



Snoopy Gems

Volume 49 Number 10 October 2023
Mississippi Gulf Coast Gem &
Mineral Society Inc.



Email: mgcgms@bellsouth.net

MGCGMS Established in 1974

President's Message

Dear Members,

The October meeting on Saturday, is the most important meeting to prepare for our annual November show which takes place on the 11th and 12th at the civic center on the fairgrounds in Pascagoula. Be sure to come and find out how you can help make it a great success for the club.

Barbi will tell us about show plans, logistics, and the dealers. Raffle tickets will be available at the meeting. We also will prepare the brochures and door prize tickets for handing out at the show and ask for volunteer work signups for the show days.

We will announce the 2024 slate of officers and open nominations from the floor. Election will take place at the November meeting after dinner just prior to show opening. Please consider helping by volunteering. Nominees need to be members of the club for at least a year and must actively participate in our activities.

Remember to bring your raffle donation if you planned to donate a gem or mineral specimen or a piece of jewelry worth at least \$25 or more.

Wire and templates with samples will be provided if you want to make a Christmas ornament. Bring thin gauge art wire, basic tools, and a few pretty beads to decorate your ornament if you wish. Lapidary equipment will be available and also gem/metal testing.

Make it a priority to come on Saturday. See you on Saturday!

Liz Platt MGCGMS President

September Workshops:

Our Wednesday classes from 11-3:00 in our room at the Mary C. All members are welcome!

Saturday Workshop:

Liz Platt will be teaching Wire wrapped Christmas ornaments. Kits will be available. You can also work on an item to donate for the show raffle. We will be working on finishing touches for the show.

Materials:

Large aluminum wire and your choice of beads.

Tools:

Wire wrapping plyers and cutters



John Guglik will be available to test stones and metals.

Machines: Members of our tool committee will be available to help with cutting and capping gemstones. As always, we will have the club machines available for metal & gemstone testing, gemstone cutting, and capping. There is a \$3 tool maintenance fee to use the machines.



Meeting Minutes

GULF COAST GEM & MINERAL SOCIETY

Sept 2023



Meeting called to order: 1:00pm by Liz Platt, President

Meeting Minutes: Liz Platt asked if minutes were read, or if there were any corrections needed. John Guglik made a motion to accept August minutes, Allan Elliott seconded, motion carried.

Treasurer: Barbi Beatty, Treasurer provided account balances for all accounts. Harvey Marcum made a motion to accept report as stated, Allan Elliott seconded, motion carried.

Committee Reports

Sunshine: Buddy Shotts is still recovering, Reba Shotts sent out Birthday cards. Bob (Connie's husband) was happy to receive his first birthday card from the club. Joni is home caring for her husband (Jack).

Library: Still located in the cabinet below the sink. It is open to all if interested.

Equipment: Per Barbi Beatty, we need wheels for the Diamond Pacific and Pixie machines. Each wheel costs approximately \$80.00. We need four for the Pixie, and six for the Diamond Pacific. Barbi made a proposal that we purchase new wheels for both machines. Harvey Marcum suggested getting wheels for one piece of equipment due to decreased membership. Harvey explained the purpose of the flat lap. Barbi made a motion to buy wheels for both machines with a budget of \$1000. Harvey Marcum seconded; motion carried. Money in equipment jar can go towards smaller items that we need.

Communication: Membership has obviously decreased, Liz Platt suggested that each member call four/five members and invite them back. Allan Elliott suggested that someone set up a booth at the flea market and have information for the club. Liz Platt set up a class on October 04, 2023, with Heather Carter Martin of Ethoterra to teach us enameling.

Newsletter: Snoopy Gem newsletter always wonderful. Barbi Beatty asked for contribution from club members to add to the newsletter. If interested in adding anything please forward it to her.

Show: November 11-12th, 2023. Lisa Fitch and Rosalind Norvel-Daniels will organize and work the front door. Tommy (Sue Shelton's husband) will run the raffle. Have received several pieces already for the raffle. Buddy has a gemstone on the dop and if he has it finished in time, he will donate that. If anyone else has items to donate, please do so. Barbi Beatty would like to place the items on our website so that people can see what they are buying tickets for. Hope to have raffle tickets in time for the October meeting to hand out. October meeting will remain the same and we will work on show planning. We will also make a list of items people will bring for the vendor dinner. Still waiting to receive applications back and should know more next month. Will need all hands on to setup and take down. John Guglik suggested perhaps giving special prizes to new members for assisting. Election of officers should be done in November. Nominating committee should be presented at the October meeting.

