



Member: South Central Federation of Mineral Societies

Affiliated: American Federation of Mineralogical Societies



September 2022  
Vol. 56, Issue 9

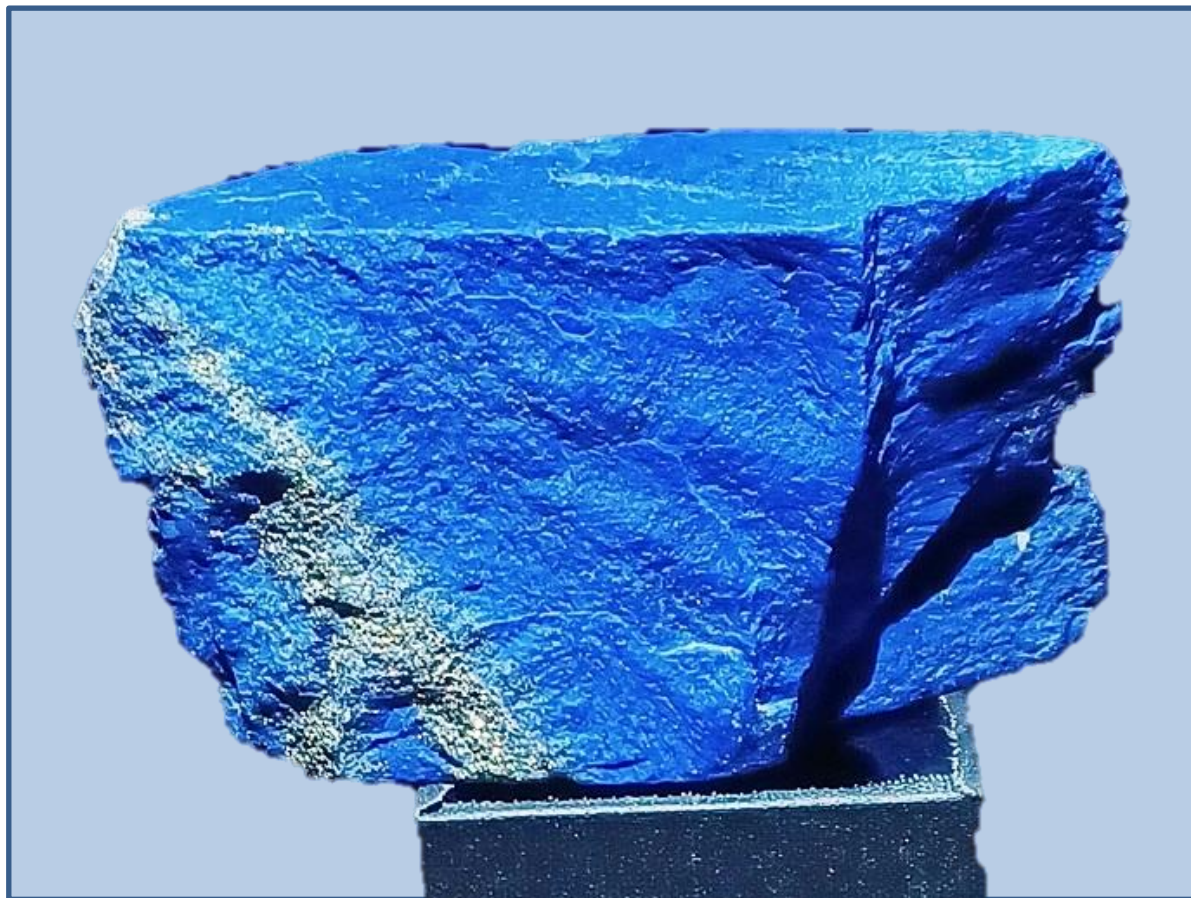
1st Place, 2019 SCFMS Mini-Bulletin  
1st Place, 2017 AFMS Mini-Bulletin

## Precious Stones – Minerals Only?

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas

What is a precious stone? A precious stone is likely an expensive, cut stone. In recent times, there are only four precious stones – diamond, emerald, ruby, and sapphire. According to various sources, precious stones are characterized by their quality, rarity, and beauty. They are all minerals. In fact, two of the stones are the same mineral, corundum variety ruby and corundum variety sapphire. In truth, they are called precious stones because of marketing. There is nothing else that makes these stones unique from other cut stones. They are not

even the rarest or most costly (dollar per carat).



