimen. **Jo Borucki** brought an Azurite specimen as well as a specimen with Biotite and pink Feldspar. **Bruce White** brought a Franklin sample with fluorescent Willemite and an unknown black mineral. He also brought a rock with Galena and Calcite as well as a Rutile specimen from Graves Mountain, Georgia. **Rick Kennedy** brought a couple of keepers from his dig at Hallelujah Junction as well as a very colorful collection of opals he collected at Rainbow Ridge in Virgin Valley. **Stephen May** submitted photos via eMail of some samples of opal from the Bonanza Mine but was unable to attend the meeting.



Bonanza Mine Opal
By Stephen May



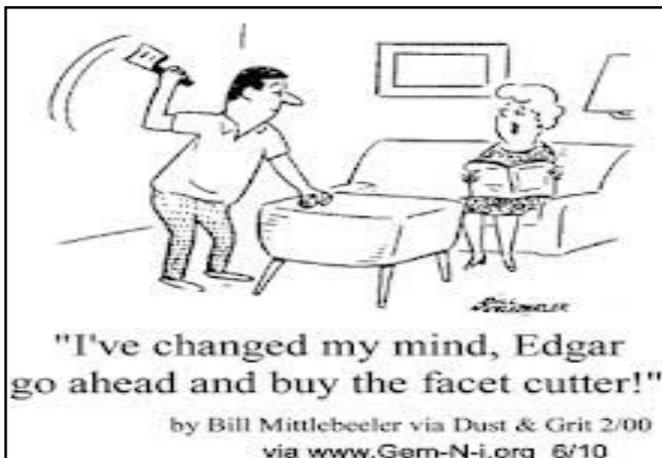
Hallelujah Junction Twin
Quartz Crystals
By Rick Kennedy



Hallelujah Junction
Amethyst
By Rick Kennedy

Don't know what to display? Any type of rock, mineral, or fossil (identified or not), your latest project, information on a field trip, ideas for a display case, or anything to do with rocks is appreciated. Sharing items helps to educate all who are attending. Show off what you love, so that we can enjoy it with you.

Rick Kennedy– Chairperson



From www.pinterest.com

General Meeting Programs

We were fortunate to have **Howard Heitner “Minerals in 19th Century America, Scientists, Dealers and Collectors”**. Howard described the lives, accomplishments, and collections of many of the nineteenth century gem and mineral collectors, and that this was the starting point for many of the museum collections that we enjoy today. A monthly journal The Mineral Collector was started in 1894.

Thank you, Howard.

Our July Speakers are Dick and Mary Pat Weber, They will present information on Geology of California’s National Parks.

Some of the finest examples of geologic features in the Western United States are on display in the national parks in our very own home state. California's national parks present a vast array of different land forms and underlying lithologies (rock types) that have been shaped by nature in different environments ranging from cold and wet in the highest mountains to the extreme heat in the driest of deserts.

Geologist Dick Weber will help us look beyond the spectacular scenery to understand the geologic processes that shaped the fascinating rocks found in some of these locales. Although we cannot collect rocks in the National Parks, we can take home an understanding of the geology that makes them so spectacular.



We are privileged to look forward to a variety of great speakers in the coming months:

August: Jim Herbold “Fluorescence”

September: Pete Goetz “Opals”

Silver Pick Field Trip

(Rock Sale)

From over 30 years of the adventures of Dick and Betty Pankey

Aug. 5-7 and 12-14 8:00 AM to 4:00 PM

August 8-11 by appointment

Unique Garden Rocks, Lapidary Rough, Slabs, Minerals, Specimens, Equipment and Tools

Petrified wood, obsidian, agate, jasper, volcanics, wonder-stone, desert roses, garden rocks, drill cores, jade, chalcedony bertrandite, quartz, slabs, rhyolite, geodes/nodules, minerals, crystals, fossil, specimens,

Directions: 4310 Kingsly Dr., Pittsburg, CA 94565. In Pittsburg take Buchanan Rd. to Suzanne (stoplight) turn south and follow signs with orange paper plates. Go south about 1/2 mile and turn right on to Kingsly Dr.

