Mojave Desert Gem & Mineral Society **Desert Diggins** November 2018

Club Objectives:

To collect and study minerals and rock.

To disseminate a general knowledge of the science of mineralogy and allied subjects.

To provide opportunity for the exhibition and exchange of specimens.

Happy Birthday

Mayra Avila 10th

It's Just Rock 'in Vocabulary

refractory - A refractory mineral is a mineral that is resistant to decomposition by heat, pressure, or chemical attack.

Pleochroism - Pleochroism is an optical phenomenon in which a substance appears to be different colors when observed at different angles, especially with polarized light.

. Annual Membership Dues
Adults: $ 20.00
Juniors: $ 10.00 (10-18 yr)
Club business meeting: 1st Friday of the month 7:00 PM
Workshop: 2nd, 3rd, & 4th Fridays of the month 6:30 PM
Location: 25647 W. Main St, Barstow, Ca., 92311

General Meeting minutes
October 5th, 2018
Meeting was called to order at 7pm by club president Danny Watts
Followed by the "Pledge of Allegiance"

Minutes from last meeting were read and approved
22 members were in attendance

New business: Danny discussed the upcoming election of officers and board members. He also mentioned that we will need to assign someone to be an alternate director of the federation to attend meetings.

A Video on Queensland Agate from Agate Creek Australia, By: Sir Paul Howard was shown. The video was very informative especially if you plan on visiting. It showed many beautiful specimens of banded agates with Opal and Dendrites with colors of green, blue, red, yellow and even with purple. The Video can be Found at Diamond Pacific for purchase.
We then took a break for snacks and refreshment, thank you to Dian and Chiko our hostess for the evening.

With it now cooling down enough; field trips are now underway. If you would like to attend Saturday field trips, you will need to contact Bill (760)253-5261 or John (951)415-0545 to get more details, Thursday – Friday prior to field trip. Saturday field trips meet up at Diamond Pacific at 8am. 2620 W Main St, Barstow, CA 92311

MDGMS gem show—We still need rock specimens to put in grab bags. All bags have been sewn together we will start filling them soon. We also Still need 12 prize items for the grab bags. It was also voted on that we will be removing one row of cases to make room for another vender. This motion was made by William Johnson and seconded by Connie Horn.

Some wonderful septarian specimens were brought in by John Printz, Connie Horn, Judy Livingston, Leslie Walker. Trisha shared some of her parents collection, Sandy Shared some of her sandstone concretions.

Cab of the month
Dian Hare won first place with a turquoise cabochon
Danny Watts got 2nd with his ocean Jasper
William Johnson got 3rd with his tigers' eye

We also need volunteers for hostess and door prizes, so please sign up if you can.
Meeting was adjourned at 9pm.
Minutes submitted by Lana Heller-Wood

Rock of the Month

Andalusite

Andalusite is a rock-forming mineral that is mined for use in high-temperature refractories. Gem-quality specimens are cut into faceted gems and cabochons.

Andalusite forms during the regional metamorphism of shale. It is found in schist and gneiss at some present and ancient convergent plate boundaries where the rocks have been exposed to the temperatures and pressures needed for its formation. In these rocks, andalusite is often associated with kyanite and sillimanite.

Blocky, Brownish-Green Andalusite

Andalusite also forms during the contact metamorphism of argillaceous rocks. In this situation, it can form within the metamorphosed rock or in veins and cavities within the igneous rock. It can be associated with cordierite in hornfels, granite, and granitic pegmatite.

VARIETIES

Chiastolite is a variety of andalusite that contains black particles of graphite arranged in geometric patterns. The graphite is pushed aside by crystal growth within a rock that is being metamorphosed. As growth occurs, the particles become concentrated at crystal interfaces. The result can be a cross-shaped pattern within the mineral - similar to the "cross-stone" shown in the photo here. People have known about these cross stones for centuries and have valued them for their perceived religious or spiritual meaning. Attractive specimens are often cut and polished for use as amulets, charms, and novelty gems.

