



A monthly publication of the Clear Lake Gem & Mineral Society

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NUMBER 2



NEXT MEETING: Tuesday, February 21, 2023

TIME: 7:00 p.m.
LOCATION: Helen Hall Library
100 W Walker St.
League City, Tx 77573

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February meeting. Meeting	1	<u>February MONTHLY MEETING</u> We will be discussing our plan for our annual show.
Board/General Meeting Minutes Upcoming events	2	Please come and join us. We always need new ideas and suggestions so our show can run better. Please also fill out the volunteer schedule sheet – We really need more volunteers to load, unload and helping on the floor during the show.
Minerals and Gemstones found in Texas	3-5	2023 Membership dues.
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MINUTES OF THE January CLGMS GENERAL MEETING

For the Annual show:

We will have The Dinosaur presentations again this year.

Gem Mine: Allan T. will organize it this year.

Geology 101 will be organized by George again and she also will ask for volunteers.

Hands-on will be organized by Theresa and she will have a few volunteers but a few more are needed.

We still need more volunteers to load/unload the supplies at the storage locker (Thursday/Sunday evenings) and setting up at the PCC (Friday morning). Dinners will be provided by the club on Thursday and Sunday.

Religious Retreat will also be held at the Pasadena Fairground on the same weekend, so there will be quite a crowd comingled, we might need to have a traffic controller personnel so people will not be confused.

MINUTES OF THE February CLGMS BOARD MEETING.

Sandy is waiting to see if any new vendors sign up for the show besides the three that she knows of.

We have 33 vendors and 180 tables so far. A few more vendors are still to confirm.

We need the new vendor's names, so that we can make the signs.

Christina will email her application to Sandy and David will deposit the money.

CLGMS.org domain name and service had been renewed.

Two new squares will be purchased and the bank will set them up for us. Mike and David will oversee them at the cost of \$50 per square.

David will get the U-Haul for the club, send out the post cards, and get the tickets ready.

We will see if we can get two police officers or volunteers to help with traffic, since there will be a religious retreat at the fairground.

Cindy will start to promote the Show online.

Georgina will see if she can help with getting her students to volunteer with us.

Call Out for volunteers to help set up, work the show, and tear down. We will speak about this during the meeting.

Sara from Rock Décor will be our speaker in April.

Our next show will be March 18 – 19, 2023.

Upcoming events - We are looking forward to the following programs.

Final discussion on the 2023 Annual Show.

Field Trips Announcement

Currently – no field trips are scheduled. If you have a good location for our club field trip – please contact:

annabel.brownfield@gmail.com or call/text: 281-486-1866.

Rose Quartz

A pink color-variety of the mineral quartz.

Author: Hobart M. King, PhD, GIA Graduate Gemologist



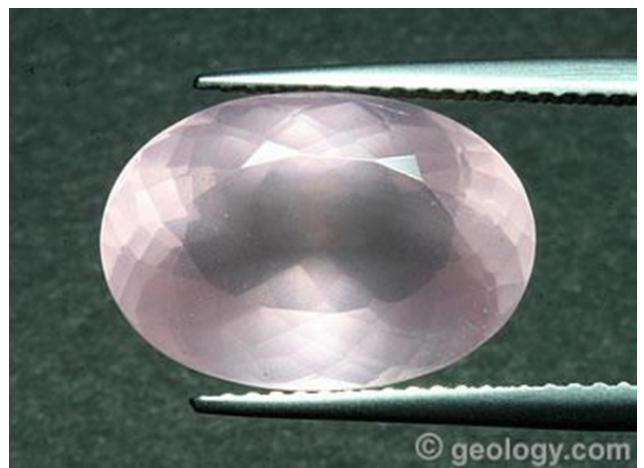
Rose Quartz: A rare specimen of rose quartz with a gemmy pink color and recognizable crystals. From the Sapucaia Mine, Minas Gerais, Brazil. The specimen is 11.5 x 7 x 4.5 centimeters in size. Specimen and photo by Arkenstone / www.iRocks.com.

Rarely, quartz occurs as transparent euhedral crystals with a pink color. These are usually late-stage mineralizations in pegmatite pockets. The color of these specimens, especially those that are transparent, is thought to be caused by irradiation-induced color centers. This color is often unstable, fading with exposure to heat or light. Pink transparent quartz is rare, but found in several locations around the world. Many people believe that pink transparent quartz should be called "pink quartz" instead of "rose quartz" because the cause of the color is different. [1]

What is Rose Quartz?

Rose quartz is the name used for pink specimens of the mineral quartz. It is abundant, common, and found in large quantities at numerous locations around the world. It is usually occurs as massive, anhedral occurrences in hydrothermal veins and pegmatites.

The pink color of rose quartz is attributed to microscopic inclusions of a pink variety of the mineral dumortierite. These inclusions are usually abundant enough to make the rose quartz translucent instead of transparent. [1]



Faceted Rose Quartz: A faceted specimen of rose quartz cut from rough mined in South Africa. This stone was cut as an oval facet of about 15.09 x 10.44 millimeters and weighs about 7.42 carats.

