



October 2024, Vol. 33 Issue 1

Next Monthly Meeting:

Our next meeting will be October 16th, 2024, at 7:30 PM

We will continue this month's presentation with Dr. Shawn Willsey, a YouTube Geology professor from Northern Utah University. In this video Dr. Willsey covers Quartz as the 2nd most abundant earth mineral and how it occurs in rocks. (24 minutes) In addition, Julio Lopez will present aspects of his master's thesis that should be of interest you. The Lake Juchipila Lake sediments present a wide variety of rock, with opaline silica and fish fossils (15 minutes)

Monthly Meeting Minutes:



Take I-95 to Pembroke Road, (Exit 19),

- Go West 1/2 blk.
- Turn Right just before the RR tracks.
- Turn Right after the
- 1st building,
- Then Left at the fence.
- Ye Olde Rock Shoppe will be on the left 50 feet up.

Visitors & Members are encouraged to attend

9/18/2024

Time Start: 7:40pm
Time Ended: 9:30pm

Minutes taken By: Susan Anderson

Previous Months Julio Lopez
Minutes Accepted by:

Attending Officers: Julio Lopez - President

Don Titman - VP

Susan Anderson -

Secretary

Beverly Norona -

Treasurer

Guest/New Members: Ido Kavavani

Treasurer's Report:

Eugene Cather

Minister of Mill Williams & County & Milliams Annual Demonstre Corporation, States, Section, Cold

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conversibles and crystalline structure

(MASSICA)

Rock naturally occurring represent of minerals

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Dr. Willsey Video - Mineral definition



Dr. Willsey Video -QuartzGeode – with well formed crytsals

INSIDE THIS ISSUE:

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Beverly indicated that the bank has 1469.73 and

there is \$440.00 in petty case

Other Notes/ Reports 20 members attended

Raffle - \$72.00, Coffee \$3.00





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Monthly Meeting Minutes: (continued)



Dr. Willsey Video - Galena - Lead Sulfide – 3 Cleavage planes

The shop is doing well; however we need members to take classes. Don Titman about the "Honey Hole rocks and that he had moved to his home about 1/3 of them to his house We need to move the rest. The plan is still to have a sale at his home and at the Miami Club's Rock sale. Some will be sold at the picnic also.

The shop purchased two new blades and Dick Haliburton repaired a non-working saw. Thank you, Dick.



New Website home page fgcgms.org

Nothing to report.

The club was presented with a mineral identification video by YouTuber Dr. Shawn Willsey. The video was short but covered several properties that geologists use to help identify minerals, such as the Moh Hardness scale and cleavage.

Julio Lopez presented the new website to the club. We found a couple of errors and typos, and these were corrected. We ask all members to visit the site fgcgms.org.

Members had a very positive reception to the new website.

On other Agenda topics:

From the last two meetings, we continued the conversation of finding Treasurer and Secretary nominees. Julio Lopez also sent an email blast to all members as why we need nominees before November. Mary Alice Manella has suggested that she can help alleviate the job by her undertaking the task of account balancing and budgeting aspects of the accounting. If Mary's helps on these items, we will then only need someone to collect dues, monies, run the bank accounts and bill payments and thus alleviating the task for the new treasurer. Please consider being a nominee.

Regarding our proposed bylaw changes. Our committee is comprised of Julio Lopez, Mary Alice Manella and Steve Ackerman and Ernest Ashurst. Their 1st meeting is planned right after the picnic.

Our tri-county picnic is fast approaching so get your displays ready. September 29th, 2024.





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Editorial:

Picnic

Our 2nd Tri-County County picnic was a total success. We had members from all three clubs join us. I counted at least 60 members and at least 8 tables were set up by members to display and sell their gems, rocks, minerals and jewelry. The club made enough money to pay for the pavilion and still make more than \$200 dollars for the kitty. Several passersby purchased items also. The food was great, the raffle and games were lots of fun with some great prizes. Photos can be viewed on Facebook and Instagram @floridagemmineral. I want to thank all members that showed up. Beverly Norona, Susan Anderson, Don Titman, and Lucas Bush each did their part to make it successful. **Teamwork, Thank you**. Great meeting new people from the other two clubs. Thank you also to the Palm Beach and Miami Club. I got a good vibe from those members that they also enjoyed the picnic.

Proposed Bylaws

Thank you to Mary Alice Manella Steve Ackerman and Ernest Ashurst for staying an additional two hours after the picnic to workshop the proposed changes to the bylaws. We discuss the changes but also other club items that will be address in future meetings.





