

2016 MEMBERSHIP DUES ARE DUE

Past due March 31, 2016

Membership Dues Jan. to Dec. 2016: Adult \$15:00, \$5.00 per additional adult at same address, Junior \$5.00, \$5.00 per member with adult at same address, Family Dues \$20.00 (4+) at same address. Send Dues to CLGMS, PO BOX 891533, Houston, TX, 77289



DECEMBER BIRTHSTONES



Garnet

Garnet, the birthstone for January, signifies eternal friendship and trust and is the perfect gift for a friend. *Garnet*, derived from the word *granatum*, means seed, and is called so because of the gemstone's resemblance to a pomegranate seed. References to the gemstone dates back to 3100 B.C., when the Egyptians used garnets as inlays jewelry. *Garnet* is the name of a group of minerals that comes in a rainbow of colors, from the deep red of the pyrope garnet to the vibrant green of tsavorites. Today, the most important sources for garnet are Africa, Sri Lanka, and India.

See more at: <http://www.americangemsociety.org>

MINUTES OF THE DECEMBER 21, MONTHLY MEETING

There are no minutes for the December Meeting. It was the club's Christmas Party.

2016 OFFICERS AND DIRECTORS

President Raul Montelongo
Vice President David Tjiok
Treasurer Mike Flannigan
Secretary Trina Willoughby

Program Director Vacant
Board of Directors1 Shannon Oliver
Board of Directors2 Sara Chelette
Board of Directors3 Bob Brock
Board of Directors4 Jim Edwards
Board of Directors5 Sandra Christiansen
Board of Directors6 Vacant

MINUTES OF THE JANUARY 4, 2015, BOARD MEETING

Show items

Children's booth:

- Charlie brought bolos to show for the kid's booth. Current cost for just the cord and backing is 85 cents. Rock not included but we have plenty in the locker. Rocks will be pre-glued on the backings. We suggest this as part of the January meeting. Raul will get the rocks from the locker. Charlie will bring the glue.
- Members please bring shallow flat boxes to place the items in so that they can dry and be transported.
- We need to check with Pam D. about the rocks and pipe cleaners for pet rocks. – Sara will call
- Need to check with Kim on necklace cages and chains. – Sara will call
- We need to go to the locker and check supplies.
- Raul will head up adding our show info to online calendars. Trina has gotten us on 7, but we need to be on more. Will request for Victoria to help with this.
- We need to check with Bud on repairs to the florescent box.
- John is working on borrowing the Houston's fluorescence display. One of us may need to go to their meeting and talk to them. The meeting will be Wednesday the 6th at 7:30 at HGMS. Raul should be able to support this.
- Sandy will order dealer tags this week.
- We would like to have an ATM at the show again. We only need one.
- Sara will call Sergeant Zink to see about security and an ATM machine.

- We have estimate for using online services for post cards. We need to find out when this design needs to be sent in. Mike has the list for names. Trina will call to find out time scale.
- Trina needs to talk to Beverly from the Houston Bureau of Geology.
- Dealer report – we have 37 vendors with 188 tables.

January meeting will be a working meeting

- Folding fliers and cutting membership applications
- Gluing rocks on backs for bolos
- Make invite to come to our meeting,
- Make sign for scholarships

Sandy planning to have new bins for the locker.

Suggestion was made to have a mini show where members can bring in items to show and sell. Invite the community.

Respectfully submitted

Trina Willoughby, Secretary

QUARTZ



Quartz is the second-most-abundant mineral in Earth's continental crust, after feldspar. Its crystal structure is a continuous framework of SiO_4 silicon–oxygen tetrahedra, with each oxygen being shared between two tetrahedra, giving an overall chemical formula of SiO_2 .

There are many different varieties of quartz, several of which are semi-precious gemstones. Since antiquity, varieties of quartz have been the most commonly used minerals in the making of jewelry and hardstone carvings, especially in Europe and the Middle East.



The word "quartz" is derived from the German word "Quarz" and its Middle High German ancestor "tware", which probably originated in Slavic, cf. Czech *tvrđý* ("hard"), Polish *twardy* ("hard"), Serbian and Croatian *tvrd* ("hard").^[7] The Ancient Greeks referred to quartz as κρύσταλλος (*krustallos*) derived from the Ancient Greek κρύος (*kruos*) meaning "icy cold", because some philosophers (including Theophrastus)

apparently believed the mineral to be a form of supercooled ice.^[8] Today, the term *rock crystal* is sometimes used as an alternative name for the purest form of quartz.