Chiastolite with Complex Pattern

Color Reddish brown, olive green, white to gray
Diaphaneity Transparent to nearly opaque
Cleavage Good
Mohs Hardness 6.5 to 7.5
Diagnostic Properties Crystal form, associated minerals, strongly pleochroic, symmetrical inclusions
Crystal System Orthorhombic
Uses Used to manufacture high-temperature porcelain of spark plugs; used to make high-temperature ceramics used in furnaces, kilns, incinerators; high-quality crystals are often used as gemstones.

Green Andalusite (Viridine)

OTHER VARIETIES

Viridine - Bright green to olive-green variety of Andalusite, with its color supposedly caused by manganese impurities.

POLYMORPHS
Kyanite
Sillimanite

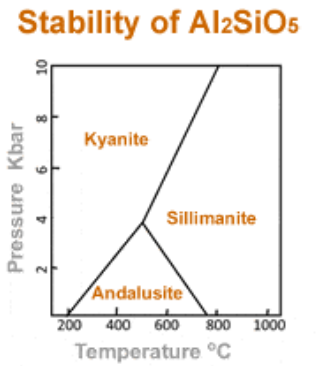
Physical Properties and Uses of Andalusite

Andalusite has a number of useful physical properties. It has the ability to withstand high temperatures without alteration. For that reason, it is used to make high-temperature ceramics and refractories. The white porcelain of many spark

plugs is made using andalusite. The rare transparent variety of Andalusite is used as a minor gemstone. Chiastolite cross-sections are often cut and polished to bring out the distinctive cross-shaped pattern, and Chiastolite crystals may also be cut along their cross-section and used in jewelry as a Christian symbol.

Transparent specimens of andalusite are often strongly pleochroic. This makes them have different apparent colors when viewed from different directions. This pleochroic effect allows andalusite to be cut into unique gemstones.

Andalusite is the low-temperature mineral of the three. Sillimanite is the high-temperature mineral, and kyanite forms at high pressures and lower temperatures.



Stability fields: This chart shows the temperature / pressure ranges where andalusite, kyanite, and sillimanite are stable.

NOTEWORTHY LOCALITIES

Well-formed Chiastolite crystals are abundant in the Boal area, Asturias, Spain; as well as in Carreço, Viana do Castelo, Portugal. Large, blocky crystals that have been pseudomorph by Pinite come from Lüsens, North Tyrol, Austria; and pink and peach colored crystals from Chiavenna and the Bregaglia Valley, Sondrio Province, Lombardy, Italy. An interesting radiating Andalusite within matrix comes from Dolní Bory, Moravia, Czech Republic.

Large Chiastolites have come from China at the Sangping Mine, Nanyang Henan Province; and from Australia at Mount Howden, Olary Province, South Australia. Brazil has several localities, with the gemmy multicolored variety coming from Santa Teresa Espirito Santo. Cinnamon-brown rectangular crystals of very good form have come from Itinga, in the Jequitinhonha valley, Minas Gerais.

In the U.S., some of the best Chiastolite has come from the Lancaster area, Worcester Co., Massachusetts. Very large Andalusite crystals were found in Alta Vista, Campbell Co., Virginia; and in the Hill City area, Pennington Co., South Dakota. In California, light pink and white Andalusite crystals have come from the Champion Mine, White Mountain, Laws, Inyo Co., California; and Chiastolite from Chowchilla, Madera Co.

Rockhounds of the past

A extended Thank You to All of Those Who help with volunteering and donations

If you wish to contact the MDGMS team or Desert Diggins

facebook — www.facebook.com/mojavedesertgemandmineralsociety

web site: www.mdgms.net

email: mdgms.contact@gmail.com

editors' email: lhellerwood82@msn.com

Rock in' Reciepts to Dig'

AGATE SLICE POPS

INGREDIENTS

10 lollipops
Parchment paper
30 JOLLY RANCHER candies, unwrapped (any colors you prefer), or more as needed
10 lollipop sticks

DIRECTIONS

1. Preheat the oven 350°F. Line two baking sheets with parchment paper.

2. MAKE MOLDS FOR THE LOLLIPOPS: Cut 10 ovals out of the parchment paper, 3 to 5 inches in diameter. Use scissors to cut a small hole from the center of each oval.