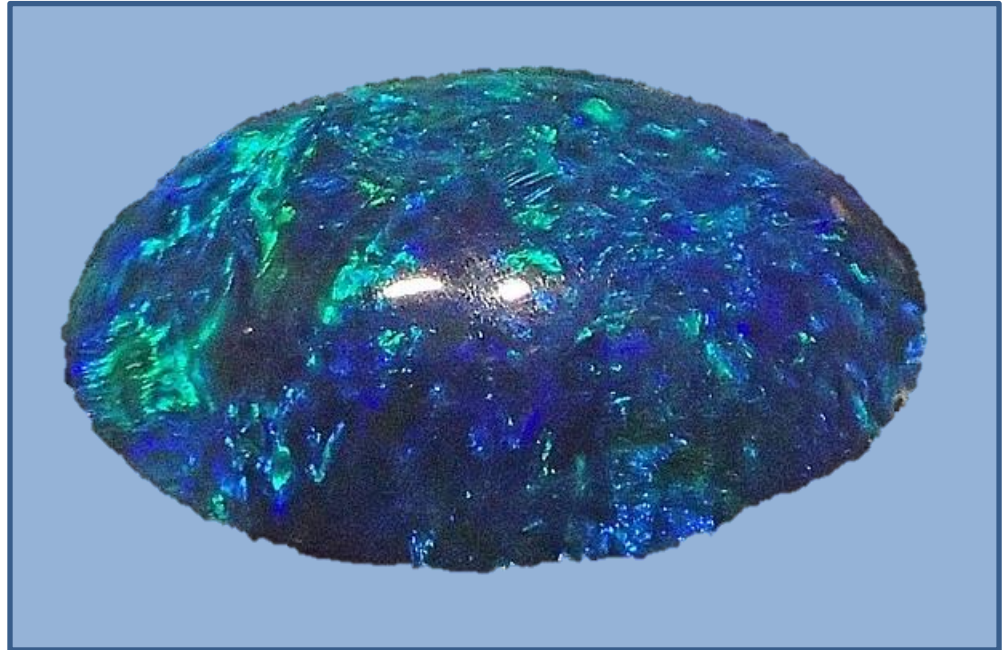
Lapis Lazuli, often shortened to just Lapis, has been considered a precious stone in the Indus Valley Civilizations that covered most of India, Pakistan, and Afghanistan. The funeral mask of Tutankhamun was made of Lapis Lazuli, and you can rest assured

that they only used the finest materials for his burial. A few hundred years later, Lapis Lazuli was used to make Ultramarine pigment which was used as a blue pigment by some of the great artists of the Renaissance era. So is Lapis Lazuli a precious stone? It is not a mineral, but rather a metamorphic rock. Lapis Lazuli is composed of four minerals, Lazurite, Pyrite, Calcite, and Sodalite. The major mineral in Lapis is Lazurite, the blue mineral that gives Lapis its predominant color. It is softer than Quartz coming in on the Mohs Scale at 5 to 5.5. It is rather soft for everyday jewelry, but you will often see large cabochons fashioned as pendants. The stone is well protected by its mounting and is likely to be worn only on special occasions. Lapis Lazuli is soft

enough that it can be carved. Many relics of carved Lapis have been found, the oldest dating back to 7570 BC. As mentioned, Tutankhamun's funeral mask was made from gold and Lapis Lazuli. It dates back to around 1330 BC. Today Lapis Lazuli is mined primarily in Afghanistan. Mines in Russia and in Peru also produce Lapis Lazuli. It can also be found in other locations, including the United States (Colorado and California). Lapis Lazuli does not make the top 10 list for the most valuable gemstones (per carat). At the bottom line, is Lapis Lazuli a Precious Stone. Considering the beauty of a cut Lapis Lazuli, I would agree with the people of the Indus Valley Civilization.

As another example of a non-mineral that could be considered a precious stone, I would offer Opal as a great choice. Common opal probably would not be in that classification, but precious opal, including black opal, should be considered. Opal is

not a mineral, but rather a mineraloid. It is not classified as a mineral as the atoms are not arranged in a definite, repeatable crystalline structure. Very small spheres (nano-sized) of Silicon Dioxide form in multiple, close-spaced layers that form a diffracting grating. This diffracting grating causes the flash of colors in the opal. The spacing of the layers and the incident angle of the light determine where the color will be found in precious



opal. Like Lapis Lazuli, it is softer than Quartz coming in at a Mohs hardness of 5.5 to 6. It is too soft to be fashioned into everyday jewelry, but if it is protected by its mounting, it is fine as jewelry for special occasions. It would be best as a pendant or in earrings. Black Opals are on many of the lists of the 10 most expensive gemstones. So precious opals meet many of the criteria for precious stones and are occasionally found on more modern lists that go beyond the original four precious stones. Precious Opal's name says it is precious, and it certainly gets my vote as a precious stone.