<https://en.wikipedia.org/wiki/Quartz>

BENCH TIPS BY BRAD SMITH

DEPTH GAUGE FOR DRILLING



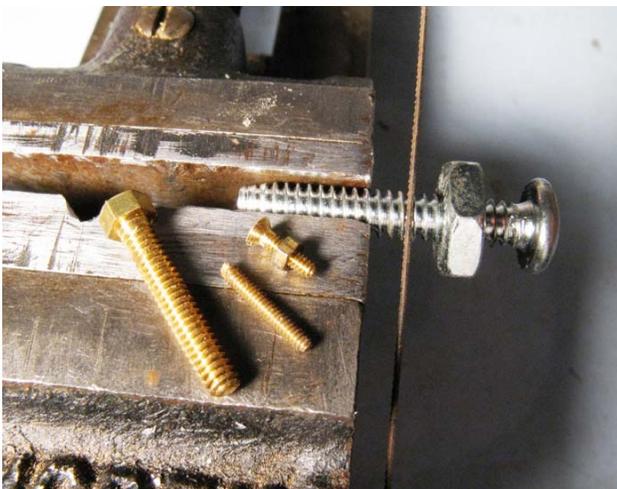
Sometimes you need to drill a number of holes all to the same depth. One quick and easy way to do this is to wind some tape around the drill bit so that the tape just touches the part surface when the hole is deep enough.

the surface level.

You can set the depth either by measuring from the tip of the drill to the tape or by drilling to the correct depth, leaving the bit in the hole, and wrapping tape around the bit at

Note that a little extra tape left free on the end will blow away debris from the drilling.

CUTTING A BOLT



Whenever you have to cut a threaded bolt shorter, it's often difficult to get the nut to thread back onto it. And the smaller the bolt, the more difficult it is to restore any distorted threads. The problem is easily solved with the use of a nut. Here's how I do it.

First, screw a nut onto the bolt before cutting it. Grip the bolt by the threaded section that is to be sawed off. Then saw the bolt to the desired length, taper the end with sandpaper or file, and unscrew the nut from the bolt.

Unscrewing the nut over the freshly cut end of the bolt will straighten out any damage that sawing and filing did to the threads. Gripping the bolt by the piece to be sawed off

localizes any crushing damage to the piece that will be thrown away.

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"Bench Tips for Jewelry Making" and "Broom Casting for Creative Jewelry" are available on Amazon.

[10 MOST DEADLY ROCKS AND MINERALS](#)

by Jim Karstell March 7, 2013

from Red Stick Rockhound News 11/2015 via Backbenders Gazette 1/2016

We often wonder if the Earth beneath our feet could swallow us up. The truth is more insidious. Drop that rock you just picked up . . . you could get poisoned. This list details the ten most toxic and potentially deadly minerals that crystalize in the Earth's rocks, presenting a dangerously deceptive array of stony beauty. These rocks don't have to be thrown to hurt you.

1) Cinnabar



Cinnabar (mercury sulfide) is the single most toxic mineral to handle on Earth. The name of the crystal means dragons blood, and it is the main ore of mercury. Forming near volcanos and sulfur deposits, the bright red crystals signal danger of the worst kind. Cinnabar may release pure mercury if disturbed or heated, causing tremors, loss of sensation and death. In the Middle Ages and late

1700s, being sent to work in Spanish mines containing cinnabar formations was widely considered a death sentence. Cinnabar was widely used in Chinese history for ornamental food dishes, and intricate carvings were created from chunks of it, sometimes at the expense of the artisans. Even more incredibly, some ancient medical practitioners believed cinnabar held healing powers, and prescribed it for certain conditions.

2) Orpiment



The only thing worse than arsenic itself could be a rock made from arsenic and sulfur. The lethal and chemically reactive orpiment crystals are found growing below the surface in mineral formations, often near hydrothermal vents. The colors are seductive, but holding the crystals in your hands may release carcinogenic, neurotoxic arsenic powder. Like cinnabar, the

Chinese made extensive use of this mineral, but to far more terrifying ends. Arrows would be rubbed on crushed samples of these stones and then launched to poison the enemy in a rather fancy way to throw a rock. Orpiment is known to give off a strong garlic smell due to its arsenic content, and may crumble into dangerous powder when exposed to light. The mineral was used as a primary component of ochre paint, and likely poisoned many of the artists who used it.