New Business: We will volunteer to help children make stretch bracelets for the Spooky Spring event at the Mary C. in October. Harvey requested that we identify who is on what committees. Barbi inquired about increasing the amount to \$5.00 for equipment use vs \$3.00. Liz suggested tabling until January. Barbi Beatty made a proposal to increase membership dues to \$20.00 per person and \$30.00 for two people in the same household per year, Jr membership will stay the same. It will be published in the October issue of the Snoopy newsletter and voted on in the October meeting. Belinda Marcum seconded; recommendation passes. Membership dues go toward dues for SFMS and insurance coverage. John Guglik would like to do a demonstration on a professional refractometer within the next two months.

Old Business: NA

Gem of the Month: Sapphire is the gem of the month, John Guglik educated us. Barbi Beatty showed several pieces in a variety of colors. Barbi also showed some mookite(?).

Motion to Adjourn: 14:50 made by Barbi Beatty, seconded by Stephanie Hatcher, motion carried.

Door Prizes: Contributed by Allan Elliott, Harvey Marcum, and others.



Happy

October

Birthday

Barbi Beatty Karl Beatty Miku Daynes
Melinda Gerhart Mimi Massa



contributes to the diffraction of light that produces the stunning array of colors within the gemstone.

Opals: Nature's Exquisite Play of Colors

Opals, known for their mesmerizing play of colors, are gemstones that captivate the imagination with their unique optical properties. This article explores the geological formation, chemical composition, and cultural significance of opals, shedding light on the science behind their enchanting allure. Opals, with their captivating play-of-color and unique charm, are gemstones formed through a fascinating geological process. These radiant gems have a distinct formation story that involves a delicate interplay of water, silica, and time.

Chemical Composition:

Opals are composed mainly of hydrated silica (SiO₂·nH₂O), often containing water content ranging from 3% to 21%. This unique composition, along with the arrangement of silica spheres,

Color: Commonly having a bodycolor of white, yellow, gray, black, or brown; however, the bodycolor of opal can be any color. Some of the most beautiful common opals are red, orange, pink, green, or blue. The play-of-color of precious opal displays spectral colors of red, orange, yellow, green, blue, and violet.

Streak: White

Luster: Rough opal can have a dull, pearly, waxy, or vitreous luster. Most opal polishes to a vitreous luster.

Diaphaneity: Translucent, opaque, semi-transparent, and, rarely, transparent.

Cleavage: None, breaks with a conchoidal fracture.

Mohs Hardness: 5 to 6

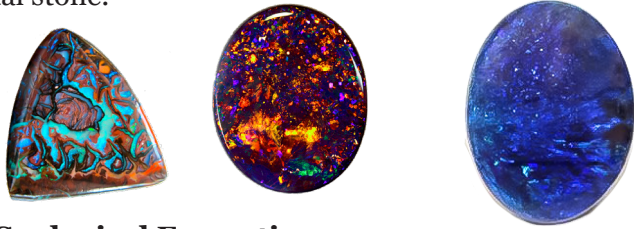
Specific Gravity: 2.0 to 2.2, varying with impurities, which include various amounts of water

Diagnostic Properties: Conchoidal fracture. Sometimes exhibits play-of-color. Low specific gravity and hardness.

Chemical Composition: $\text{SiO}_2 \cdot n\text{H}_2\text{O}$

Crystal System: Amorphous

Uses: Commonly used as a gem and as an ornamental stone.



Geological Formation:

Opals are primarily composed of silica, which is a mineral found in abundance in the Earth's crust. The formation of opals begins in environments where silica-rich solutions can percolate through rocks, typically in areas with volcanic activity. The water carrying dissolved silica seeps into the rock crevices, and over time, as the water evaporates or drains away, it leaves behind deposits of silica. Opals belong to the mineraloid group, lacking a defined crystal structure. Their spectral display of colors, known as "play-of-color," arises from the diffraction of light within microscopic silica spheres. This article delves into the geological processes that give rise to opals and the distinct characteristics that make them a coveted gemstone.

silica-rich water moves through these voids, it deposits layers of silica, creating the opal. The play-of-color is a result of the light interacting with the stacked silica spheres.