#### References:

- International Gem Society, The Mohs Hardness for Select Gems, <https://www.gemsociety.org/article/select-gems-ordered-mohs-hardness>
- Lapis Lazuli, [https://en.wikipedia.org/wiki/Lapis\\_lazuli](https://en.wikipedia.org/wiki/Lapis_lazuli)
- Leysen Jewelers, Precious and semi-precious stones, <https://www.leysen.eu/en/news/what-are-the-differences-between-precious-and-semi-precious-stones>
- The 10 most valuable gemstones, The Pearl Source Blog, <https://www.thepearlsource.com/blog/most-valuable-gemstones/>
- Most Valuable Gemstones in the World, The Spruce Crafts, <https://www.thesprucecrafts.com/most-valuable-gemstones-in-the-world-4105417>

#### Pictures

- Lapis Lazuli rough, picture by Don Shurtz of a specimen on display at the Perot Museum of Nature and Science
- Precious Opal cabochon, [https://commons.wikimedia.org/wiki/File:Precious\\_opal](https://commons.wikimedia.org/wiki/File:Precious_opal), licensed under the terms of [Creative Commons Attribution 2.0 Generic](https://creativecommons.org/licenses/by/2.0/)



# Shows and Activities – Upcoming Show and Activity Dates

Check with the show contact to verify the show status

## October

- 1-2 October, Cabot, AR, Central Arkansas GM&GS, Cabot Event Center, [centralarrockhound.org](http://centralarrockhound.org)
- 8-9 October, Fort Worth, TX, Cowtown GM&G, 3300 Bryant Irvin Rd, [steve.l.shearing@lmco.com](mailto:steve.l.shearing@lmco.com)
- 8-9 October, Temple, TX, Tri-City G&MS, Mayborn Civic and Convention Center, email: [selovelace@showdirection.com](mailto:selovelace@showdirection.com)
- 8-9 October, Murphy, TX, David's October Gem Amethyst Rock Fossil sale, 1409 Oak Hill Lane, email: [rock@rocktrading.org](mailto:rock@rocktrading.org)
- 14-16 October, Westwego, LA, G&MS of Louisiana, The John A Alario Event Center. SCFMS & AFMS Show and Convention, Contact J. David Cope, (504) 214-6754.
- October 14 – 16, Dallas, TX, International Gem and Jewelry Show, Market Hall event center, website: <https://www.intergem.com>
- 21-23 October, Austin, TX, Austin G&MS, Palmer Events Center, [www.agms-tx.org](http://www.agms-tx.org)
- 29-30 October, Oklahoma City, Oklahoma G&MS, State Fair Park- Modern Living Bldg., [omgs-minerals.org](http://omgs-minerals.org)
- 5-6 November, Amarillo, TX, Golden Spread GM&TS, Amarillo Civic Center Complex, website: [www.amarillotreasure.com](http://www.amarillotreasure.com)

## November

- 11-13 November, Humble, TX, Houston G&MS, Humble Civic Center, website: [hgms.org](http://hgms.org)
- 19–20 November, Mesquite, TX, Dallas G&MS, Mesquite Convention Center, website: [dallasgemandmineral.org](http://dallasgemandmineral.org)

## December

- 2-4 December, El Paso, TX, El Paso M&GS, El Maida Temple, email [ekosturakiis@gmail.com](mailto:ekosturakiis@gmail.com), website: [epmgs.com](http://epmgs.com)
- Mountain Home, AR, Ozark Earth Science Club, Baxter County Fairgrounds Educational Building, contact Allison (417) 679-046

Ref: Rock & Gem Show Dates, <https://www.rockngem.com/ShowDatesFiles/ShowDatesDisplayAll.php?ShowState=ALL>

Ref: January – February 2022 SCFMS Newsletter

## Federation News

### President's Message [AFMS]

Margaret Kolaczyk, AFMS 2022 President  
From the October 2022 AFMS Newsletter



Hi Everyone. This is my last article as the AFMS President. I wish to say a great big THANK YOU to all the AFMS Committee Chairs, AFMS Executive Committee, and Regional Directors Donna Moore and Pat LaRue. It is their support that made my job so much easier to handle. One could not

ask for a better team to have your back.