3) Stibnite



Stibnite is antimony sulfide, but it looks like silver. For that reason, the huge, shining metallic crystals of this unstable compound were once fashioned into magnificent eating utensils. But the sword shaped crystals bore the powers of death to those who used them. Stibnite's antimony-laced crystals killed a number of people before it became known that use of the mineral was causing food poisoning of the worst kind. Even in collections, stibnite samples should be handled with great caution to avoid poisoning. Hand washing is advisable after any contact. Mines near Oksaku in Japan have produced the best stibnite crystals in the world, measuring up to a foot in length. Many stibnite samples have the appearance of a miniature steeple.

4) Torbernite



Torbernite is the mineral from hell. The prism shaped green crystals form as secondary deposits in granitic rocks, and are composed of uranium. Formed through a complex reaction between phosphorous, copper, water, and uranium, the stunning crystal displays have seduced many mineral collectors into taking a sample for a shelf collection. If the uranium decay from a pocket-sized Chernobyl were not enough, lethal radon gas capable of causing lung cancer slowly releases from these hot rocks. This is one crystal to leave alone. Torbernite can occur in granite, so your stone countertop just might contain traces of torbernite. The bright green crystal blooms were used by prospectors as indicators of uranium deposits.

5) Arsenopyrite



Arsenopyrite is fool's gold, but with a difference. One would not just be a fool to mistake it for gold. Equally foolish would be a decision to pick up this mineral on a hike at a quarry, and proceed to use your hands to put trail mix in your mouth. Arsenopyrite is arsenic iron sulfide, which is the same type of mineral as pyrite (fool's gold, iron sulfide), but with a heavy addition of arsenic. If one attempts to heat or in any way alter the mineral, a strong garlic odor of arsenic will be produced as lethally toxic, corrosive and carcinogenic vapors are released. Just handling the mineral brings one into contact with unstable sulfuric arsenic salts. Interestingly, arsenopyrite may be identified by striking a specimen with a hammer. The powerful garlic odor of arsenic can be briefly detected as the sparks fly.

6) Asbestos Chrysotile and Amphibolite



Asbestos is not a manmade product, but one of most terrifying minerals on the planet. Where other minerals act as toxins through their chemistry and sicken victims of accidental poisoning, Asbestos conducts full scale mechanical sabotage on the human lung. Asbestos is a fully natural category of minerals composed of silica—the most abundant of Earth's hard elements, iron, sodium, and oxygen. Asbestos deposits consist of aggregates of thousands of tiny, fibrous crystals that can become airborne and lodged in the human lung. Carcinogenic effects occur through persistent irritation of the lung tissues, leading to scarring. Asbestos formations can also be uncovered among any set of silica rocks, warranting caution when exploring. Strangely, natural weathering leads to natural distribution of asbestos in Earth's atmosphere. As a result, many humans carry some asbestos fibers in their lungs.

7) Galena



Galena is the principle ore of lead, and forms glistening silver cubes with almost unnaturally perfect shapes. Although lead is normally extremely flexible, the sulfur content of galena makes it extraordinarily brittle and reactive to chemical treatment. Galena is capable of taking an equally heavy toll on workers and amateur researchers who are exposed to it. Contact with specimens may lead to lead dust exposure, while workers in mines face a high risk of poisoning from contact with the mineral and the deadly dusts released through production. Once extracted, the lead content from this mineral poses environmental and health threats during treatment and extraction. Galena has a cubic fracture, and if hit with a hammer, the crystal will shatter into multiple smaller replicas of its original shape.

