



THE AGATEER

The Newsletter of the Madison Gem and Mineral Club

Volume 17, Issue 3

March 2019

Monthly Meeting – March 26 – Topic Rescheduled from February

Quartz – An Old Friend *presented by Carlos Peralta*

Quartz is the most common mineral in the Earth crust. All of us are very familiar with it. But, quartz has several secrets and skeletons in the closet. It does have an extended family including some rich relatives. It is a consummate shape shifter and it really likes to add details to its many faces. It likes to be always on time and sparks fly if you hit it hard. Often it grows to gargantuan proportions but it can also be extremely small that not even optical microscopes can see it. The really small ones just like to be in huge groups and play with dirt and other impurities resulting in either drab stones or spectacular gems. It has habits which do not refer to routines or to religious attire. Quartz crystal don't have to be killed twice to make them double terminated. Although some people believe that all the knowledge of the world is stored in some quartz crystals, in reality, those crystals only know about a few Laws. Quartz---it is time to share some gossips about this good old friend.

February Program - For more about February's program on Southern Illinois Fluorite, see page 2.

Lapidary Classes to be scheduled

There will be a club sponsored Lapidary class Sundays, March 24 – April 28 for 6 weeks, noon to 4 PM. Cost is \$125 per student. At this time, there is a wait list for this class. See the MGMC Facebook page for more information. Good News! There will be a summer session and two sessions in the fall through Wheelhouse Studios. We will share details about registration as soon as the information is available.

*****MARCH MEETING – VOTE on CLUB T-SHIRT DESIGN*****

**Next Meeting: Tuesday,
March 26 at 7p.m. in
AB20 Weeks Hall
UW Dept. of Geoscience**

****Dues are Due****

Dues are due at the beginning of each new year. You may give your dues to treasurer Rick Maske at the meetings, or send them to the club address: Madison Gem & Mineral Club, P.O. Box 8882, Madison, WI 53708. Dues are \$15 for an individual; \$20 for a family; plus, a surcharge of \$6 for a printed, mailed copy of the Agateer. Thank you for your continued support!

Notes on February's Program on Southern Illinois Fluorite

The program for January was on Fluorite from Southern Illinois presented by Stephanie Sobczak. In addition to some fantastic pictures, Stephanie shared her specimens of fluorite "phantoms" or what looks like a shadow of a different crystal inside the fluorite crystal. Club member Carlos Peralta shares information on what might cause this phenomenon.

The prevalent explanations on how phantoms form in quartz are:

- 1) **Discontinuous growth.** Any time that the crystal growth is temporarily interrupted, further growth might not "adhere" perfectly to the previous developing crystal. This might result in a surface in the plane between the two growth period that might react to light differently. Hence, that surface can be seen as a ghost growth.
- 2) **Sudden change in the solution composition that might result in a different color.** The amethyst phantoms growing inside a quartz crystal might be explained by this. But, reasons other than solution composition might also be at play. The rather recent discovery of "hourglass amethysts" in Morocco has giving me lots of headaches. I think some crystallographic plain physics might be at play; and, by extension, some phantoms in other minerals might also be the result (at least in part) of similar phenomena.
- 3) **Growth of a crystal on top of a previous crystal.** This is similar to the first one described above but a much slower process where the original growth completely stops for a while.
- 4) **Sudden influx of non-silica materials.** The "classical" example is clay. The resulting phantoms are usually yellowish color and rather opaque. Occasionally, the phantom can be separated from the later crystal. These are called "capped quartz." Chlorite can also produce greenish phantoms.
I have seen one fluorite crystal with a smaller loose phantom.

Competition Schedule 2019

All members are urged to bring specimens for the monthly competition. Questions may be directed to Carlos Peralta, at 509-2836. Cash awards: 1st place \$10; 2nd place \$5. Unless specifically instructed, the specimens for the Competitions described below can be self-collected, or purchased, or given to you by somebody else. Please make sure to write a short description (including the name of the specimen) on a 3 X 5 card or similar.