For more information contact: dickpankey@juno.com or 925-439-7509

Information on Shows June-October

July 16-17; Culver City, CA Culver City Gem & Mineral Society Fiesta of Gems
Veterans Memorial Auditorium, 4117 Overland Ave., Culver City
Hours: Sat 10-6; Sun 10-5
Contact: BradSmithJewelry@gmail.com Website: <http://culvercityrocks.org/fiesta.htm>

August 20-21; Arcadia CA Pasadena Lapidary Society
Arcadia Masonic Center, 50 W. Duarte Rd., Arcadia
Contact: Ellen Ferrell 1-727-512-0381 Email: ellenbf2007@aol.com
Website: pasadenalapidary.org

September 10-11; Reno, NV The Reno Gem & Mineral Society, Inc
Jackpot of Gems Reno Convention Center 4390 S Virginia Street
Hours: Sat 10-5, Sun 10-4
Contact: Dan Ellis Email: sailondan55@aol.com Website: www.renogms.org

October 8-9; Los Altos, CA Peninsula Gem and Geology Society Los Altos, CA
Hours: Sat & Sun 10-5
Contact: (650) 575-3144 Website: <http://pggs.org>

October 9; Fallbrook, CA Fallbrook Gem and Mineral Society Fall Festival of Gems & Minerals
123 W. Alvarado Street, Fallbrook CA Hours: 9 AM-4 PM
Contact: (760) 728-1130, info@fgms.org Website: <http://www.fgms.org>

October 15-16, 2022 - Santa Rosa, CA Santa Rosa Mineral & Gem Society
45th Annual Mineral and Gem Show
Santa Rosa Veterans Memorial, 1351 Maple Ave., Santa Rosa, CA
Hours: Saturday 10 AM -6 PM, Sunday 10 AM - 5 PM
Contact: (707) 849-9551, jolene4srmgs@gmail.com Website: <http://SRMGS.org>

Smiles (or Is It Groans?)

My kids say that they want a cat for Christmas. Normally, I do a turkey, but if that'll make 'em happy....

Driver: What am I supposed to do with this speeding ticket?

Officer: Keep it. When you get four of them, you get a bicycle.

This is my step ladder. I never knew my real ladder.

I want to grow my own food, but I can't find bacon seeds.

If your car is running, I'm voting for it.



Camp Paradise

Week 1: August 21 to August 26, 2022
Week 2: August 28 to September 2, 2022

For more information about time, location, lodging, etc., contact:
Camp Paradise Registrar

Heidi Hall

9055 Trina Circle, Stagecoach NV 89429
(707) 291-8904
hdafler@yahoo.com

Also available to assist you:

E.S.S. Committee Co-Chairs, Tony & Sandie Fender, email: sandie.fender@gmail.com

It's Camp Paradise Time!

By Tony & Sandie Fender, co-chairs

Have you registered for Camp Paradise yet?

You may ask what is Camp Paradise? Camp Paradise is a Lapidary based learning experience.

There are two different sessions, Aug. 21 – Aug. 26 and Aug. 28 – Sept. 2. Both sessions will have the same classes. The fabulous chef we had last year is returning again, so you can expect a great dining experience. The cost is \$425 per person per week. You won't find a more competitive price for food, accommodation and skilled teachers.

We have classes in cabochon making, lost wax casting, beginning and advanced metal smithing, wire wrapping. PMC and fused glass, carving, enameling, Ming tree magnets, chain making and this year we have a class in relief carving. During the evening we have short demonstrations of other lapidary skills including vacuum casting and etching.

Camp Paradise is located north of Sacramento in the mountains near Clipper Mills. Accommodations include women's and men's dorms, couple's dorm, cabins (up to 4 people) and a RV area with hookups.

The registration form can be found on the CFMS website.

Tony and Sandie Fender, From the CFMS July Newsletter

Bragging Rights

The theme for our **June's meeting** was geodes; **solid or hollow**. We had four excellent entries. **Jim and Missy Fox** won with their double quartz and amethyst geode. Jim cut and polished it, and it is really beautiful. It was hard to choose a winner even so, because the other three entries were also excellent. They are shown below.



1
Geode with Platy Crystals

Geode with Platy Crystals
by **Jim Sugiyama**



3
Double Geode Half Amethyst and Half Quartz

Double Geode, Half Amethyst and Half Quartz
by **Jim and Missy Fox**



4
Dugway Egg

Dugway Egg
by **John Bahr**



SEPTARIAN
GEODE
2

Septarian Geode
by **Thunder Parley**

The theme for July is something that you have made. We have lots of talent among us so please enter your special item by emailing a photo of your entry to Alan Achor at kayakbb7@gmail.com

Alan Achor-Bragging Rights Chairman

Sunshine



We are sorry to learn that **Tony Macias** passed away suddenly. We offer our sympathy to his wife, Josephine, and to all his family. We will miss him and his enthusiasm for rocks and minerals that he shared with us at SCVGMS. He has donated his rock and mineral collection to SCVGMS.