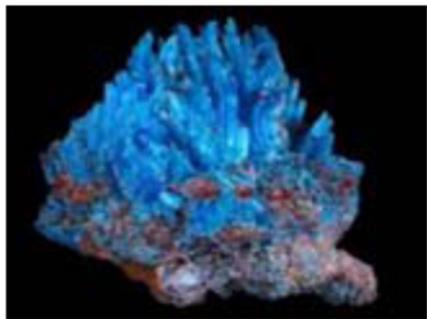
8) Hutchinsonite—Thallium



Thallium is the dark twin of lead. This thick, greasy metal is similar in atomic mass but even more deadly. Thallium is a rare metal that appears in highly toxic compounds consisting of rather strange combinations of elements. The effects of thallium exposure are even more peculiar, and include loss of hair, serious illness through skin contact, and in many cases, death. Hutchinsonite is a hazardous but dramatic mixture of

thallium, lead, and arsenic. The three poisonous metals form a lethal mineral cocktail that should be handled only with great caution. Hutchinsonite was named after John Hutchinson, a prominent mineralogist from Cambridge University. The mineral is found in mountainous regions of Europe, most frequently in ore deposits.

9) Chalcantite



Seductive blue chalcantite crystals are composed of copper, combined with sulfur and other elements, and water. This arrangement turns copper, which is required by the body but toxic in excess quantities, into an extremely bio-available crystal. In another words, the copper becomes water soluble, and it may be assimilated in great quantities by any plant or animal, rapidly weakening it and then killing it by shutting down body processes. Chalcantite

should never be tastetested by amateur scientists for salt content, or an extremely serious overdose of copper could result. Just releasing crystals of the blue mineral has killed entire ponds of algae, and posed great environmental threats. Because of the incredible beauty and rarity of chalcantite, an enterprise dedicated to growing artificial crystals and passing them off as genuine specimens for sale has developed within the geological community.

10) Coloradoite



Coloradoite is a recently discovered crystalline mineral originating in magma veins. The mineral is a mercury telluride compound formed when mercury fuses with tellurium, another extremely toxic and rare metal. Coloradoite therefore poses a doubly toxic threat to anyone daring to handle it. The combination of the two elements poses the risk of serious poisoning if carelessly handled. If heated or chemically altered, deadly vapor and dust is released by this strange mineral. Interestingly, the mineral

may be mined for its tellurium content. Tellurium minerals may combine with gold, but were previously not recognized. In a strange twist of fate, the streets of Kalgoorie in Australia were mined in a bizarre gold rush after the realization that gold-bearing tellurides had been used to fill potholes.

<http://hibiscusmooncrystalacademy.com/resources/toxic-crystals-stones/#sthash.q9YAe1DC.dpuf>

GOT RUST? BY DENNIS SCHNEIDER

I use Super Iron Out (available at Walmart for \$2.47) to clean quartz crystals, and I must say this product is great! I used to boil them in Oxalic acid. But that process has MANY flaws. (Even slow heating and cooling causes fractures, fumes, and it eats through the cooker.) Now all I do is pour 1 bottle of Super Iron Out into a 2 gallon gas can (NOTE I said pour acid into the water), seal and shake. The crystals are in large flat Tupperware containers, and I simply pour in enough of the mixture to cover the crystals by at least an inch. Then snap the lid and put in a dark place for 2 days. (Not sure if the darkness is needed, but I have a shed with racks that I use.) After 2 days there is little sign of rust/oxidation. I rinse the crystals and then soak them for 24 hours in a baking soda bath, neutralizing any remaining acid. I have seen this remove rust from some of the nastiest looking crystals with just 1 or 2 soakings. Including some ugly clusters I got from the Spruce Claim. It even left the un-oxidized pyrites alone! Super Iron Out contains sodium hydrosulfate and sodium bisulfite. They have a website at <http://ironout.com>.

Via Petroglyphs 11-12/ 2015; The Tumbler, 11/15; Washington Agate & Mineral Society Newsletter, 11/15; Wonders of the Mine 2010; Clackamette Gem Dec 2015; The Glacial Drifter Jan 2016



UPCOMING FIELD TRIPS

Plans are being made for a field trip to McFadden Beach, near Port Arthur. Plans are also being made for a field trip to Waco Pit. More information to follow.