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OCTOBER BIRTHSTONE

OPAL TOURMALINE

Those born in October enjoy two spectacular birthstones to commemorate their birthdays – opal and tourmaline. Both October birthstones have endless color combinations and beautiful coloring characteristics. Learn more about these two October birthstones and discover the perfect gift for those born in the tenth month.



OPAL BIRTHSTONE

OPAL BIRTHSTONE MEANING & HISTORY

The name of this, the traditional October birthstone, is believed to have originated in India (the source of the first opals brought to the Western world), where in Sanskrit it was called *upala*, a "precious stone". In ancient Rome, this became *opalus*. Most opals are valued for their shifting colors in rainbow hues – a phenomenon known as "play-of-color."

The October birthstone's dramatic play-of-color has inspired writers to compare it to fireworks, galaxies and volcanoes. Bedouins once believed opal held lightning and fell from the sky during thunderstorms. Ancient Greeks thought opals bestowed the gift of prophesy and protection from disease. Europeans long maintained opal to be a symbol of purity, hope and truth. Hundreds of years ago, opal was believed to embody the virtues and powers of all colored stones.

Opal is also the stone given to celebrate the 14th wedding anniversary.





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A breathtaking sunset seems to dance on the surface of this 1.72 carat (ct) opal. Photo: Dr. Edward J. Gübelin/GIA

WHERE IS OPAL FOUND?

The opal birthstone can be found in many places. The fields of Australia are the most productive in the world for the October birthstone. Ethiopia, Mexico and Brazil are also important sources. Additional deposits have been found in Central Europe, Honduras, Indonesia, Madagascar, Peru, Turkey and the United States.

Lightning Ridge, a small town in New South Wales, Australia, is famed for producing prized black opal. A dry and rocky region softened only by small trees and scrub brush, Lightning Ridge gets little rain and bakes in the scorching summer temperatures. The climate is so unforgiving that miners often live underground to find a respite from the punishing heat.



Black opal nodules are sometimes found in a line, as you can see in this photo from the Lightning Ridge mine.

Photo: Vincent Pardieu





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Australia is also a source of other types of the October birthstone. White opal is found in the White Cliffs area of New South Wales, as well as in Mintabie, Andamooka and Coober Pedy in South Australia. Boulder opal, which comes from only one location in the world, is mined in Queensland.



Two pieces of boulder opal that is found only in Queensland. Photo: Robert Weldon/GIA

In Ethiopia, the October birthstone is found near the village of Wegel Tena, in Wollo Province. Travel 340 miles (about 550 kilometers) north of the capital Addis Ababa and up 8,000 feet (2,400 meters), where miners pry opal from shafts dug into the side of a plateau. Gems unearthed here range in body color from white, yellow, orange and brownish red to "chocolate" brown. Some of the opals show play-of-color. Another mine, in Ethiopia's Shewa Province, yields the coveted black opal, as well as orange, white and crystal opal. Its treasures are buried in steep cliffs that tower over the landscape.

Querétero, a state in Mexico, is known for producing fire opal in yellow, orange and reddish orange to red, some with good play-of-color. The mines are a tourist destination, and getting to them requires taking a dirt road through dense forests of pine and oak, past scrubby plateaus of cacti and shrubs, and up winding mountain roads.

OPAL BIRTHSTONE CARE & CLEANING

Opal may be treated by impregnation with oil, wax or plastic. Opal doublets or triplets are fine slices of opal glued to a base material and covered with a thin dome of clear quartz. The safest way to clean this October birthstone is with warm, soapy water. Other cleaning methods might damage the opal or filler material. Note that prolonged exposure to water may weaken the adhesive in opal doublets and triplets. Even natural opal can fracture if exposed to high heat or sudden temperature changes.

This October birthstone ranges from 5 to 6.5 on the <u>Mohs scale of hardness</u>. To prevent jewelry set with harder gems from scratching opal, store it by itself. <u>Diamonds</u>, <u>rubies</u>, <u>sapphires</u>, and <u>emeralds</u> are just a few of the gems that can scratch the October birthstone.





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GIA.edu

Sapphires and diamonds encircle a 1.92 carat (ct) black opal in this stunning 18K yellow gold and black rhodium ring. Courtesy: Omi Privé

TOURMALINE BIRTHSTONE

TOURMALINE BIRTHSTONE MEANING & HISTORY

Tourmaline is the newer October birthstone. The name comes from the Sinhalese word toramalli, which means "stone with mixed colors," because it often has multiple colors in one crystal. Very few gems match tourmaline's dazzling array of colors. Perhaps this is why ancient mystics believed this October birthstone could inspire artistic expression – it has a color palette for every mood. Among the most popular are the pink and red rubellites, the emerald green "chrome" tourmalines, and the neon green and blue-to-violet "paraíba" tourmalines.