Types of Opals:

There are two primary types of opals: precious opals and common opals. Precious opals, the ones prized for their vibrant play-of-color, have a specific arrangement of silica spheres. Common opals, on the other hand, lack this play-of-color and are valued for their unique patterns or colors. Opals come in various types, each with its own characteristics. Precious opals, the most valued, exhibit a play-of-color, while common opals lack this feature. Fire opals, with vibrant orange and red hues, derive their name from their intense coloration.

The process of opal formation is a slow one, taking thousands to millions of years. The conditions must be just right for opals to develop, including the right combination of silica-rich solutions, suitable host rocks, and the necessary geological processes.



Opals are often associated with arid regions like Australia, which is renowned for producing some of the world's finest opals. The Australian outback, particularly the areas around Coober Pedy and Lightning Ridge, is known for its opal mines where these precious gems are extracted from the Earth.



Opals, with their kaleidoscope of colors, continue to be cherished gemstones, fascinating both scientists and enthusiasts alike. By understanding the geological processes, chemical composition, and cultural significance of opals, we gain a deeper appreciation for these extraordinary gems that have captured the hearts of many throughout history.



One of the crucial elements in opal formation is the presence of silica spheres. These microscopic spheres are arranged in a regular pattern, and when light passes through them, it diffracts into a spectrum of colors, creating the opal's characteristic play-of-color. The size and arrangement of these silica spheres determine the color and brilliance of the opal.

Opals can form in various host rocks, but one of the most common is sandstone. In some cases, opals develop in cavities or fissures within these rocks. As the



Exploring the Wonders of Tourmaline: Nature's Electrifying Gem

Tourmaline, a captivating gemstone with a rich history, has intrigued scientists and gem enthusiasts alike for centuries. Known for its stunning array of colors and unique electrical properties, tourmaline has become a focal point of scientific research, unlocking secrets that showcase the wonders of Earth's geological processes.



Formation and Varieties:

Tourmaline belongs to a group of complex borosilicate minerals with a wide range of compositions. Its formation occurs in metamorphic rocks subjected to high temperatures and pressures. The presence of elements such as aluminum, iron, lithium, and sodium contributes to the diverse color palette exhibited by tourmaline, ranging from vibrant reds and greens to deep blues and blacks.

Piezoelectric and Pyroelectric Properties:

One of the most fascinating aspects of tourmaline lies in its unique electrical properties. Tourmaline is both piezoelectric and pyroelectric, meaning it can generate an electric charge when subjected to mechanical stress (piezoelectric) and temperature changes (pyroelectric). This inherent ability makes tourmaline a valuable material in various scientific and technological applications.



Tourmaline in Technology:

The unique electrical properties of tourmaline have found practical applications in technology. Tourmaline crystals are used in certain pressure-sensing devices, sonar equipment, and even as components in piezoelectric ceramics. Researchers continue to explore novel ways to harness and amplify tourmaline's electrical capabilities for advancements in fields such as electronics and materials science.

Gemological Significance:

Gemologists appreciate tourmaline for its pleochro-

ism—the ability to display different colors when viewed from different angles. This optical phenomenon adds an extra layer of complexity and allure to tourmaline gemstones. Gemological laboratories meticulously evaluate and classify tourmalines based on their color, clarity, cut, and carat weight, providing a standardized approach to assessing their value.

Tourmaline, with its remarkable combination of geological origins, vibrant hues, and unique electrical properties, stands as a testament to the intricate beauty of Earth's natural processes. Ongoing scientific exploration continues to unveil the secrets held within this mesmerizing gem, offering both aesthetic enjoyment and potential technological advancements for future generations. Color Most commonly black, but can range from colorless to brown, red, orange, yellow, green, blue, violet, pink, or hues in-between. It can also be bi-colored, or even tri-colored. Rarely, it can be found as neon green or electric blue.