If you know of anyone needing some sunshine in their lives, please email **Margo Mosher** at margomosher@yahoo.com.

Quartz

A piece of quartz was the first specimen in my rock collection. More precisely, a piece of quartz *became* the first specimen in my collection, since I neither had a collection before I acquired it nor, even knew that I was interested in rocks. Quartz is both attractive and also ubiquitous, so it is a greater “starter” specimen to launch someone, perhaps a *young* someone, into the world of rock and mineral collecting.

Truth to tell, that first piece of quartz in my collection wasn't a crystal cluster or even a single crystal point – it was just a formless chunk of off-white rock. But it was special to me because *I found it in the ground!* I came to learn, later, that quartz is relatively abundant – in Earth's crust, quartz is the second most abundant mineral after feldspar – and relatively easily found. Quartz is also interesting – at 7 on the Mohs Hardness Scale, it is relatively hard and therefore relatively scratch resistant.

Pure quartz is composed of atoms of silicon and oxygen, bound in clumps of four oxygen atoms to a central silicon atom. Each oxygen atom is shared between two neighboring clumps, however, and it is this inter-connection that gives quartz its hardness. Because each oxygen atom in the silica lattice is shared between two silicon atoms, the chemical formula for quartz is SiO_2 , rather than SiO_4 . SiO_2 : silicon dioxide.

As with so many minerals, pure SiO_2 is colorless and transparent; specimens of quartz are imbued with color as a result of trace amounts of impurities, or as a result of defects in the molecular lattice structure. Rose quartz, for example, acquires its pink color from small amounts of titanium, iron, or manganese interspersed with the silicon and oxygen atoms. Aventurine, a variety of chalcedony – which is SiO_2 , that is, quartz – gets its green color and shimmery appearance from inclusions of chromium-bearing mica. And the white, translucent appearance of milky quartz, the most common variety of quartz, is due to tiny inclusions of gas or liquid that got trapped between the SiO_2 molecules when the rock was forming. Are there other colors of quartz? Yes! You can find varieties of quartz of literally every color of the rainbow, from dark grey-brown smoky quartz, to yellow or orange-yellow citrine, to the deep purple of amethyst.

Crystals of quartz are hexagonal, and terminated in a six-sided point. Quartz crystals commonly form in clusters as shown, for example, in Figure 1.



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Figure 1. A Quartz Crystal

Quartz crystals that form in an environment in which they are not attached to another material, for example, in a cavity filled with liquid, can grow with a terminated point at both ends. Of particular note are the “doubly-terminated” quartz crystals found in and around Herkimer County in upstate New York.

Doubly-terminated crystals of quartz are found all over the world. But those found in Herkimer County tend to be exceptionally clear and well formed. And because they are usually short and stubby, after large quantities of these doubly-terminated quartz crystals were discovered in the dolomite deposits in Herkimer

Continued on 13

Quartz continued from page 12

County, this particular variety of quartz was dubbed a “Herkimer diamond.” They aren’t diamonds, of course, but they are certainly specimens of exquisite beauty. Members of the Mohawk tribe of the Iroquois Nation – who lived in the part of New York State which eventually became Herkimer County and who had been finding Herkimer diamonds in streams and fields since the 16th century – prized these stones, and used them to make amulets and to trade with other tribes. Early European settlers were also taken by these Herkimer diamonds.

A Herkimer diamond crystal, like most quartz, is hexagonal, with all six (cross-sectional) sides equal in length. Each end of a crystal is capped by a six-sided pyramid; a typical doubly terminated Herkimer diamond crystal is shown in the sketch on the left of Figure 2. Herkimer diamonds are also found that exhibit variations on this hexagonal structure; two of the many variations are shown in the middle and right sketches in Figure 2.