3. Using the scissors, make short cuts around the center hole, about ¼ inch apart. Do the same around the outside of the oval (no need to be precise). Fold the cuts inward to create little walls around the perimeter and at the center of the oval. Transfer the parchment molds to the prepared baking sheets.

4. PREPARE THE CANDY: Sort the Jolly Rancher candies by color and transfer them to plastic bags and seal. Using a meat mallet, a rolling pin or other heavy object, smash the candies into a coarse powder.

5. MAKE THE LOLLIPOPS: Starting at the center of a mold, sprinkle a ring of one color of crushed candy. Repeat with the remaining molds, using different colors as desired. Transfer the trays to the oven and bake until the candy melts, 3 to 5 minutes.

6. Remove the trays from the oven and sprinkle another ring of crushed candy (in a different color) around the first ring of melted candy; they should overlap slightly. Return the trays to the oven until the candy melts, 3 to 5 minutes more.

7. Repeat the process one more time, filling in any remaining space with more crushed candy (in a different color). Return the trays to the oven until the candy melts, 3 to 5 minutes more.

8. ADD THE STICKS: When the lollipops come out of the oven, press the sticks into the melted candy. Rotate the sticks a few times so they're fully coated in sugar (this will make them more secure).

9. Let the lollipops cool completely and then carefully peel away the paper. Serve immediately or store the lollipops in an airtight container, separated by sheets of parchment paper, for up to three days.

NUTRITION

72 calories

5g fat	1g protein
10g carbs	8g sugars

Upcoming Show dates

NOVEMBER

November 3 - 4: ANAHEIM, CA
American Opal Society
Business Expo Center
1960 S. Anaheim Way
Hours: Sat 10 - 6; Sun 10 - 5
Contact: Veronica Purpura, (714) 501-9959
Email: info@opalsociety.org
Website: www.opalsociety.org

November 3 - 4: RIDGECREST, CA
Indian Wells Gem & Mineral Society
Desert Empire Fairgrounds
520 South Richmond Road
Hours: 9 - 5 daily
Contact: John DeRosa, (760) 375-7905
Email: jfrocks@dslextreme.com

November 3 - 4: CONCORD, CA
Contra Costa Mineral & Gem Society
Centre Concord
5298 Clayton Road
Hours: 10 - 5 daily
Contact: Kelly Plumb, (510) 693-9075
Email: kellyplumb900@yahoo.com

November 10 - 11: YUBA CITY, CA
Sutter Buttes Gem & Mineral Society
Yuba-Sutter Fairgrounds
442 Franklin Avenue
Hours: Sat 10 - 5; Sun 10 - 4
Contact: Karen Horita, (916) 677-6696
Email: horita@comcast.net
Website: http://sutterbuttesgemmin.org

November 18 - 19: LAKESIDE, CA
El Cajon Valley Gem & Mineral Society
Lakeside Rodeo Grounds
12584 Mapleview Street
Hours: Sat 10 - 5; Sun 10 - 4
Contact: Mary Ness, (619) 449-0759
Email: ecvgms@gmail.com
Website: www.ecvgms.org

November 17 - 18: LIVERMORE, CA
Livermore Valley Lithophiles
At the "Barn"
3131 Pacific Avenue
Hours: Sat 10 - 5; Sun 10 - 4
Contact: Bill Bish, (925) 447-1266
Email: bcbish@att.net or info@lithophiles.com
WebSite: www.lithophiles.com

November 17 - 18: OXNARD, CA
Oxnard Gem & Mineral Society
Oxnard Performing Arts Center
800 Hobson Way Hours: Sat. 9 - 5; Sun. 10 - 4
Contact: Stephanie Hagiwara, (805) 394-8002
Email: webmaster@oxnardgem.com
Website: http://oxnardgem.com

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T Y Q Q D L G R O O R A I H E N H

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H G Q C O I U P Z S D B C G M I E

D R K T O G L B S Z U I M I I J G

O R T H O R H O M B I C N R M R S

X X P B A A R C L P K E Z E O A J

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