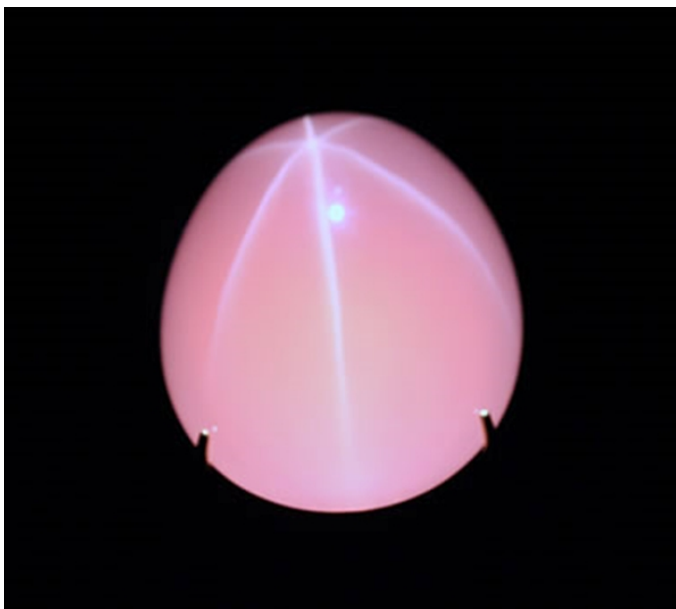
Physical Properties of Rose Quartz

Chemical Classification:	Silicate
Color:	Pale pink to vivid pink. Sometimes zoned.
Streak:	Colorless (harder than the streak plate)
Luster:	Vitreous
Diaphaneity:	Transparent to translucent
Cleavage:	None, breaks with a conchoidal fracture
Mohs Hardness:	7
Specific Gravity:	2.6 to 2.7
Diagnostic Properties:	Conchoidal fracture, glassy luster, hardness, pink color, translucence
Chemical Composition:	SiO ₂
Crystal System:	Trigonal
Uses:	Cabochons, beads, carvings, spheres.

Physical Properties of Rose Quartz

The pink color of rose quartz ranges from a very light, almost imperceptible pink, to a rich translucent pink. It is usually cut into cabochons, beads, and faceted stones of about eight millimeters in size or larger to display the rich pink color.

Some specimens of rose quartz contain a dense network of fine inclusions that align with the gem's crystal structure. If a cabochon is cut so that its base is perpendicular to the c-axis of the quartz crystal, the cabochon might display asterism in the form of a six-ray star. The best star stones have a vivid pink color and a distinct, symmetrical, and well-centered star.



Star Rose Quartz: An oval-shaped cabochon of rose quartz exhibiting beautiful color and a spectacular six-ray star. This gem is from the collection of the Houston Museum of Natural Science, and this Creative Commons Attribution photo was taken by andytang20.

Uses of Rose Quartz

Rose quartz is one of the most commonly encountered lapidary materials. It is abundant, usually inexpensive, and popular as tumbled stones, beads, and cabochons. These have the richest color when pieces are at least a centimeter in diameter or thickness because of the material's weak color. With a hardness of 7 on the Mohs scale and a lack of cleavage, rose quartz is durable enough for use in any type of jewelry.

Faceted rose quartz is rarely seen because transparent pink quartz is rare, and translucent rose quartz does not compete well with other faceted materials. Although rose quartz cabochons are popular in craft jewelry, rose quartz is seen far less often in commercial or designer jewelry. Its pink color does not contrast strongly with metal settings or the skin color of many people. Faceted gems such as pink

sapphire, morganite, rhodolite, spinel, and tourmaline are used instead of pink quartz, probably because of their superior clarity and brighter luster.

Pieces of rose quartz up to a few pounds in size with nice color are usually available and relatively inexpensive. For that reason it is commonly used to produce small sculptures, puffed hearts, spheres, and utility items.

Color and Asterism in Rose Quartz

In the mineralogical literature, the pink color of rose quartz has been attributed to titanium, manganese, and iron by a large number of authors for over 100 years. Tiny needles of rutile have been given credit for forming the six-ray star of rose quartz for the same amount of time.

In the late 1990s, an interesting investigation into the color and asterism of rose quartz was done by George Rossman, Julia Goreva, and Chi Ma at Caltech [2]. They obtained samples of rose quartz from a number of localities throughout the world and gently dissolved them in hydrofluoric acid heated to 100 degrees Celsius. This treatment was intended to dissolve away the silicon dioxide of the quartz and any included material soluble in HF at 100 degrees Celsius.

In specimen after specimen, a tangle of extremely thin pink fibers remained after the acid treatment. They examined these fibers using scanning electron microscopy, infrared spectroscopy, Raman spectroscopy, optical absorption spectroscopy, and x-ray diffraction. Through this they determined that the pink fibers are a borosilicate with properties that are very similar to those of dumortierite. These investigators believe that the pink color and asterism of rose quartz is caused by these pink fibers that they have named dididumortierite.

Sources, Treatments, and Synthetics

Rose quartz is found in abundance in many deposits throughout the world. Much of the rose quartz that is sold today is produced in Brazil, South Africa, India, and Madagascar. Other sources include Namibia, Mozambique, and Sri Lanka. In the United States, a deposit near Custer, South Dakota once produced significant amounts of rose quartz.

