



A monthly publication of the Clear Lake Gem & Mineral Society

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NEXT MEETING: October 16, 2017
TIME: 7:30 p.m.
LOCATION: Clear Lake Park Building
 5001 Nasa Parkway
 Seabrook, Texas

INSIDE THIS ISSUE

Octobrr Meeting Monthly Meeting Minutes	1- 3	<u>OCTOBER MONTHLY MEETING</u> School of Rock
Board Meeting Minutes Bench Tips	3- 5	Five tables will be set up with five members demonstrating or talking about different things to do with your rocks. You will spend 10 minutes at each table. When the bell rings, you will move to the next table.
Fukang Meteorite Upcoming Workshop	5- 8	
Septarian Dragon Stone Azurite	8- 10	Eddie will be doing chain maille. If you have taken his class before, he would love for you to bring your project and show it off!
Upcoming Shows	11	(continued Page 2)



Charlie will be demonstrating wire wrapping. He makes amazing items with wire!

John will be talking about dichroic stones and turning them into jewelry. If he has time he will also talk about cabochons.

Sara will talk about solder-less prong setting jewelry. She will show you her work.

Pam will talk about tumbling your rocks. She will show you about each step.

So join us for a fun filled night!

[MINUTES OF THE SEPTEMBER 18, 2017 MONTHLY MEETING](#)



For the show we have agreements with NASA to bring a moon rock and display various suites.

Trina will see if she can find the form to request an astronaut speaker and sent it to Vince.

We would like to bring back the gentleman that held the kids classes. We would like the dinosaurs rock show.

Trina now has administration rights for our Facebook site. She would like a second person added to this. Vince volunteered for this

The group approved for Trina to use Facebook advertising for our next two meetings. She will use her best judgment for amount to spend.

Jerry will pay the membership and insurance for SCFMS. Our membership is down from last year.

Charlie would like to give some money to middle school or lower schools after Christmas. This will be timed to also advertise for our show. He would like our typical \$1500 donation.

We discussed donating the rock display to Hasse Elementary in Alvin that they borrowed last year. We will talk more about this.

We still need a presenter for November. Our presenter could not make it tonight, he may be able to reschedule for November.

The October reservation at the park building for a workshop has been cancelled. Charlie will still be holding the October workshop that will be held at his house in October. This is on glass fusion, the class is full.

The November 11th workshop will be held by Gary. It will be on photographing your specimens. This will be more complicated than the last class. We will be working with macro photography. He suggests a lens longer than 50mm. Close up or magnification filters are suggested. These can also be found for small cameras that do not have interchangeable lenses. A tripod, flash that can bounce, white poster board to bounce light and a way to hold that board are needed. Patients will also be needed!

Respectfully submitted by Trina Willoughby for Pam Dudley, Secretary

MINUTES OF THE OCTOBER 2, 2017, BOARD MEETING

We had to meet across the street. Vince relayed to us that Trina has given him information on writing a letter to secure getting us an astronaut speaker(s) for our upcoming rock show. He also presented us with information on advertising in the "Texas Monthly". He will be doing more checking into where exactly the audience base is. Is it the Houston area or statewide? Will make a decision when he finds out.

Vince has sent the appropriate forms in for the lunar rock displays. He has not heard back from NASA yet.

Sandy has sent the first batch of e-mails out to the vendors for the show. Things are moving along.

November 10, 11, 12th is the Houston Gem and Mineral Show. We usually have a table set up with info about our group and upcoming show. WE NEED VOLUNTEERS TO MAN THE TABLE! Sara, Sandy, and John have already volunteered to do some time.

We need all our members to step up and help with our upcoming show. Every little bit helps! Raul is going to check with the U oh H geology department to see if we can get some student volunteers.

The first payment has been made to the Pasadena Convention Center. Jerry let us know it is time to pay rent on our storage unit. It was decided to pay for another year.

Pam checked on having a small show next year at the park across the street from where we meet. Found out we would have to pay for security on top of the rental fee. Makes it too expensive for us to do that. Pam suggested making one of next year's workshops into a small show. We are still talking about July.

Don't forget about our upcoming photography workshop in November!

Sandy asked if we could donate some of our logo items to put in "skippers bags" for the Clear Lake Chamber Christmas Boat Parade. We would also include our show flyers with those items.

Meeting adjourned.

Respectfully submitted by Pam Dudley, Secretary

BENCH TIPS BY BRAD SMITH

LAYOUT TOOLS



Dimensions on some features of a design can be fluid while others must be accurate for the design to work. When precision on a piece is important, good layout techniques are essential.

These are the tools that I rely upon to get holes in the right place, to achieve correct angles, and to cut pieces the correct length.

I like crisp sharp lines to follow, so I often coat surfaces with a dark marker and scribe my layout lines onto the metal. A square makes quick work of checking right angles or marking where to cut, and the thin center punch helps me mark a place to drill holes exactly where I want them.