Because of its vast range of colors, <u>tourmaline</u> was often mistaken for other gemstones. One of the "rubies" in the Russian crown jewels, the "Caesar's Ruby" pendant, is actually red (rubellite) tourmaline. A Spanish conquistador found green tourmaline crystals in Brazil in the 1500s and confused the stones with emerald. These and other cases of mistaken identity continued for centuries until scientists recognized tourmaline as a distinct mineral species in the 1800s.





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Suite of multi-color tourmaline. Photo: Robert Weldon/GIA

Different colors of tourmaline are thought to have their own healing properties. Black tourmaline is believed to protect the wearer and give a sense of self-confidence. Pink tourmaline embodies love and is associated with compassion and gentleness. Green tourmaline promotes courage, strength and stamina. Tourmaline is given to celebrate the eighth wedding anniversary.

WHERE IS TOURMALINE FOUND?

This October birthstone is most commonly found in Brazil, but it is also mined in Afghanistan, Pakistan, Kenya, Madagascar and Mozambique (among other countries in Africa). California and Maine are historically important producers of fine tourmaline in the United States.



Examining purple and green tourmaline rough while visiting the tourmaline deposit near Mavuco village on a field expedition to Mozambique. Photo: Vincent Pardieu





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Most of the tourmaline mined in Brazil over the centuries comes from pegmatites in the state of Minas Gerais. These subterranean intrusions of magma are the source of a virtual kaleidoscope of gem minerals. In the late 1980s, however, electric green, blue and violet tourmalines entered the gem market from pegmatites in Brazil's Paraíba State. Scientists found that the intense colors were caused by trace amounts of copper, which had previously not been recorded as a coloring agent in any other tourmaline. In the early 2000s, Paraíba-type copper-bearing tourmalines were also discovered in Mozambique and Nigeria. Overall, prices for the best Paraíba and Paraíba-type tourmalines easily surpass other tourmalines due to their vivid hues, higher color saturation and greater rarity.



Old tunnel entrance at the Tourmaline King mine. Photo: Brendan Laurs

In the United States, both Southern California and Maine host several **pegmatite districts**. For more than a century, they have sporadically yielded large quantities of tourmaline.

Maine's first major tourmaline deposit was discovered in 1820 at Mount Mica in Paris, by two young boys exploring the local area. Even today, a quarry at Mount Mica intermittently produces various colors of gem tourmaline. The Dunton mine, near Plumbago Mountain, is the most prolific producer of tourmaline in Maine.

In 1898, California's first commercial tourmaline mine opened at the Himalaya pegmatite in the Mesa Grande district – famed for the production of fine rubellite. To feed Empress Dowager Cixi's obsession with the vibrant color, San Diego mines sent 120 tons of gem rubellite to Imperial China between 1902 and 1910. With the death of Cixi in 1908 and the subsequent overthrow of the Qing dynasty, the heyday of tourmaline mining in California ended. Today, only a few mines in San Diego County occasionally produce gem-quality tourmaline.

TOURMALINE BIRTHSTONE CARE & CLEANING

The tourmaline birthstone is rated 7 to 7.5 on the <u>Mohs</u> scale of hardness and is generally suitable for everyday wear. These colorful gems are usually stable enough to withstand light and most chemicals, but heat can be damaging. This October birthstone is best cleaned with warm, soapy water and a soft brush The use of ultrasonic and steam cleaners is not recommended.





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15.16 ct pink tourmaline and diamond ring set in platinum and white gold. Courtesy: Omi Privé

Now that you know a little bit more about the history of these two October birthstones and where they can be found, you just might be inspired to add them to your collection! But before you go shopping for an October birthstone, be sure to review our Opal Buying Guide and our Tourmaline Buying Guide for tips to help you pick a beautiful October birthstone. Both of these birthstones come in a spectacular array of colors sure to please you or your loved one born in October.





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OCTOBER BIRTHSTONE – continued Opal and Tourmaline Crystal Energy:

Opal Properties

<u>Opal</u> is an emotional stone and is believed to reflect the mood of the wearer. It intensifies emotions and enhances cosmic consciousness while stimulating intuition and insight. Opal can be a powerful addition to your spiritual practices.

Due to its changing colors, opal is also heavily linked to creativity and spontaneity. Wearing opal jewelry or meditating with this stone can inspire you to embark on new creative projects and ideas!

Tourmaline Properties

Tourmaline properties depend on the color. <u>Black Tourmaline</u>, for example, is famous for its protective abilities against negative energy. Meanwhile, green tourmaline is for self-growth and new beginnings.

