

## **Snoopy Gems**

Volume 50 Number 1 January 2024 Mississippi Gulf Coast Gem & Mineral Society Inc.



MGCGMS Established in 1974



## President's Message

Dear Members,

Happy New Year! At the Saturday workshop and meeting we will have fun doing a project and working on machines. We will also have some time to discuss and plan for 2024. What skills do you want to learn? What new tools do we need and what techniques do we need to perfect? Let's plan for our spring exhibit and sale in March and the annual show in November. Are you willing to teach or assist with a workshop? We are here to support your goals and help you succeed. Let's make 2024 a terrific year!

See you on Saturday!

Liz Platt

**MGCGMS** President



Email: mgcgms@bellsouth.net

## January Workshops:

Our Wednesday classes from 11-4:00 in our room at the Mary C. All members are welcome!

## Saturday Workshop:

Vicki Reynolds will be teaching a pearl beaded bracelet. Kits will be available.

## **Materials:**

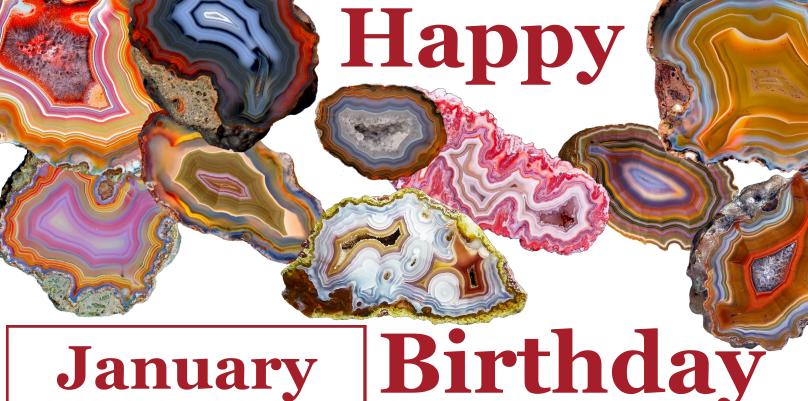
36 6mm crystal pearls or round beads 40 3mm round beads 36" white beadalon wildfire thread .15mm 1 clasp with jump rings

Tools: 2 beading needles Thread cutter, ruler



John Guglik will be available to test stones and metals.

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



# January



Joni Arias Lisa Fitch Sandy Hunt Stephanie Hatcher Billie Kelly Alex Marcum Belinda Marcum Angie Troutman Lettie White

## **Garnets: Unveiling the Spectrum** of January's Birthstone

Garnets, the birthstone for January, have captivated human fascination for centuries due to their stunning array of colors and unique crystal structures. We will explore the diverse spectrum of colors exhibited by garnets and the underlying geological and chemical factors responsible for their distinct hues.

#### Structure

Garnets are a group of silicate minerals with a shared crystal structure but a remarkable range of colors. January's birthstone encompasses various species, including almandine, pyrope, spessartine, grossular, and andradite. Understanding the mechanisms that give rise to the different colors requires an exploration of their formation processes. Chemical Formula: Garnet is a series of several different minerals with unique chemical formulas.

Color: Red, Green, Yellow, Orange, Brown, Pink, Purple,

Gray, Black

Hardness: 6.5 - 8.5

Crystal System: Isometric Refractive Index: 1.780 - 1.889

SG: 3.5 - 4.3

Transparency: Transparent to translucent

Double Refraction: None

Luster: Vitreous; some forms adamantine or submetallic

Cleavage: None. May exhibit parting.

Mineral Class: Garnet



## **Formation and Geological Origins:**

Garnets form under a variety of geological conditions, from metamorphic rocks to igneous intrusions. The specific combination of temperature, pressure, and mineral composition during their formation contributes to the unique coloration. For example, almandine garnets, known for their deep red hues, often originate in metamorphic rocks rich in iron and aluminum.



#### **Chemical Influences on Coloration:**

The vibrant colors of garnets are intricately tied to the presence of transition metal ions within their crystal lattice. Iron, manganese, and chromium are common trace elements that influence the gem's color. The varying oxidation states and concentrations of these elements result in a broad spectrum of colors, from the fiery red of pyrope garnets to the vibrant green of demantoid garnets.

#### **Color Variations in Garnets:**

**1. Almandine** (Red) Iron impurities in the crystal lattice contribute to the deep red color, ranging from purplish-red to brownish-red hues.



**2. Pyrope** (Red) High magnesium content and low iron levels create the iconic ruby-red appearance.

**3. Spessartine** (Orange): Manganese impurities yield shades of orange, from yellow-orange to reddish-orange.

**4. Grossular** (Green): Also known as Tsavorite. Variable composition, including calcium and chromium, produces colors spanning from green to yellow and even brown.