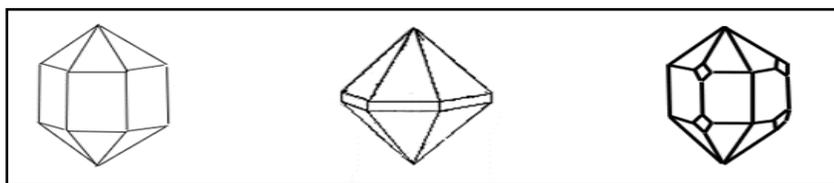


Figure 2. Three examples of the crystal habit of a Herkimer diamond.

But, wait! How can doubly terminated crystals form in dolomite deposits? Dolomite, a type of sedimentary rock, is compressed into bedrock – the hard, solid rock that underlies the looser soil on Earth’s surface – as more sediment is laid down on top of it.

Dolomite is a type of limestone. The molecules of limestone are composed of a calcium atom bonded to a carbon atom and three oxygen atoms – CaCO_3 , or calcium carbonate. Dolomite is calcium magnesium carbonate, $\text{CaMg}(\text{CO}_3)_2$, a molecular structure similar to pure limestone with a magnesium atom added. Five hundred million years ago, runoff from the Adirondack Mountains, a mountain range that runs north and south in northeastern, upstate New York, deposited calcium and magnesium carbonate sediments in the shallow, inland sea that occupied a region in what is now part of New York State. As those sediments accumulated and lithified, the slightly acidic water formed cavities, or *vugs*, in the dolomite bedrock. And as the rock got buried deeper and deeper under layers of accumulating sediment, the temperature in those vugs rose, creating an environment ideal for crystal formation... crystals and also geodes tend to form in vugs. And because those vugs could sometimes be filled with liquid, they were also an ideal environment for the formation of crystals not attached to the surrounding material. Huzzah! A perfect environment for the formation of doubly terminated crystals.

The clear, doubly terminated crystals found in upstate New York are not the only quartz crystals to have acquired the “diamond” moniker. Quartz pebbles found on the beaches of Cape May Point in New Jersey – just a bit to the south of Herkimer County – are known as Cape May diamonds. Small pieces of quartz became worn smooth as they were washed down the Delaware River, resulting in attractive stones prized by collectors. Again, these stones are not diamonds, but higher quality Cape May diamonds are often cut and faceted and used as gemstones in jewelry. Cape May diamonds are not as hard as actual diamonds, nor as brilliant, but they are attractive... and also far less expensive!

Continued on page 14

Quartz continued from page 13

Long ago I lived in upstate New York, and was fortunate to both visit Herkimer County and also to find and collect some Herkimer diamonds. These form the centerpiece of my satisfying sub-collection of quartz points and clusters, including some red and orange (“tangerine”) quartz clusters. And including, of course, clusters of smoky quartz, citrine, and amethyst. (I don’t yet have a Cape May diamond, but it’s on my list.) Quartz: it is both an excellent choice to start a crystal and mineral collection, and also a perfect rock around which to build a “sub-collection.” So inject more variety into to your own collection: add more quartz!

Prof. Philip R. Kesten, Ph.D., Department of Physics, Santa Clara University

An American First: Rockhounding & Fossil Collecting in a National Monument

Rockhounding and fossil collecting, as you know, are not allowed in the United States national monuments. However, when the BLM initial planning process began for the Mojave Trails National Monument in California, Rockhounds got involved. Rockhounds were very aware this was their one and only chance to possibly keep their collecting sites accessible within the new monument.

Rockhounds showed up, got involved and stayed involved during the initial planning process. Rockhounds learned how to submit public comments in the articulate way BLM management needed them presented, so the comments could be included in the official planning. Rockhounds submitted more public comments than any other organization or category of individuals involved in the planning process.

This was and is, amazing feedback for all Rockhounds. Many thought their aspirations too high a hill to even try to climb. Many thought the environmental groups already had the BLM planning “in the bag”, given the amount of lobbying money and attorneys they have at their use. Others leaned on their hope, hoping they could still collect in what has been one of their favorite collecting areas for more than 100 years. Rockhounds realizing last chances can be huge opportunities for success, worked together with American Lands Access, their societies, federation, the AFMS and the BLM. Rockhounds realized entitlement wouldn’t get them anywhere but doing good work and working together would.

What’s up next? Although rockhounding and fossil collecting is currently allowed in the Mojave Trails National Monument, the next phase of planning the monument is coming up this year. Rockhounds will be showing up, getting involved, and staying involved again.