I have been able to attend a few of the rock and gem shows. It is great to be able to see friends and get a chance to catch up on how they are doing. Since I have moved and started a new job, it has not been easy to get to all the regional shows.

Starting November 1, 2022, there will be a new AFMS Executive Committee. Please take time to say thank you for stepping up. All officers, committee chairs, committee members, and directors starting at the society/club level, to the regional level and then the national level are volunteers. These individuals are going the extra mile for the societies/ clubs. My time as president of AFMS is coming to an end but the memories will stay with me forever. Thank you for letting me be your president.

Respectfully submitted

### President's Message [AFMS]

Roger Burford, SCFMS President  
From the September-October 2022 SCFMS Newsletter

We are finally getting our newsletter back up and running, thank you Susan, and with that, please, everyone please send in interesting articles to be added to upcoming editions.

This year we are holding the SCFMS convention in my home state of Louisiana in the New Orleans area. The show and convention will be held in Westwego, LA which is across the river from New Orleans. The venue is the Alario Center which is very nice; there will be around 30 vendors. This will be the first show that the New Orleans club has been able to hold in the last 3 years due to COVID and Hurricane response and it will be their 50<sup>th</sup> show so they are really excited and going all out.

On top of this being their 50<sup>th</sup> show and the SCFMS convention, they are also hosting the AFMS convention which will bring in guests from all over the country. Of those I have spoken to, they are very excited to come and take in our great hospitality

The Gem and Mineral Society of Louisiana belonged to the South Eastern Federation until just a couple of years ago when I was able to talk them into moving over to the SCFMS and joining with other societies from Louisiana. They are very excited to put on this show and the events holding two federation shows entails. If at all possible, please come and join us for a great time. We hope to see you there.

## Bench Tip from Brad Smith

By permission of the author, Brad Smith. Received as an email from Brad Smith. Not for commercial use

### WINDING JUMP RINGS

If you need a few jump rings the same size, it's easy to grab a round rod and wind as many as you need. But when you need a lot of them, some form of winder saves a lot of time. A variable speed screw gun makes quick work of winding the coils. Screw guns are quite inexpensive at discount stores and are remarkably handy for odd jobs in the shop and around the house.

To wind a coil, just bend a right angle on the end of the wire about a half inch long and insert this into the screw gun chuck. Then wind slowly, keeping a tight coil. I like to rest the end of the mandrel on the edge of the table or bench pin. Finally, one note of caution. If you are winding an entire length of wire, be careful as you get near the end of the wire. If the end passes under your thumb, it can cause a nasty scratch or cut.



### TOUCHING UP A BEZEL

Pumice wheels are good for touching up a bezel after you've set the stone. The hardness is about 6 on the Mohs scale, less hard than quartz, so it shouldn't scratch any of your agates or Jaspers. However, I'd avoid or be really careful of using pumice near the softer stones like Turquoise, Amber, Howelite, etc.

If you're unsure about the hardness of your wheels, test them on a piece of glass. Glass is about 5 ½ on the Mohs scale, softer than quartz. So, if the wheel doesn't harm glass, it's safe for use on the Quartz and harder stones.

My preference is the one-inch diameter ones such as those shown at [riogrande.com/Product/AdvantEdge-Pumice-Wheels-Medium/332722?pos=2](http://riogrande.com/Product/AdvantEdge-Pumice-Wheels-Medium/332722?pos=2)

If you enjoy these tips on jewelry making, see many more in the sample chapters from these two books:

- Bench Tips 1 - <http://amzn.to/1Z6hQ06>
- Bench Tips 2 - <http://amzn.to/2KCygh4>