**5. Andradite** (Yellow to Green): Presence of iron, titanium, and manganese results in yellow, green, and brown tones.

**6. Color-Change Garnet:** Garnet that exhibits a different color in natural and artificial light. Color-Change Garnet is an intermediary mix between the Pyrope and Spessartite (though closer in composition to Pyrope), and presents a color change from a light brownish, yellowish, or greenish in daylight to a pink or purplish color in incandescent light. A few rare specimens may even have a bluish color, which is extremely rare for Garnet.

AY INCANDESCENT BHT LIGHT

Garnets, with their kaleidoscopic range of colors, offer a fascinating exploration into the geological and chemical intricacies of gemstone formation. As we delve deeper into the science behind their hues, we gain a greater appreciation for the natural processes that create these mesmerizing gemstones, making them an enduring symbol of January birthdays.



## **BENCH TIPS**

**Silversmithing** is a centuries-old craft that involves the manipulation of silver to create intricate and stunning pieces of art. This delicate and precise craft requires a combination of skill, creativity, and patience. Here are some key techniques employed in the art of silversmithing:

## 1. Annealing:

The process of heating and cooling silver to make it more malleable is known as annealing. This crucial step allows the silversmith to shape the metal with greater ease, preventing it from becoming brittle during the working process.

## 2. Sawing:

Silversmiths use saws to cut through silver sheets or wires, creating the desired shapes for their designs. Precision is essential in this step, as it sets the foundation for the overall structure of the piece.



After cutting, filing helps refine the edges and surfaces of the silver. It ensures smoothness and uniformity, preparing the metal for further

detailing or joining.

## 4. Forming:

Silversmiths use various techniques to form silver into three-dimensional shapes. This can involve hammering the metal over stakes, using mandrels, or employing hydraulic presses. These methods allow artisans to create bowls, vessels, or intricate sculptural elements.

## 5. Soldering:

Soldering is the process of joining two pieces of silver using a lower melting point metal alloy. Silversmiths apply heat to melt the solder, creating a strong bond between the pieces without compromising the integrity of the silver.



## 6. Repoussé and Chasing:

These techniques involve shaping silver from the reverse side, pushing the metal outwards (repoussé) or refining the design by indenting the front side (chasing). This adds depth and intricate detailing to the final piece.

## 7. Engraving:

Silversmiths often use engraving tools to carve intricate patterns, designs, or text onto the surface of the silver. This technique allows for personalization and intricate embellishments.

## 8. Polishing and Finishing:

The final step in silversmithing involves polishing the piece to achieve a lustrous finish. Silversmiths may use a variety of tools, compounds, and methods to bring out the shine and highlight the details of the crafted item.

## 9. Stone Setting:

For pieces that incorporate gemstones, silversmiths must master the art of stone setting. This involves carefully securing gemstones into the silver using techniques like bezel setting, prong setting, or channel setting.

#### 10. Patination:

Silversmiths sometimes use chemical processes to apply a patina to the silver. This can create various colors and effects, enhancing the visual appeal and adding character to the finished piece.









Mastering these techniques requires dedication and practice, and each silversmith often develops their unique style by combining these methods in creative ways. Silversmithing is not just a craft; it's an art form that continues to evolve, blending traditional techniques with contemporary design.

## William Holland Workshops June 2-8, 2024

#### JACK KING - CABOCHONS I

Class Fee includes: Beginner slabs to make your first cabochons, Diamond sprays and pads to take your stones to 100,000 Polish, Iron

out to clean crystals & druzy

Lab Fee: \$50

Estimated Materials Cost: \$0-\$25

Consumable Fee: \$15 Prerequisites: None

#### JOHN WILD - CABOCHONS II

This is a course for experienced cabbers. Students should have completed a Cab I course of at least 16 hours and should have mastered the basics of standard, templated forms.

Lab Fee: \$50

Estimated Materials Cost: \$0-\$100

Consumable Fee: \$15 Prerequisites: Cabs I

#### MICHAEL BATEMAN - STONE ON STONE

Students will learn several methods to manipulate cabochons using a flex-shaft and common bench tools. Cab enhancements include "carving" or etching the backs of cabochons, and inlaying carvings with 23k gold leaf and fine silver.

Lab Fee: \$150

Estimated Materials Cost: \$0 Consumable Fee: \$15

Prerequisites: Cabochons I or experience with cab machines is required. Some silversmithing experience is recommended, but not

required.

#### TOM MITCHELL - FACETING I & II

For beginners, you will learn roughly how to identify your gem rough, how to choose a design, where to place the dop on the stone and how to dop it, hot to cut, polish and transfer, how to realign, how to complete the stone.

Lab Fee: \$65-\$90

Estimated Materials Cost: \$0+

Consumable Fee: \$15

Prerequisites: None for beginners; faceting 1 for II

#### **BILL BOGGS - INTARSIA I & II**

This is a class for beginners and advanced students. For Intarsia beginners we will focus on basic concepts and learning to cut and shape small pieces of colorful or otherwise interesting rocks and gluing them together to form intricate scenic and/or geometric pattern. For students with previous Intarsia class experience, we will be building on those skills and experience to create more diverse and complex designs.