History is alive, always adding to its growth rings, as the future becomes our present and then our past. It will be up to Rockhounds to decide what our future will be. What Rockhounds have accomplished so far in the planning of the Mojave Trails National Monument, is monumental. If Rockhounds succeed in their efforts and establish the approval of rockhounding in the final phase of the monument, it will be a major breakthrough for Recreational Rockhounding’s future.

By Jennifer Haley, AFMS Historian, AFMS Newsletter June 2022

Minerals and Their Crystal Shapes

What is a mineral? In SCVGMS, we enjoy rocks, minerals, and gemstones. Each is a different concept. As I referred to Wikipedia, I found that minerals are the building blocks of rocks and some minerals are gemstones when cut and polished. can be used in making jewelry. I found also that not all gemstones are minerals because a mineral must have a fixed structure and a chemical composition either fixed or within a set of defined limits. Pearls and opals are examples of gemstones that are not minerals.

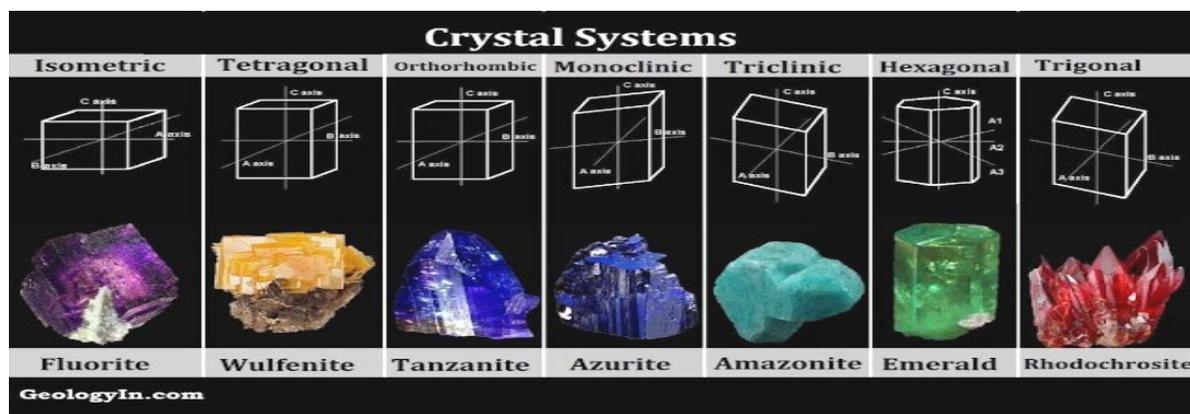
So, what defines a mineral? I referred to geology.com, and found that to be a mineral, five requirements must be met: The material must occur naturally, be inorganic, be solid, have a definite chemical composition, and have an ordered internal structure. The ordered internal structure means that the atoms that compose the mineral are arranged in a systematic and repeating pattern that we think of as crystal shapes.

So, what defines a crystal? I am married to a dedicated scientist, and I often feel rather uneducated in comparison to him. Occasionally, when the mood hits me, I decide to work on that a bit, but being who I am, I read lots of comic books when I was a kid, and I loved Popeye. In the words of Popeye the Sailor Man, I occasionally decide to get “edumacated” (educated). Well, like Popeye, “I yam what I yam and that’s all that I yam” and reading William D. Nesse’s book, “Introduction to Minerology” to learn all about crystal shapes was too much for me. After I woke up from trying to read it and understand all of the complications involved in crystal shapes, I decided to look on my computer and find some **simple facts, forms, and patterns for basic crystal shapes**. I found a treasure in the website shown below.

[Crystalshapes.pdf \(ellenjmchenry.com\)](http://Crystalshapes.pdf(ellenjmchenry.com))

Ellen McHenry’s presentation on cutting and assembling crystal shapes begins with a simple explanation, pictures of each basic mineral shape, and examples of each. And then best of all, just what I was looking for, patterns that I could print, cutout, and assemble! **If you are like me; one who learns best when able to manipulate, touch, feel, and examine from various angles, this website on basic crystal shapes is a good resource for you.** Click on the pdf shown in blue and give the website a try. Once again in the words of Popeye, “I ain’t no sailor, but I know what suits me”, and viewing crystal shapes through the eyes of Ellen McHenry suits me just fine. Maybe it will suit you too.