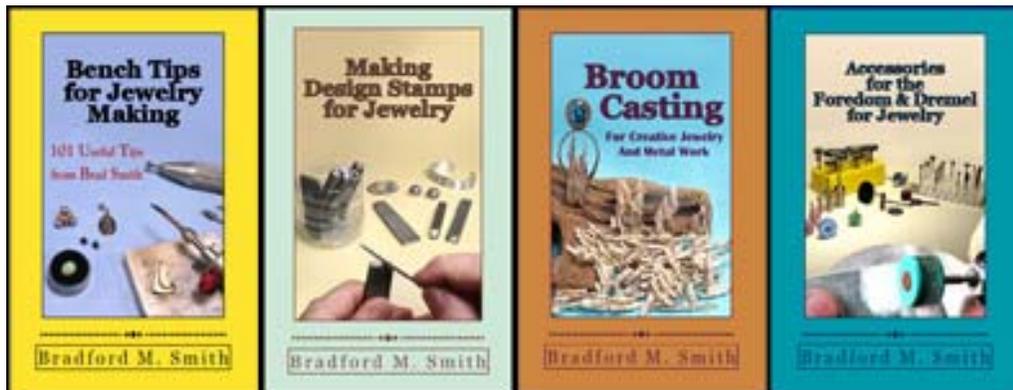
Finally, a good set of dividers is probably my favorite layout tool. They let me quickly mark a strip for cutting, swing an arc, and divide a line or curve into as many equal segments as I need. I keep at least one set of dividers in every toolbox.

INVENTORY RECORD

In an ideal world each of us has a complete pictorial record of all pieces of jewelry in our inventory. We use the pics for marketing, and we use the record for insurance. We use it to remember which items have been sent out on consignment, or we use it to mark which items we're taking to a show. And eventually, we note in the record the pieces that have sold.

Unfortunately, we don't always have time to take good pictures of each piece for a detailed inventory. In situations like this I've been able to make a quick group shot with the help of a smart phone, a camera, a scanner, or a color copier. The quality is more than sufficient to accurately identify the pieces.

See all Brad's jewelry books at Amazon.com/author/bradfordsmith



THE FUKANG METEORITE... AND PALLASITES

www.amusingplanet.com/2013/05/the-beautiful-fukang-meteorite.html inspired by the July/August 2016 Franklin County Rockhouser. And, yes, these can be found at the Tucson show.



The Fukang meteorite, believed to be some 4.5 billion years old, which is as ancient as Earth itself, was unearthed near a town of the same name in China, in 2000. It is a pallasite, a type of meteorite with translucent golden crystals of a mineral called olivine embedded in a silvery honeycomb of nickel-iron. It's a gorgeous meteorite, and possibly the most stunning extraterrestrial piece of rock man has ever seen.

The Fukang meteorite was found by a hiker. The man had often stopped and had lunch on this giant rock, and he always wondered what the metal and crystals were. He finally took a hammer and chisel and broke some pieces off, which he sent to the USA to confirm that it was a meteorite.



The original meteorite weighed just over a thousand kilograms, but the rock was so brilliant that everybody wanted a piece of it. Since then it has been divided into dozens of thin slices and auctioned or distributed around the world.

A total of thirty-one kilograms of specimen is on deposit at University of Arizona. Marvin Killgore of the University of Arizona's Southwest Meteorite Centre holds the largest portion weighing at 420 kg. In 2008, this piece was expected to fetch \$2 million at an auction at Bonhams in New York but, unfortunately, the prospective bidders were more impressed with a couple of pieces of 130-million-year-old fossilized

dinosaur's dung that day, which sold at more than twice the estimate.

Pallasites

Pallasites are a rare type of stony-iron meteorite. They consist of centimeter-sized olivine crystals of peridot quality in an iron-nickel matrix. Coarser metal areas develop Widmanstätten patterns upon etching. Only 61 are known to date, including 10 from Antarctica, with four being observed falls.



Pallasites were once thought to originate at the core-mantle boundary of differentiated asteroids that were subsequently shattered through impacts. An alternative recent hypothesis is that they are impact-generated mixtures of core and mantle materials.

A common error is to associate their name with the asteroid *2 Pallas* but their actual name is after the German naturalist Peter Pallas (1741–1811), who studied in 1772 a specimen found earlier near

Krasnoyarsk in the mountains of Siberia that had a mass of 680 kilograms (1,500 lb). The Krasnoyarsk mass described by Pallas in 1776 was one of the examples used by E.F.F. Chladni in the 1790s to demonstrate the reality of meteorite falls on the Earth, which were at his time considered by most scientists as fairytales. This rock mass was dissimilar to all rocks or ores found in this area (and the large piece could not have been accidentally transported to the find site), but its content of native metal was similar to other finds known from completely different areas.

(Wikipedia; Via Rocky Trails 8/17; via WGMS Rockhouser Sept 2017) Esquel, via Drifter, Sept 2017

UPCOMING WORKSHOP

November 11 – Macro Photography. In the first photography class, we learned about lighting and photographing small objects.

Rocks can be a bit bland in a photograph just by themselves so on this class we will explore Macro Photography.

By some definitions, a macro photograph is one in which the size of the subject on the negative or image sensor is life size or greater. However, in other uses it refers to a finished photograph of a subject at greater than life size.