Lab Fee: \$25

Est Materials Fee: \$20 - \$60 Consumables Fee: \$15 Prerequisites: Cabs I

#### STEPHANIE DANZ - STAINED GLASS

In this class we'll explore the art of stained glass using the Tiffany method, also known as the copper foil method. You will have the opportunity to create two projects.

Lab Fee: \$275

Estimated Materials Cost: \$25

Prerequisites: None

#### **BILL HARR - CASTING**

This class will teach silver casting for beginner and intermediate silversmithing. The emphasis will be on production centrifugal casting, meaning techniques for high reliability.

Lab Fee: \$100

Estimated Materials Cost: \$100

Consumable Fee: \$15 Prerequisites: None

#### JERRI HEER - GEM TREES I

This class will start with the basic and intermediate skills of gem tree making and graduate to an exploration of multiple styles and advanced designs of truly beautiful and species-specific trees.

Lab Fee: \$90.00 (Covers 1st Three Trees) Estimated Materials Cost: \$0-\$150

Prerequisites: None

#### **JASON HAMILTON - SILVER I**

This class will teach Silversmithing for beginners and intermediate skill levels with an emphasis on using fabricated stock silver material to make settings for Cabochons in Rings, Pendants, Bracelets, & Earrings.

Lab Fee: \$0

Estimated Materials Cost: \$100-\$300

Prerequisites: None

#### **CINDY MOORE - MOOVIN METAL** (Hydraulic press/rolling mill)

Working with different types of metal, cold connections, forging, fold forming and more to create bracelets, rings, earrings, etc...

Lab Fee: \$95

Estimated Materials Cost: \$25-\$75

Consumables Fee: \$15 Prerequisites: None

#### SUSAN BROOKS - METAL CLAY

Students will be introduced to the amazing world of Fine Silver metal clay and its multitude jewelry items.

Lab Fee: \$50

Estimated Materials Cost: \$300

Prerequisites: None

#### WAYNE PARKER - LEATHER & Bi-METAL Bracelet

In this course, we will use multiple disciplines & skills – i.e. Riveting, Hand Stamping, Annealing, Fold Forming

Lab Fee: \$125

Estimated Materials Cost: \$0 - \$200

Prerequisites: none

## KRISTI ROSS & STEPHANIE SAVIC POLK (acid etching & enameling)

The class will begin with the basics of acid etching on copper.

Lab Fee: \$200 Est. Materials Fee: \$0 Prerequisites: None

#### JUDI WILD - WIRE I

This class is specifically designed for the new wire-wrapping students.

Lab Fee: \$75

Est. Material Cost: \$100-\$275

Prerequisite: None

We always welcome new members!



Date	Misssissippi Gulf Coast Gem and Mineral Society								
	http://www.mgcgms.org	Application for Membership							
Individual	: \$20.00 Individual +1 re	elative Sa	me Address: \$30.00	) Ju	nior Unc	der 18: \$6.00			
Name:				Cell:					
Address:									
Zip:		Email 2	<u>:</u> :						
Adult: Adult: Junior: Junior:	Please Check All Applicable Interests Beading Chain Mail Field Trips Fossils Others:		Birthday M/D: Birthday M/D: Birthday M/D/Y: _						
	you hear of us?								
Signati	eck the following:  I understand that my picture or likenes I authorize MGCGMS to include my con contact each other only.  cure: cure:	ntact info	rmation be included		or meml	bers to			

Mississippi Gulf Coast Gem & Mineral Society Inc. P.O. Box 857 Ocean Springs MS 39566 mgcgms@bellsouth.net

## **Snoopy Gems**

is the Official Publication of The Mississippi Gulf Coast Gem and Mineral Society, Inc.

#### **AFFILIATIONS**

The Southeast Federation of Mineralogical Societies,

The American Federation of Mineralogical Societies,

S.C.R.I.B.E. (Special Congress Representing Involved Bulletin Editors)

#### **OFFICERS 2022**

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ALAA John Wright: Director John Wright: Past President **SFMS** Barbi Beatty: Treasurer **SFMS** & Past Asst Treasurer & Insurance

Liaison

**SFMS** Buddy Shotts: Past Long-range Plan-

ning, Past President, Past State Director

Annual dues are: \$20 Individual \$30 (2) Members in same house hold \$6 Junior

## 2024Workshop/Meeting **Dates**

January 13 Mary C. 9:30-4:00

February 10 Mary C. 9:30-4:00

March 9 Mary C. 9:30-4:00

April 13 Mary C. 9:30-4:00

May 11 Mary C. 9:30-4:00

June 8 Mary C. 9:30-4:00

July 13 Mary C. 9:30-4:00

August 10 Mary C. 9:30-4:00

September 14 Mary C. 9:30-4:00

October 12 Mary C. 9:30-4:00

November 8 After Vendor Dinner 5ish

December 14 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

## January 2024

Sun	Mon	Tue	Wed	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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