Rose quartz has been produced in laboratories, but synthetic rose quartz does not have a significant presence in the gem and jewelry marketplace. Natural material is too abundant, inexpensive, and only seen in craft jewelry. This removes the incentive to produce synthetic rose quartz instead of other, more highly priced materials.

La Madona Rosa: "The Pink Madonna" is possibly the most famous specimen of rose quartz in the world. It is believed to have been discovered in Minas Gerais, Brazil in the 1950s and was sold by Heritage Auctions in 2013 for \$550,000.

La Madona Rosa and The Van Allen Belt

Rose quartz is not one of the most commonly seen specimens in mineral collections because it rarely occurs in the well-formed crystals preferred by collectors. The exceptions have been a few spectacular specimens of pink quartz with well-formed crystals that have sold for very high prices.

One specimen of note is "La Madona Rosa" (The Pink Madonna) that was sold for \$550,000 in June, 2013 by Heritage Auctions (see video). This specimen is believed to have been discovered at the Sapucaia Mine in Minas Gerais, Brazil in the 1950s. It consists of a central cluster of smoky quartz crystals surrounded by a halo of quartz crystals with a vivid pink color. It is about 39 centimeters tall and about 20 centimeters wide. [3] [4]

"The Van Allen Belt" is another famous pink quartz specimen from Minas Gerias, Brazil. It consists of a central cluster of smoky quartz crystals surrounded by a belt of pink quartz. It is on display in The Janet Annenberg Hooker Hall of Geology, Gems, and Minerals at the Smithsonian Museum in Washington, D.C. [5]

SCFMS and MEMBER CLUB GEM SHOWS

Tucson Gem and Mineral Show – 02/09/2023 Start Date: 02/09/2023 End Date: 02/12/2023 Hours: Thurs/Fri/Sat 10:00-6:00 Sunday 10:00-4:00 Venue: Tucson Convention Center Address: 260 S Church St Tucson , AZ 85701 Website: http://www.tgms.org/ Types: Rock & Mineral Shows	Williamson County Gem & Mineral Society Show – 2/18/2023 Start Date: 02/18/2023 End Date: 02/19/2023 Hours: Sat 10:00 - 6:00 Sun 10:00 - 4:00 Venue: San Gabriel Park Address: 445 E Morrow St Georgetown , TX 78628 Website: http://www.facebook.com/WilliamsonCountyGemSociety Types: Rock & Mineral Show	Gem, Mineral & Jewelry Show – 3/10/2023 Start Date: 03/10/2023 End Date: 03/12/2023 Hours: Fri 10:00-8:00 Sat 10:00-7:00 Sun 10:00-5:00 Venue: KCI Expo Center Address: 11730 NW Ambassador Dr KCI Expo Center Website: http://kcgemshow.org/ Types: Rock & Mineral Shows	Texas Mineral and Fossil Dallas/Plano – 5/19/2023 Start Date: 05/19/2023 End Date: 05/21/2023 Venue: Plano Event Center Address: 2000 E Spring Creek Pkwy Plano , TX 75074 Website: https://www.rmgmmpromotions.com/ Types: Rock & Mineral Shows
STONEY STATEMENTS Clear Lake Gem and Mineral Society, Inc PO BOX 891533 Houston, Texas 77289			
Meeting 3rd Tuesday of the Month 7:00 P.M. League City Library 100 W Walker St, League City, Tx 77573			

				
		Member of		
Next Annual Show February 26-27, 2022 Pasadena Convention Center				
CLGMS is on the Web: http://www.clgms.org FACEBOOK: CLEAR LAKE GEM AND MINERAL SOCIETY.			American Federation of Mineral Societies	South Central Federation of Mineral Societies
Clear Lake Gem and Mineral Society, Inc				
MEMBER: American Federation of Mineralogical Societies and South Central Federation of Mineral Societies PURPOSE: To promote education and popular interest in the various earth sciences; in particular in those hobbies dealing with the art of lapidaries and the earth sciences of minerals, fossils and their associated fields.				
2021 OFFICERS:	President Vice President Secretary Treasurer Program Director Board of Directors: Newsletter Editor	Cynthia McGowan David Tjiok Christina Rankin Morgan Davies VACANT Sandra Christiansen Jim Edwards Donna Nelson David Tjiok	281-546-2662 832-423-4802 281-723-5408 281-224-2444 Jim Hawkins John Caldyne	
Annual Show 2021 Sandra Christiansen Constitution & Bylaws.....Jim Hawkins Community Benefits.....Charlie Timme Historian.....David Tjiok Publicity..... Annabel Brownfield Facebook.....Cynthia McGowan Membership.....Mike Flannigan WWW System Admin..Mike Flannigan Refreshments.....Vacant Education/Field Trips.....Annabel Brownfield				
Membership Dues Jan. to Dec. 2023: Adult \$15:00, Family Dues \$20.00 (4+) at same address. Send Dues to CLGMS, PO BOX 891533, Houston, TX, 77289				