Some of the tools we used last time will be needed here along with a few add-ons to take highly magnified images of extremely small subjects. You could begin by slipping a diopter lens to the front of the existing standard lens. This would impart a degree of magnification; you could also install extension tubes between your normal lens and the camera body and finally, you could invest in a fairly expensive — and optically superb — macro lens that was dedicated to macro shooting.

A Close-Up Macro Filter Set such as a Vivitar Series 1- 1 2 4 10 Close-Up Macro Filter Set can be purchased for a very reasonable cost on Amazon for most cameras that accepts screw on filters. Make sure you get the correct size for your lens and camera.

This will obviously leave out many, inexpensive point and shoot cameras, but you can get good results with a non DSLR camera such as a Canon PowerShot with a Lens/Filter Adapter Ring to attach close up/ macro filters, or a Nikon CoolPix with the Lens/Filter Adapter Ring.

There are other adaptors to achieve macro photography so do your research!
Of course if you already have a good DSLR camera, you can't beat a good macro lens!

All can be found on Amazon.com

We will also will be using a flash both on and off camera for lighting.

If you need advice on cameras, lens or lighting, feel free to write me at the address below.

Gary A. Chelette
gachelette@att.net

SEPTARIAN DRAGON STONE



This stone has a few different names, Dragon stone, Septarian Geode, Septarian Concretion, to name a few. It is an interesting stone as it is a combination of different minerals. The name Septarian is derived from the Latin name, Septem, meaning seven. This relates to the fact that the mud balls cracked with 7 points in every direction, thereby creating the beautiful design.

Septarians are composed of Calcite (The Yellow Centres), Aragonite (The Brown Lines) and the Outer Grey Rock is Limestone. Occasionally the fossil or some of the fossils which started the formation of the rock is noticeable in the rock.

Septarians were formed during the Cretaceous period, 50 to 70 million years ago when the Gulf of Mexico reached what is now Southern Utah. Decomposing sea life killed by volcanic eruptions, had a chemical attraction for the sediment around them, forming mud balls and as the ocean receded, the balls were left to dry and crack. Because of their bentonite content they also shrank at the same time trapping the cracks inside. As

decomposed calcite from the shells was carried down into the cracks in the mud balls, calcite crystals formed. A thin wall of calcite was transformed into aragonite separating the bentonite heavy clay exteriors from the calcite centres. Because of this, the nodules are called Septarians.

Concretions



Septarian concretions are a special type of concretion. Concretions are masses of mineral matter formed when minerals in water are deposited about a nucleus (such as a leaf or shell or other particle) forming a rounded mass whose composition or cement is usually different from the surrounding rock. This can occur at the time of deposition, shortly thereafter, or after the sediment has hardened.

Generally, concretions are harder than the rocks around them; therefore, over time the concretions can weather out of the surrounding rocks. Concretions in Kansas are formed from any of a number of minerals, including calcite, limonite, barite, pyrite, or silica. They vary widely in shape and size, with the huge spherical concretions at Rock City in Ottawa County and Mushroom Rock State Park in Ellsworth County measuring up to 27 feet in diameter.

Excerpted from Rockgrinders Gazette, 6/17 via WGMS Rockhouser 8/2017, via Drifter 9/2017

AZURITE



Azurite is a beautiful, deep blue copper based mineral, copper carbonate hydroxide ($\text{Cu}_3(\text{CO}_3)_2(\text{OH})_2$). Its Mohs hardness is a rather soft 3.5 to 4.0 (your fingernail is about 3.5 on the Mohs scale). Despite being very soft, jewelry made from azurite can be found. It would be better as a pendent or earrings rather than as a ring. Azurite has been known for many millennia. It is mentioned in Piney the Elder's "Natural History" where it is referred to by its Greek name "*kuanos*" and its Latin name "*caeruleum*". The name "Azurite" is derived from Persian "*lazward*" an

area known for lapis lazuli. Interestingly, lapis lazuli in Persian would be “stone of azure” or “blue stone”.

Azurite is found as crystalline specimens, in massive and nodular form, and sometimes found in stalagmites and stalagmites. In addition to being used in jewelry azurite was used as a pigment in paints. Azurite was use as a blue pigment for paint as early as 2613 BCE. It was also used by many medieval painters. The fundamental problem with using azurite as a pigment is that is that it will slowly weather into green malachite. Thus, if you were to look at Raphael’s *Madonna and Child Enthroned with Saints* you would note that sky background now has a distinctive greenish tint.



The chemical reaction for the weathering process is:



Heat and moist conditions accelerate the weathering process. Ancient paintings and mineral specimens need be kept in a cool, dry environment to greatly slow down the weathering process.

Azurite is found in many localities; virtally any location where copper is found can be a source for azurite. Some locations for the best mineral specimens include France, Nambia, Morocco, United States (Arizona) with more recent finds include Morocco, China, and Mexico. Early pigments derived from azurite were mined in Egypt and Isreal.

References:

- GIA, <https://www.gia.edu/>
- Wikipedia, <https://en.wikipedia.org>

Via Chips and Chatter 03/2017



STONEY STATEMENTS
 Clear Lake Gem and Mineral Society, Inc
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 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 24-25, 2018
 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.

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