Crystal habit Parallel and elongated; acicular prisms, sometimes radiating; massive; scattered grains

Cleavage Indistinct

Fracture Uneven, small conchoidal

Tenacity Brittle

Mohs scale hardness 7.0–7.5

Luster Vitreous, sometimes resinous

Streak White

Diaphaneity Translucent to opaque

Specific gravity 3.06+0.20–0.06

Density 2.82–3.32

Polish luster Vitreous

Optical properties Double-refractive, uniaxial negative

Refractive index $n_{\omega} = 1.635–1.675$ $n_{\epsilon} = 1.610–1.650$

Birefringence -0.018 to -0.040 ; typically about -0.020 but in dark stones it may reach -0.040 [1]

Pleochroism

Typically moderate to strong

Dispersion 0.017



Magnolia State Gem Mineral and Jewelry Show

Nov 11 & 12, 2023

Jackson County Fairgrounds,
1st Lieutenant Eugene J. Majure Dr

Pascagoula MS 39567
Saturday 10AM to 6PM
Sunday 10AM to 5PM



Admission: Adult \$5/Kids 12 and under free with a paying adult
One door prize ticket with each paid admission
Door Prizes awarded hourly!

Come see
Exhibits
Demonstrations
Educational Resources
Fossils

Vendors will be selling, Jewelry, Gemstones, Jewelry making supplies, Mineral specimens, & Fossils

Enter our Raffle for Prizes!
Tickets are \$1ea or 6 for \$5
Enjoy a great meal or snack at our Concession Stand!



RAFFLE
TICKET



GEM SHOW
INFO



MGCGMS
CLUB

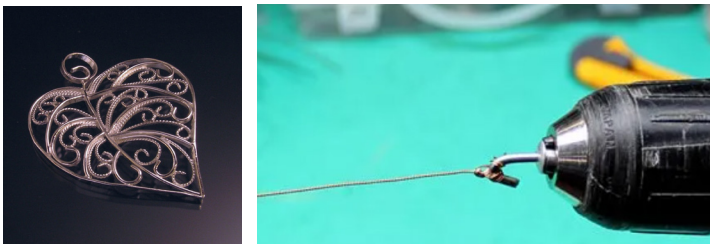
BENCH TIPS

MAKING FILIGREE WIRE

Making wire for filigree is quite simple. Take a double strand of 24-26 gauge wire, twist it tightly, and then flatten it a bit. While the basics are straightforward, here's a few tips that will quickly make you an expert with

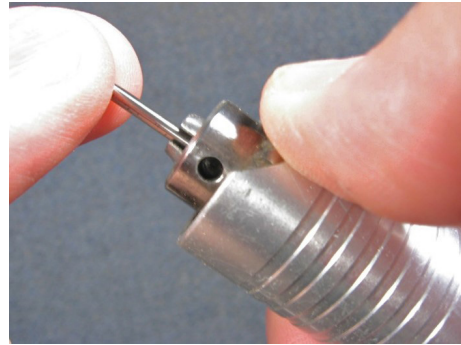


Filigree looks best when the wire has a very tight twist. The way to do this is to start with dead soft wire and twist it until it breaks. It always seems to break on one end or the other. Use a drill motor or a Foredom. You will need a small hook in the chuck like a cup hook from the hardware store or a nail that has been bent into the shape. Be sure to keep a little tension on the wires as you twist. Then to get a real tight twist, anneal the wire and twist it a second time until it breaks. The final step in prepping the filigree wire is to flatten it slightly with a planishing hammer or rolling mill. The amount of flattening is a personal preference. The wire will be quite stiff at this point, so it's best to anneal it again before starting to make the filigree shapes. USE



YOUR THUMB

When using multiple bits in a Foredom, we often have to deal with several different shaft sizes - the usual 3/32 inch burs, the larger 1/8 inch shaft sizes and of course the many different sizes of drills. For some reason I real-ly dislike having to turn the key multiple times to open or close the jaws of the handpiece chuck.