Pink tourmaline is the most gentle one, bringing a touch of compassion and love to one's soul. And if you are looking for some more grounding in your life, purple tourmaline can help!

Don't hesitate to explore all the different colors and their meanings; you'll indeed find a tourmaline that speaks to your heart the most.



Balance All of Your Chakras with Opal or Tourmaline



Balancing chakras is one of the most important aspects of spirituality. All the different hues in opal and tourmaline will allow you to work with any chakra.





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Opal Stone & Chakras

Opal is incredibly fantastic for balancing chakras. The changing color spectrum and high vibrations can respond to any chakra in your body.

Wear an opal or hold it in your hands during meditation and visualize the preferred chakra area in the body or its color. You'll remove any blockages and keep that chakra balanced.

Tourmaline Stone & Chakras

With tourmaline stone, once again, it depends more on the specific stone and its color. Pink Tourmaline is linked to the heart and crown chakra because of its compassionate energy. Black or purple tourmaline stones can work mainly with the root chakra since they are protective and grounding gemstones.

If balanced chakras are something you seek, October birthstones can help!



Conclusion

From ancient mystics to a modern gem society in the United States, opal and tourmaline are still some of the most beloved gems out there! If you're in search of extra support or looking for a little more push in your spiritual development, opal and tourmaline can be wonderful. You don't have to be born in October, however, if you are, these two gemstones can truly become special and personal for you. These birthstones or their jewelry also make a perfect gift for someone born in October!









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What is it? (Section of Rock and Minerals Identification) Tip #4 – Comparing Rock Properties – Metamorphic Rocks (next month Sedimentary Rocks)

Compare the Rock's Properties to Known Rock Types

Now that you have analyzed your rock and made note of as many physical characteristics as possible, it's time to actually find out what it is! You may already have a very good idea of whether your rock is sedimentary, igneous, or metamorphic, so I have divided the tables below accordingly.

Use these tables to find the rock type that most closely aligns with the properties of your rock. If you find a rock that is very close but doesn't quite match, it may be worthwhile to go back and re-evaluate the physical properties that don't align. Also, keep in mind that this list is far from exhaustive.

These tables are pretty comprehensive, but there may be uncommon rock types not listed here. Follow the links for more complete information on each rock type.

1. Metamorphic

Metamorphic rocks are formed when existing rocks are subjected to **heat and pressure**, changing their shape, appearance, and composition. All three rocks type can undergo metamorphism. Metamorphic rocks themselves can undergo varying stages of metamorphism. They are often distinguishable from other rock types by their foliation and the presence of characteristic metamorphic minerals like garnet, kyanite, and staurolite.







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Rock Name	Composition	Grain Size	Foliation	Color	Other Characteristics
	Quartz, Feldspar, Mica,				Alternating bands of light and
Gneiss	Varied	Coarse	Yes	Light and dark	dark
					Platy, flaky texture. Defined by
	Mica, Chlorite, Quartz,	Medium to			texture, so composition is
<u>Schist</u>	Feldspar, Varied	Coarse	Yes	Light to dark	highly variable
				Usually white,	
				with swirls of	Soft, metamorphosed limestone
<u>Marble</u>	Calcite, Dolomite	Fine to coarse	No	other colors	or dolostone
				White, Gray,	
Quartzite	Quartz	Medium	No	Pink	Hard, metamorphose sandstone
	Clay or volcanic ash,				Sometimes confused for shale,
<u>Slate</u>	Quartz	Very Fine	Yes	Gray	breaks into sheets
<u>Phyllite</u>	Mica, Chlorite, Quartz	Fine	Yes	Gray, Green	Silky luster, breaks into sheets
	Serpentine, Brucite,			Light to dark	
<u>Serpentinite</u>	Magnetite	Fine	No	green	Greasy feeling
	Hornblende, Actinolite,	Medium to	Yes,		
<u>Amphibolite</u>	Plagioclase	coarse	weak	Dark	Dense, very little silica
		Medium to			Red or pink garnet crystals
<u>Granulite</u>	Feldspar, Quartz, etc.	coarse	No	Light	common
	Varied -Clays, Quartz,			Varied from	
	Feldspars, Hornblende,			light, dark,	
<u>Hornfels</u>	Calcite	Fine	No	green, etc.	Very hard, originally sandstone
					Very hard, can form from
	Calcite, Dolomite,			Light to	sedimentary or igneous
<u>Skarn</u>	Garnet, Pyroxene	Coarse	No	medium	protolith
	Talc, Chlorite,				Schistose or massive texture.
Soapstone	Amphibole	Fine	No	Light	Very soft, may feel like soap
	Varied – at least two	Fine to			Clearly visible layers that may
<u>Migmatite</u>	distinct rock types	medium	No	Light and dark	appear 'melted'





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On the Punny Side:

I'll keep digging up more rock and mineral puns. I just know you have an "apatite" for them

So here you go;

- What did Sherlock Holmes say when Watson asked what type of rock he was holding? "Sedimentary, my dear Watson."
- Why was the geologist confused at the new mineral he discovered? Because its whereabouts weren't crystal clear.