SCFMS and MEMBER CLUB GEM SHOWS			
January 22-24, 2016 Tyler TX East Texas G&MS Rose Garden Center	Feb 20-21, 2016 GEORGETOWN, TX Williamson County Gem and Mineral Society Community Center- San Gabriel Park; 445 East Morrow Street	February 27-28, 2016 Pasadena, TX Clear Lake Gem & Mineral Society Pasadena Convention Center 7902 Fairmont Parkway	February 19-21, 2016 Plainview, TX Hi-Plains G&MS Ollie Liner Center
March 5-6, 2016 Big Spring, TX Big Spring Prospectors Club Howard Co. Fair Barn	March 5-6, 2016 Robstown, TX Gulf Coast G&MS Regional Fairgrounds	March 12-13, 2016 Live Oak, TX (San Antonio) Southwest G&MS Live Oak Civic Center 8101 Pat Booker RD	Mar 10 – 13, Deming, NM, Deming G&MS, SWNM Fairgrounds,thedgms @ gmail.com, www.thedgms.com
Mar 18 – 20, Albuquerque, NM, Alb. G&MC, Expo NM State Fairgrounds, paulhlava@q.com, www.agmc.info	Apr 1 – 2, Ada, OK, Ada GM&FC, Pontotoc Cnty Agri-Plex, okieed42@windstream.n et,	April 09-12, 2016 Abilene, TX Central Texas G&MS Abilene Civic Center North 6th & Pine	April 15-17, 2016 Alpine, TX Chihuahua G&MS Alpine Civic Center
Apr 30 – May 1, Waco, TX, Waco G&MC, Extraco Event Center, www.wacogemandmineral.org	May 7 – 8, Lubbock, TX, Lubbock G&MS and the SCFMS Show and Convention, http://www.lubbockgemandmineral.org/57th-annual-show	May 21-22, 2016 DeRidder, LA DeRidder G&MS Beaugard Parish Fairgrounds 506 West Drive	May 28-29, 2016 Fort Worth, TX Fort Worth G&MS Will Rogers Mem. Center
Aug 13-14 2016 Baton Rouge, LA Baton Rouge GMS Marriot Hotel	August 20-21, 2016 Bossier City, LA Ark-La-Tex G&MS Bossier City Civic Center	August 27-28, 2016 Gem & Mineral Show Jasper, TX Pine Country G&MS Events Center	September 17-18, 2016 Dallas, TX Dallas G&MS Restiol Expo Cen. Mesquite, TX
October 8-9, 2016 Temple, TX Tri-City G&MS Mayborn Civic Cen.	Fort Worth, TX Cowtown Gem, Min. & Glass Society	October 29-30, 2016 Glen Rose, TX Paleo. Soc. Of Austin Somervell Expo Center Hwy 67	November 5-6, 2016 Amarillo, TX Golden Spread G&MS Amarillo Civic Center Exhibition Hall
November 11-13, 2016 Humble, TX Houston G&MS Humble Civic Center 8233 Will Clayton Pkwy	SCFMS November 10-12, 2017 Humble, TX Houston G&MS Humble Civic Center 8233 Will Clayton Pkwy		

STONEY STATEMENTS
 Clear Lake Gem and Mineral Society, Inc
 PO BOX 891533
 Houston, Texas 77289

(Postage)

Meeting 3rd Monday of the Month
 7:30 P.M.
 Clear Lake Park Building
 5001 NASA Parkway, Seabrook, Texas



Member of:

Next Annual Show
 February 27-28, 2016
 Pasadena Convention Center

CLGMS is on the Web:
<http://www.clgms.org>



American Federation of Mineral Societies

South Central Federation of Mineral Societies

Clear Lake Gem and Mineral Society, Inc

MEMBER: American Federation of Mineralogical Societies and South Central Federation of Mineral Societies

PURPOSE: To promote education and popular interest in the various earth sciences; in particular in those hobbies dealing with the art of lapidaries and the earth sciences of minerals, fossils and their associated fields.

2015 OFFICERS:	President	Raul Montelongo
	Vice President	David Tjiok
	Secretary	Trina Willoughby
	Treasurer	Mike Flannigan
	Program Director	vacant
	Board of Directors:	Shannon Oliver Sara Chelette
		Bob Brock Jim Edwards
		Sandra Christiansen vacant
	Newsletter Editor	Annabel Brownfield

Annual Show 2016	Sara Chelette	Library	Vacant
Constitution & Bylaws.....	Sara Chelette	Membership.....	Victoria Faulkner
Community Benefits.....	Vacant	WWW System Admin.....	Mike Flannigan
Historian.....	David Tjiok	Refreshments.....	David Tjiok
Publicity.....	Eddie Dove	Education/Field Trips.....	Annabel Brownfield

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