By Jo Borucki, June 26, 2022



[Crystal Structure and Crystal Systems \(geologyin.com\)](http://Crystal Structure and Crystal Systems (geologyin.com))

General Meeting Minutes

June 28, 2022

The June meeting of the Santa Clara Valley Gem and Mineral Society was called to order at 7:30 pm at the Cabana Club and on Zoom, so that our members could enjoy the meeting in the way they felt the most safe and comfortable.

Announcements: Dues are due and Frank Mullaney is here to take your money. Cash or checks. Please sign in! SCVGMS Board meeting is this Thursday at 7:30 pm. On ZOOM.

Tony Macias recently passed away. He will be sorely missed.

Congratulations are due for Jo Borucki, our newsletter won first place at the CFMS Show. Congratulations are also due for Pat Speece, whose article “Carats, Carets, Karats, Carrots, Oh My!” also won first place at the CFMS Show!

New Members: No new members. If you want to join the club, one must attend at least two club meetings and have two sponsors from the club. It is easy to do!

Board Meeting: Will be at on Zoom at 7:30.

Program: Tonight’s presentation is being given by Howard Heitner. The presentation was done before the club’s business meeting because Howard is in New York and it is three hours later there. Howard’s presentation was on **Minerals in 19th Century America, Scientists, Dealers and Collectors.**

Member Displays: By Rick Kennedy. Kyle Van Woerkom brought a very heavy rock from Utah that may be a lead ore. He also brought a Rhodochrosite specimen. Jo Borucki brought an Azurite specimen as well as a specimen with Biotite and pink Feldspar. Bruce White brought a Franklin sample with fluorescent Willemite and an unknown black mineral. He also brought a rock with Galena and Calcite as well as a Rutile specimen from Graves Mountain, Georgia. Rick Kennedy brought a couple of keepers from his dig at Hallelujah Junction as well as a very colorful collection of opals he collected at Rainbow Ridge in Virgin Valley.

Bragging Rights: The theme was geodes or thunder eggs. Jim Fox won for his double geode that had two different colors in each cavity. The July Bragging rights will be “Something you made”.

Rockhound of the Month: No award was given this month.

Study Groups:

Cabbers: In search of a new leader.

Smithies: The next Smithies meeting is on July 19.

Hospitality: 25 members and no guests were in attendance.

ALAA: Nothing new.

Field Trips: Stephen May emailed a list of upcoming field trips. The list is found in this issue of the Breccia.

DRC: Michele Smith reported that the last sale netted over \$411.00.

Federation Report: Karen Welder reported that Camp Paradise will be happening on August 21 – 26th and also from August 28 – September 2nd.

Correspondence: No report.

Sunshine No report other than Tony Macias’ passing.

Next Meeting: July 26th at 7:30 PM.

Meeting was adjourned at 9:35 PM.

Respectfully submitted, Rick Kennedy SCVGMS Secretary

Board Meeting Minutes

June 30, 2022

The meeting was called to order at 7:37 PM via the Zoom application.

Roll Call: All board members were present.

Reading of the minutes from the May 26th Board Meeting: M/S/P to approve the minutes as read (F. Mullaney, M. Powers).

New Members: M/S/P to send a letter asking Wei Wang and Xiaofang Mu to resend their application forms as it appears the club cannot locate them (D. Welder, R. Kennedy).

Correspondence: Frank Mullaney reported receiving correspondence from Dodge and Cox, a letter from the IRS he delivered to our accountants, and some dues.

Treasurer's Report: Presented by Frank Mullaney. There was a discussion about Zelle.

M/S/P to pay \$127.98 to renew our SSL certificate for our website (D. Welder, J. Borucki).

Frank also brought up the two different sizes of patches, the stickers and pins he has that belong to the club. It was decided that he will bring them to the next general meeting.

Member Dues: It has been announced in the Breccia that the club is accepting 2022 dues and many members have already paid.

Committee Reports:

Federation: There was discussion about compensating a Federation Director for a hotel room if they had no other business other than club business when attending. M/S/P to compensate the Federation director up to \$130.00 per night for lodging if they have no other business than club business at the event. This includes reimbursing the Federation Director for lodging at the 2022 show. (R. Kennedy, S. May).

Field Trips: Stephen May emailed a list of upcoming field trips. The list is found in this issue of the Breccia.

Old Business:

Facebook Site: Amber M. has agreed to be a moderator and to help run and populate the club's Facebook page.

DRC: Michele Smith reported that although it was very hot, the DRC sale still took in over \$411.