### Work Smarter & Be More Productive With Brad's "How-To Books"



### VISIT AN AREA CLUB

[Arlington Gem & Mineral Club](#), meets the 1st Tuesday of each month at 7:30 pm, 1408 Gibbins, Arlington, TX  
[Cowtown Gem, Mineral, & Glass Club](#), meets the 2nd Tuesday at 7:00 pm, CERA 3300 Bryant Irvin Rd. Fort Worth  
[Dallas Bead Society](#), meets 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](#) meets the 3rd Tuesday of each month at 7 pm, American Legion, 10205 Plano Rd, Dallas (next to their shop)  
[Dallas Paleontological Society](#), meets 2nd Wed. of each month at 7:00 pm, Brookhaven College, Building H, 3939 Valley View Lane, 75244  
[Fort Worth Gem & Mineral Club](#), meets 4th Tuesday of each month at 7:30 pm, 3545 Bryan Avenue, Ft. Worth  
[Oak Cliff Gem & Min Soc.](#), meets the 4th Tuesday of each month at 7:30 pm, Unitarian Universalist Church, 3839 W. Keist Blvd, Dallas,  
[Pleasant Oaks Gem & Mineral Club](#), meets the 1st Thur. of each month at 7:15 PM Bradfield Recreation Center, 1146 Castle Drive, Garland,  
[Wild West Bead Society](#), meets 3rd Tuesday of each month at 6:30 pm, Wild Beads, 1124 S. Bowen Road, Arlington, TX

## CLUB OFFICERS FOR 2022

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

### Minutes of the September 1, 2022 Meeting

POGMC President Don Shurtz called the September 2022 club meeting to order at 7:25pm.

Quorum: We have a quorum. (The Club's Constitution and By-Laws define a quorum at a regularly scheduled meeting to be those in attendance at the meeting).

Visitors: There was one visitor – kind of. Amy and Eden's pet dog Scooby attended the meeting. He was quiet, but did not seem to be very interested in rocks.

Minutes: We reviewed the August 2022 Minutes as published in the September 2022 Chips and Chatter. Carolyn made a motion to accept the minutes as published. Brenda seconded the motion. The motion passed.

Treasurer's Report: The report was deferred to the October meeting.

#### Old Business:

- IGEM is October 14-16. We will not be participating.
- AFMS/SCFMS Convention 14 – 16 in Westwego, LA. Don will be attending as an AFMS Officer. Do we have a volunteer to be a delegate? The POGMC will offer \$150.00 to help defer expenses (travel and lodging).

#### New Business:

- We need to form a Nominating Committee. We will be electing a President, 1st and 2nd Vice Presidents, Secretary, Treasurer, and Editor. Julie, Carolyn, and Don volunteered to be on the committee.
- Elections will be at the October Meeting. New Officers will be installed at the November meeting.
- There was no new business from the floor:
- 

Break

Presentation: We watched the video "Planetary Wonders – Out of This World" lecture from the Great Courses Series.

Raffle

Don adjourned the meeting at 8:30 PM with a request for all to help clean up and straighten up the meeting room.

### OCTOBER MEETING

**Our October 6<sup>th</sup> meeting will start at 7:15 at the Bradfield Recreation Center. The meeting will feature PIZZA and TALK**

### VISITORS ARE ALWAYS WELCOME

#### Program Review: Planetary Wonders

Don Shurtz, Pleasant Oaks Gem and Mineral Club of Dallas

The sub-title to this presentation was "Out of This World, and the program really was! It was one of the best Lectures in "The World's Greatest Geological Wonders". Who would have thought that the tallest Mountain and Volcano in the Solar System would be on Mars, Olympus Mons? It is three times the height of Mt. Everest. Mars also hosts the largest canyon in the solar system, Valles Marineris. It is up to 200 km wide, 7 km deep, and 4,000 km long. Compare this to some of the deep canyons on Earth in the Himalayas which are up to 5 km deep and a puny 250 km long. Wow!

The presentation covered the major geological features of the Moon, Venus, Mars, the asteroids, the Gas Giants (Jupiter and Saturn), Uranus, and Neptune. It also touched on some of the Gas Giant moons including Europa, Ganymede, Enceladus, and Titan. It is amazing the similarities of the geologic features, yet how different they can also be.

As if that was not enough, Professor Michael Wyession's lecture also went on to speculate on the probability of life elsewhere in the Solar System besides Earth. One example was methane gas that comes from several regions on Mars. Also included in the speculation about life was that the saltwater oceans of Enceladus, Ganymede, and Europa could support simple life forms

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# PLEASANT OAKS GEM and MINERAL CLUB of DALLAS



<p>Meetings First Thursday of each month. The next meeting will be at the Bradfield Recreation Center, 1146 Castle Drive, Garland, TX</p>	<p>Membership Single Adult: \$16.50, Junior: \$5.00, Family: \$27.50 (Plus badge fee for new members)</p>
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## 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 Section 501(c)(3) 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 will be Thursday, October 6, 2022, starting at 7:15

Be prepared for **PIZZA** and **TALK**

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