So I have two ways to speed up that task. For opening up the jaws, I just remember "four", the number of turns I have to make to open the chuck just enough from the 3/32 bur shaft size to the larger 1/8 bur shaft size. For closing the jaws around a smaller shaft, there's a neat trick. Hold the new bit in the center of the open jaws of the chuck, put your thumb lightly onto the outer toothed collar of the chuck, and gently start up the Fore-dom. As the chuck turns, it will naturally tighten the jaws around the bur shaft or the drill bit. Then all you have to do is a final tightening with the key.




"Bench Tips for Jewelry Making" and "Broom Casting for Creative Jewelry" are available on Amazon source: www.BradSmithJewelry.com

We always welcome new members!



Date _____ Mississippi Gulf Coast Gem and Mineral Society

http://www.mgcgms.org		Application for Membership	
Individual: \$16.00		Individual +1 relative Same Address: \$20.00	
		Junior Under 18: \$6.00	
Name: _____		Cell: _____	
Name: _____		Cell: _____	
Address: _____		Home Phone: _____	
City: _____			
State: _____		Email 1: _____	
Zip: _____		Email 2: _____	
Members Birthdays			
Adult: _____		Birthday M/D: _____	
Adult: _____		Birthday M/D: _____	
Junior: _____		Birthday M/D/Y: _____	
Junior: _____		Birthday M/D/Y: _____	
Please Check All Applicable Interests			
<input type="radio"/> Beading	<input type="radio"/> Cabbing	<input type="radio"/> Jewelry Making	
<input type="radio"/> Chain Mail	<input type="radio"/> PMC	<input type="radio"/> Lapidary	
<input type="radio"/> Field Trips	<input type="radio"/> Faceting	<input type="radio"/> Minerals	
<input type="radio"/> Fossils	<input type="radio"/> Wire Wrapping	<input type="radio"/> Silver Smithing	
<input type="radio"/> Others: _____			
How did you hear of us? _____			
Please check the following:			
<input type="radio"/> I understand that my picture or likeness may be used in Society promotions.			
<input type="radio"/> I authorize MGCGMS to include my contact information be included in Society listings for members to contact each other only.			
Signature: _____			
Signature: _____			

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AFFILIATIONS
 The Southeast Federation of Mineralogical Societies,
 Inc.
 The American Federation of Mineralogical Societies,
 Inc.
 S.C.R.I.B.E. (Special Congress Representing Involved
 Bulletin Editors)

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 Vice President Jodi Arias
 Treasurer Barbi Beatty
 Secretary Roslind Daniels
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 Editor Barbi Beatty
 Web master Barbi Beatty
 Member at Large Harvey Marcum
 Member at Large Reba Shotts

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Membership Barbi Beatty
 Show Chair Barbi Beatty
 Historian Lettie White
 Librarian Vicki Reynolds
 Sunshine Reba Shotts

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 SFMS John Wright: Past President
 SFMS Barbi Beatty: Treasurer
 & Past Asst Treasurer & Insurance
 Liaison
 SFMS Buddy Shotts: Past Long-range Plan-
 ning, Past President, Past State Director

Annual dues are:
 \$16 Individual
 \$20 (2) Members in same house hold
 \$6 Junior

**2023 Workshop/Meeting
 Dates**

January 14 Mary C. 9:30-4:00
 February 11 Mary C. 9:30-4:00
 March 11 Mary C. 9:30-4:00
 April 8 Mary C. 9:30-4:00
 May 13 Mary C. 9:30-4:00
 June 10 Mary C. 9:30-4:00
 July 8 Mary C. 9:30-4:00
 August 12 Mary C. 9:30-4:00
 September 9 Mary C. 9:30-4:00
October 14 Mary C. 9:30-4:00
 November 10 After Vendor Dinner 5ish
 December 9 Christmas Party Mary C.
 11:00am-3:30pm

**Dates subject to change.
 Be sure to check each month!**
 The November meeting is the Friday evening
 of the gem show after the dinner for the dealers
 at the Jackson County
 Fairgrounds Civic Center Building.
 December will be our
 Christmas Party and Installation of
 Officers

October 2023

Sun	Mo	Tue	We	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

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<http://www.mgCGMS.org>



The Mississippi Gulf Coast Gem & Mineral Society is a Non-profit Organization Dedicated to Education, Science, and the Lapidary Arts and Crafts

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