2023 Officers: In November, 2022, the club will need to elect a new president and secretary. Anyone interested in either of these positions or as an at-large Board member, please contact any member of the Board.

New Business:

P.O. Box Rental: Rick Kennedy reported that he will pay the PO Box fee on July 1st.

Founder's Day Picnic: Will be September 18th

Program Schedule:

July: Dick and Mary Pat Weber will give a presentation on "The Geology of California's National Parks". They recently gave this presentation to the CFMS, where it was well received.

August: Jim Herbold will give a presentation on Fluorescence.

September: Pete Goetz will give a presentation on Opals.

Next Board Meeting: July 28th, at 7:30PM on Zoom.

Meeting adjourned at 8:22pm

Respectfully submitted, Rick Kennedy, SCVGMS Secretary

Santa Clara Valley Gem and Mineral Society

P.O. Box 54, San Jose, CA 95103-0054

Website: www.scvgms.org

Email: info@scvgms.org

Phone Number (408) 265-1422

Like us on Facebook:

<http://www.facebook.com/santaclaravalleygemandmineralsociety>

SCVGMS ELECTED OFFICERS

President: Michele Smith (408)374-1897
 Vice President: Stephen May (408)306-6782
 Secretary: Rick Kennedy (408)529-9690
 Treasurer: Frank Mullaney (408)691-2656
 Editor: Jo Borucki (408)245-2881
 Federation Director: Karen Welder (408)353-2675
 Alternate Fed. Director:
 Paul Kidman (408)356-4995

Board Members at Large

Jim Fox (408)356-7711
 Missy Fox (408)356-7711
 Michelle Powers (408)694-8686
 Alan Achor (408)749-0771
 Deb Runyan (408)866-7564

Parliamentarian: Dean Welder (408)353-2675

SCVGMS COMMITTEE HEADS

Bragging Rights Chair: Alan Achor
 Donation Receiving Committee Chair:
 Michele Smith
 Festival Chairpersons 2023: Jim and Missy Fox
 Field Trip Coordinator: Stephen May
 Founder's Day Picnic Chairman: Stephen May
 Founder's Day Raffle: TBD
 Founder's Day Bingo: TBD
 Hospitality: Pat and Louis Schuesler
 Installation Dinner: Rick Kennedy, Jim and Missy Fox
 Member Displays: Rick Kennedy
 Refreshments: TBD
 Silent Auction: TBD
 Sunshine: Margo Mosher
 Trophies: Frank Mullaney
 Librarian: Deb Runyan
 Webmaster: TBD

Note: Some of these committee heads may change. Michele Smith and Stephen May are working to fill all positions.

An Invitation

This society is pleased to invite guests to attend general meetings, study groups, and field trips. General meetings are normally held the fourth Tuesday of every month with meet and greet time beginning at 7:15 followed by the meeting at 7:45 PM at 100 Belwood Gateway (the Cabana Club), Los Gatos, CA 95032. Belwood Gateway is just south of Blossom Hill Road between Leigh Avenue and Harwood Road.

The next **General Meeting is scheduled for July 26 at 7:45 at the Cabana Club and is also available on Zoom. The Board Meeting is scheduled for July 28 at 7:30 on Zoom.**

Our Society's Purpose: The inculcation of a love of rocks and minerals by the furtherance of members' interests in the earth sciences and by education in all facets of related educational activities with the promotion of good fellowship, proper ethics, and conduct.

Our Membership Requirements: Attendance at two general meetings within twelve months. This society is a member of the California Federation of Mineralogical Societies (CFMS) and is affiliated with the American Federation of Mineralogical Societies (AFMS). **Our Newsletter**, the Breccia, is published ten times annually. **The deadline for all articles is the Sunday after the general meeting.** The Breccia editor is Jo Borucki who may be contacted by email at joborucki@yahoo.com or by phone at (408)245-2881. The Breccia is proofread by Pat Speece. Exchange bulletins may be sent to Jo Borucki, 1196 Sesame Drive, Sunnyvale, CA 94087. Permission to copy is freely granted to American Federation of Mineralogical Societies (AFMS) affiliated clubs when proper credit is given.

Study Group Leaders

For information, please contact the leader listed below.

Smithies: Pat Speece 408- 266-4327 pat.speece@comcast.net

Cabbers: We need a leader. Can it be you?

Rock Tumbling Study Group: David Mosher