He was also too busy staring in ore

• Why was the gemstone scared for his exams? Because he thought he wasn't going topaz.





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Calendar of Events

July 17th 2024 FGCG&M Society's Monthly Meeting

August 21th 2024 FGCG&M Society's Monthly Meeting

September 18th 22024 FGCG&M Society's Monthly Meeting

September 29th 2024 Tri-county Picnic

October 16th, 2024 FGCG&M Society's Monthly Meeting

At this meeting, the club will open the officer and board of

director nominations to the club membership.

November 20th 2024 FGCG&M Society's Monthly Meeting

At this meeting the club will accept Officer and Board of

Directors nominations from the floor, close the

nomination process, create the slate of candidates and

start election procedure

December 18th 2028 FGCG&M Society's Monthly Meeting & Christmas Party

Seven (7) days prior to the December meeting ballots are

due.

The new Officers/Board of Directors, for the upcoming year, will be announced at the December meeting.





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2024 Snack Volunteers

June Ernie & Tove Ashurst
July Stephanie Struss
August Ariel Helman
September Julio Lopez
October Beverly Norona
November Marlene Flores

December Christmas Party – No Volunteer(s) needed

Please contact Ariel Helman @ 305-335-4405 for changes.

Club Info:

Club's Email: floridagemmineral@gmail.com
Club's Website: http://www.fgcgms.org

Club Facebook Page: <u>Florida Gem & Mineral Society</u> Federation Website: <u>http://www.amfed.org/sfms</u>

Instagram: floridagemmineral – follow us on Instagram

Mailing Address: 8783 NW 142 Lane, Miami Lakes, FL 33018

List of Officers:

Function	2 nd Function	Name	Phone Number	E-mail Address	2 nd E-mail Address
President	Database Manager	Julio Lopez	786-603-8081	floridagemmineral@gmail.com	juliolp2059@gmail.com
Vice President	Shop Foreman	Don Titman	305-502-4345	nolewake@yahoo.com	
Shop Foreman	Program Committee	Lucas Bush	954-588-6323	snugglefish22@gmail.com	
Secretary	Program Committee	Susan Anderson	954-559-9198	poochiepawlor@aol.com	pochiepawlor@aol.com
Treasurer		Beverly Norona	954-205-5815	bevn12345@aol.com	
Sunshine Chair		Mirtha Rimarachin	954-948-7657	mrimarac88@gmail.com	
Member Committee	e	Robert Allen	954-981-2307	rca39@yahoo.com	
Refreshment Committee		Ariel Helman	305-335-4405	arielh305@gmail.com	
Game Master / Quiz Committee		Dick Haliburton	954-249-0365	dickhaliburton@gmail.com	
Newsletter Committee		Vacant			
Newsletter Committee		Jeffrey Gross	954-987-0645	jgrossarchitect@gmail.com	





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Advertisers:

Ye Olde Rock Shoppe



Ye Ole Rock Shoppe 1425 S 30 Avenue, Suite C, Hollywood, FL 33020 954-295-0606, 954-610-8084 Yeolderockshoppe@comcast.net https://yeolderockshoppe.com





Crystal Cave Rock and Gem Shop 6835 Stirling Road, Fort Lauderdale Florida 33314, https://thecrystalcaverockandgemshop.com Phone: (954) 585-8988 Fax: (954) 585-8988

Email: jackiescrystalcave@att.net



Poochie Parlor – By Susan Anderson 1621 N. Hiatus Road, Pembroke Pines FL 33026





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IF YOU HAVE ARRANGED A SPEAKER FOR THE CLUB MEETING, PLEASE BE SURE ALL OF THE INFORMATION NOTED BELOW IS INCLUDED.

Email the form to the newsletter editor at juliolp2059@gmail.com Month the speaker will be speaking: First Name **Last Name** Title or Self Identifier: (for example rock hound, Geologist, whatever the person calls him/herself.) (no more than five words) Type self-description here: **Title of Program:** Short paragraph on content of presentation: **Biographical information on presenter:** Phone number of speaker in case further information is needed: Name of person submitting this form: