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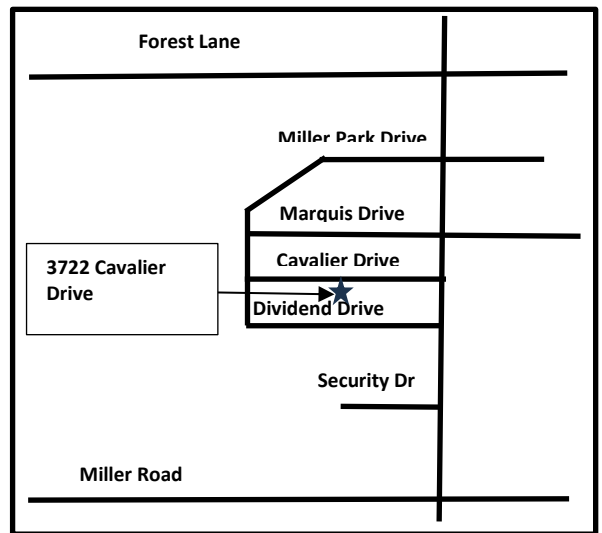


February 2024
 Vol. 58, Issue 2

1st Place, 2022 SCFMS Mini-Bulletin
 1st Place, 2022 AFMS Mini-Bulletin

POGMC Meeting, February 5, 2024 Starting at 7:00
Knights of Columbus Council 6402 Hall
3722 Cavalier Drive, Garland, TX 75042

This will be our first meeting at the Knights of Columbus (KofC) Council 6402 Hall on Cavalier Drive. Cavalier Drive is a road going west from Jupiter between Miller Road and Forest Lane. Cavalier Drive does not have a stoplight at Jupiter Road. Coming from the north, you will pass stoplights at Forrest Lane, Miller Park, and Marquis Drive. Cavalier will be the next right turn (there is a Ryder Truck Rental and Parking lot on the northwest corner of Cavalier and Jupiter). Coming from the south, you will pass stoplights at Miller Road and Security Street. Cavalier will be the second left turn. Look to your left for Rick’s Smokehouse Barbecue – Cavalier will be the next left turn



Once you are on Cavalier going west, look for the KofC building about ¼ mile down the road on your left. If it is nighttime, look for the large REF EXPERTS bright neon sign across the street for the KofC building.

Here are a few pictures that may help:



Knights of Columbus Building And KofC sign



Neon Sign across the Street from the KofC Building



Mineral Families

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas

At our January meeting, questions concerning minerals coming in different colors, specifically why is it that Amethyst is considered to be Quartz? If you have been around Rockhounding for some time, you have probably found information about Mineral Families, but it may not be obvious to those new to Rockhounding.

There are Mineral Families, but not all Mineral Families are the same. Some Mineral Families have the same chemical composition, crystal structure, and physical properties but members of the family may have different colors. Other Mineral Families have similar chemical composition, very similar crystal structure, and similar physical properties, yet members of the Mineral Family have differing colors.

Let's look at two examples. First, let's look at the Quartz Family. Some of the members of the Quartz Family are Quartz, Amethyst, Citrine, Rose Quartz, and others. They all have the same chemical composition, SiO₂ (Silicon Dioxide) arranged as tetrahedra. All members have the same Mohs hardness (7), streak (white), fracture (conchoidal), specific gravity (2.64), etc. The crystal structure, however, may have differing trace elements caught up in the crystalline matrix which causes a color difference that leads to differing names. In Amethyst, the purple color is caused by a few of the Silicon atoms being replaced by Iron atoms with a plus three valance that have been irradiated. Yellow Quartz is called Citrine. It is not yet fully understood what causes the yellow color. The predominant theory is that the yellow color is caused by irradiated aluminum atoms substituting for silicon atoms. Yellow Quartz can also be created by heat-treating Amethyst which causes the plus three valance state Iron to be changed to plus 2 valance state Iron creating sub-microscopic inclusions of hematite in the quartz. The hematite crystals are responsible for the yellow color. Rose Quartz is the pink to red variety of Quartz. Rose Quartz is always found in a massive form, never as crystals. Like Citrine, the color source is still being debated. One theory is that the color is caused by atoms of Silicon being replaced by Titanium, Iron, and Manganese. However recent studies have found microscopic fibers of Aluminum Phosphate in the crystal, and there is growing evidence that these may be the source of the coloration.

The second example is the Garnet Family. An idealized chemical formula of the Garnet Family is A₃B₂(SiO₄)₃. From this, we can gather that Garnets are Silicates (SiO₄). From there, it gets a bit difficult. One group of the Family includes the varieties Pyrope, Almandine, Spessartine, and Grossular, which have the chemical formula of [Mg,Fe,Mn]₃Al₂(SiO₄)₃. The brackets indicate the garnet may include Magnesium (Mg), Iron (Fe), or Manganese (Mn). Varieties in this group will always have Aluminum (Al) and silicate radicals (SiO₄). The second group of the Family includes Uvarovite, Grossular, and Andradite and has the chemical formula Ca₃[Cr,Al,Fe]₂(SiO₄)₃. Again, the brackets indicate the garnet may have Chromium (Cr), Aluminum (Al), or Iron (Fe). Varieties in this group will always have Calcium (Ca) and silicate radicals (SiO₄). To add more confusion, those listed so far are the more common varieties.

Now let's examine the members and the colors for a few of the major Mineral Families:

Quartz Family	
Quartz	Clear
Amethyst	Purple
Citrine	Yellow
Ametrine	Purple and yellow
Smoky Quartz	Grey, brownish hue
Blue Quartz	Blue
Milky Quartz	White
Rose Quartz	Light red to pink
Prasiolite	Green



Topaz	
Topaz	Colorless
Blue Topaz	Blue
Imperial Topaz	Golden
Yellow Topaz	Yellow
Red Topaz	Red



Beryl Family	
Goshenite	Clear
Emerald	Green
Aquamarine	Blue
Heliodor	Yellow
Morganite	Pink or rose
Red Beryl	Red



Garnet Family	
Almandine	Dark red to black
Pyrope	Red
Spessartine	Orange
Andradite	see below
Var. Melanite	Black
Var. Demantoid	Green
Topazolite	Yellow
Grossular	see below
Var Hessonite	light orange - redish orange
Var. Hydrogrossular	yellow to orange
Var, Tavorite	Green
Uvarovite	Green



Tourmaline	
Schorl	Black
Dravite	Dark Yellow to Brownish-Black
Elbaite	see below
Var. Achroite	Colorless
Var. Rubellite	Red to Pinkish Red
Var. Indicolite	Light blue to bluish-green
Var Verdelite	Green



Corundum	
Corundum	Colorless
Ruby	Red
Emery	Black
Sapphire	All but black and red
Padparadscha (a var. of Sapphire)	pink-ornage



Chrysoberyl	
Chrysoberyl	Yellowish-Green
Cymophane (aka Cat's Eye)	Yellow with Ligh-yellow to White Cat's Eye
Alexandrite	Greenish in daylight, reddish in incandescent light



This list could go on (and on, and on), but this covers many of the main minerals used by facetors. Just trying to describe the micro-crystalline varieties of Quartz (Agates, Jaspers, etc.) would take up a whole book.

Reference: Wikipedia, <https://en.wikipedia.org/wiki/> and Mindat.org, <https://www.mindat.org/>

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From the Desk of the President

Roger Burford, AFMS President 2023-2024

From the February 2024 AFMS Newsletter



Welcome to a new year!!!! I have decided that this will be a great year -- the power of positive thinking at work.

By the time you read this Liz and I will be on our way to Quartzsite. This will be the first Quartzsite trip in three years for us, but we are not going to be vendors this year. We are just going to visit with friends we have made over the years and welcome anyone to come along. If you have never been, it can be overwhelming to see so many vendors from all over the world selling their wares in the desert. We like going to Quartzsite because of the prices there (compared to Tucson) and of course, we have to eat at Silly Al's Pizza. We are planning a week in Quartzsite and another in Tucson -- just to look more than anything -- since we have never been and will probably be low on funds by that time.



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Interstate 10, Quartzsite, AZ by Ken Lund (28288359835_91867aa768_w.jpg) CC BY-SA 2.0 Deed

Quartzsite has multiple shows going on from the end of December to February 14th. There may be a few shops staying open, but by the end, most of the vendors have left for Tucson. Since Louisiana doesn't have any rocks to speak of this is the time of year we stock up with good rock and try to do some rockhounding. Now that we have a 4-wheel drive truck we may be able to get to some good locations.

Shows and Activities – Upcoming Show and Activity Dates

Check with the show contact to verify the show status

February 2024

- Feb 18-19, Williamson County G&MS, Community Center at San Gabriel Park, Georgetown, TX, www.Facebook.com/WilliamsonCountyGemSociety
- February 24-25, Clear Lake G&MS, Pasadena Convention Center, 7902 Fairmont Pkwy, Pasadena, TX, www.clgms.org
- February 24-25, Hi-Plains G&MS, Ollie Liner Center, Plainview, TX, www.facebook.com/groups/HiPlainsGMS

March 2024

- March 4-5, Gulf Coast G&MS, RMB Regional Fairgrounds, Robstown, TX, www.gcgms.org
- March 4-5, Big Spring Prospectors Club, Howard County Fair Barn, Big Spring, TX, www.facebook.com/bigspringprospectorsclub
- March 16-17, Central Texas G&MS, Taylor County Expo Center, Display Bldg, Abilene, TX, www.facebook.com/p/Central-Texas-Gem-and-Mineral-Society-100082479451581/

VISIT AN AREA CLUB

[Arlington Gem & Mineral Club](#): 1st Tuesday of each month at 7:30 pm, 1408 Gibbins, Arlington, TX
[Cowtown Gem, Mineral, & Glass Club](#): 2nd Tuesday at 7:00 pm, CERA 3300 Bryant Irvin Rd. Fort Worth
[Dallas Bead Society](#): 1st Saturday of each month at 10:00 am at The Point at CC Young, 4847 W. Lawther Dr., Dallas, TX
[Dallas Gem & Mineral Society](#): 3rd Tuesday of each month at 7 pm, American Legion, 10205 Plano Rd, Dallas (next to their shop)
[Dallas Paleontological Society](#): 2nd Wed. of each month at 7:00 pm, Brookhaven College, Building H, 3939 Valley View Lane,
[Fort Worth Gem & Mineral Club](#): 4th Tuesday of each month at 7:30 pm, 3545 Bryan Avenue, Ft. Worth
[Oak Cliff Gem & Min Society](#): 4th Tuesday of each month at 7:30 pm, Unitarian Universalist Church, 3839 W. Keist Blvd, Dallas,
[Pleasant Oaks Gem & Mineral Club](#): 1st Monday of each month at 7:00 PM, KofC Council 7402 Hall, 3722 Cavalier Dr., Garland,
[Wild West Bead Society](#): 3rd Tuesday of each month at 6:30 pm, Wild Beads, 1124 S. Bowen Road, Arlington, TX

OFFICERS FOR 2023 - 2024

President: Joe Vulk
1st VP, Programs: Carolyn Grady
2nd VP, Field Trips: Julie Wilson
Secretary: Amy Vulk
Treasurer: Ling Shurtz
Editor: Don Shurtz
Contact us by e-mail: don.shurtz@gmail.com or
L.SHURTZ@gmail.com

Minutes

There were no minutes from the December 2023 or January 2024 meetings. The December meeting was our Christmas Party and the January meeting was an informal Dinner meeting at the Golden Corral in Garland.

We have yet to approve the November meeting Minutes that were published in the December Chips and Chatter.

President's Message

I hope everyone had a good holiday season. The December meeting was very enjoyable - the pot-luck nibbles and "thieves" gift exchange. Here's wishing you a happy and prosperous New Year.

For lack of a meeting place for our January meeting, Golden Corral Buffet restaurant proved to be an enjoyable venue. It was good to see nearly all of our members present. There was no business conducted

other than an informal discussion on where to meet. We did check out the Golden Corral's meeting room but they wanted \$200 per meeting.

In searching for a permanent home for our meetings, Don coordinated with the American Legion Hall and I worked with my Knights of Columbus Council. As a longtime member of the Council, I was able to negotiate the same cost that the American Legion offered. So on January 10th, several of our club members checked out both locations. Then all our club members that we could reach were polled. Despite the KofC's only available night being the first Monday, the majority of the vote preferred KofC. Therefore, for the remainder of this year, at least, we will meet at the KofC facility on the first Monday of every month except July. In my discussion with the KofC, I allowed that we could probably pay for a year in advance which would be for eleven meetings.

That would cover through and including the month of January 2025. To make it legitimate, I will be asking for a vote for the year in advance payment at our February meeting.

I'm looking forward to seeing everyone at our February 5th meeting at the new location.

Joe Vulk

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VISITORS ARE ALWAYS WELCOME

Next Meeting

Our next meeting will be Monday, February 5 starting at 7:00 PM. As previously discussed, we will meet at the Knights of Columbus Hall at 3722 Cavalier Drive, Garland. For our Hands-On project, we will be attempting to create crystalline structures from MARSHMALLOWS and TOOTHPICKS. I hope this turns out to be as fun as our attempts to create crystalline structures from paper templates. The structures can be either the Crystal System structures which are one of the defining characteristics of Minerals (Cubic, Tetragonal, Orthorhombic, Monoclinic, Triclinic, Hexagonal, or Trigonal pyramids), or the structures can be like Mineral Crystals such as Snow Flakes (crystalline water), a Beryl Crystal, (six-sided crystal with a pyramidal top, or, for the adventurous, a Pyritohedron, a dodecahedron (12-face solid) with unequal size faces (think of a distorted soccer ball. We will have some drawings to help visualize the structures.

PLEASANT OAKS GEM and MINERAL CLUB of DALLAS



Meetings

First Thursday of each month. Please check website, www.pogmc.org, for updates.

Membership

Single Adult: \$16.50,
Junior: \$5.00, Family: \$27.50
(Plus badge fee for new members)

PURPOSE

The Pleasant Oaks Gem and Mineral Club of Dallas is organized for charitable and educational purposes to promote interest in the various earth sciences, particularly those hobbies dealing with the art of cutting and polishing gemstones, the science of gems, minerals, and metal crafts, as well as their related fields. Pleasant Oaks Gem and Mineral Club of Dallas is a not-for-profit organization

CHIPS AND CHATTER

Pleasant Oaks Gem & Mineral Club
c/o 4004 Dublin Rd.
Allen, TX 75002-6526

To

VISITORS ARE ALWAYS WELCOME

Our next meeting: Monday, February 5th, 2024 at 7:00 PM

We will meet at the Knights of Columbus Hall, 3722 Cavalier Drive, Garland, 75042.

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Chips and Chatter

See the Chips and Chatter online for color!

February 2024

Pleasant Oaks Gem and Mineral Club of Dallas, TX

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