March 2019. All Thumbs

This month we celebrate the little guys! You can leave the heavy stuff at home. The competition is for specimens that fit inside a 1" cube perky box, but big enough to see without a microscope. These are also known as "thumbnail" size specimens. Some amazing specimens come in very small sizes. Magnifiers will be provided.

April 2019. Rough, Cut and Finished

Bring a finished cabochon or other polished piece presented right next to a piece of the original rough or slab. Have some work in progress? Bring it along.

Competition Results from February: Fossil Creatures

First Place – Paul Nonn Second Place – Jennifer Herron

Word Search Answers from February Newsletter: W – Wavellite, I – Illmenite, S – Spinel, C – Calcite or Chalcopyrite; O – Opal; N – Nickeline; S – Silver; I – Iolite; N – Natrolite.

Geologic Time Period Word Scramble

The terms below are all related to geologic time periods. Can you put the letters in order?

1. ENRCAHA A _ _ _ _ _
2. NEAIDNVO D _ _ _ _ _
3. REEUATCCSC _ _ _ _ _
4. ROCIANDVO O _ _ _ _ _
5. CJSRIRAU J _ _ _ _ _
6. ZTEORORICPOP _ _ _ _ _
7. RANABIMC C _ _ _ _ _
8. RILNASUI S _ _ _ _ _

Calendar

March 26, 2019 MGMC Club Meeting, 7 pm at Weeks Hall

April 2, 2019 MGMC Board Meeting, 7 pm at Lapidary Lab

April 23, 2019 MGMC Club Meeting, 7 pm at Weeks Hall

MAR 9: SKOKIE, IL Chicago Rock & Mineral Society 70th Silent Auction. 7 - 9 pm. St. Peter's United Church of Christ Gym, 8013 Laramie, Skokie. Contact Jeanine Mielecki, (312) 623-1554, jaynine9@aol.com

MAR 9-10: WEST BEND, WI Kettle Moraine Geological Society Annual Show. Sat 10 am - 5 pm; Sun 10 am - 4 pm. Washington County Fair Park & Convention Center, 3000 Hwy PV, West Bend. Contact: John Rettler, (262) 345-5020; johnrettler@gmail.com; kmsrocks.com

MAR 23-24: JANESVILLE, WI: Badger Lapidary and Geological Society Show, Rock County Fairgrounds, Craig Center Building, 1301 Craig Avenue, Sat 9-5, Sun 9-4. <http://badgerrockclub.org/>

MAR 23-24: CEDAR RAPIDS, IA Midwest Federation of Mineralogical and Geological Societies. Annual Convention. Hosted by Cedar Valley Rocks and Minerals Society. "Geodes, Iowa's Mysterious State Rock" Hawkeye Downs, 4400 6th St. SW, Cedar Rapids, IA. Contact Ray Anderson, (319) 337-2798, rockdocanderson@gmail.com

APR 6-7: DES PLAINES, IL Des Plaines Valley Geological Society Annual Show. Sat 9:30 am - 5 pm; Sun 10 am - 4 pm. Des Plaines Park District, 2222 Birch Street, Des Plaines. Contact: Connie Lavin, (815) 222-8197.

APR 13-14: DECATUR, IL Central Illinois Gem & Mineral Club Annual Show. Sat 9 am - 5 pm; Sun 10 am - 4 pm. Lester Building, Progress City, 4140 E 2nd Progress St., Decatur. Contact: Tony Kapta, 1483 E. Wood St., Decatur 62521; (309) 830-6516; tkapta@comcast.net

MAY 4-5: MARSHFIELD, WI Heart of Wisconsin Gem, Mineral, Fossil & Jewelry Show. Marshfield Senior High Fieldhouse, 1401 E. Becker Road, Sat 10-5, Sun 10-5. <https://www.heartofwisconsinrocks.com/>

The Agateer is the official publication of the Madison Gem and Mineral Club. It is published monthly, and mailed as a benefit of membership to all Madison Gem and Mineral Club members.

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Membership is open to all individuals, and applications for membership will be accepted upon payment of annual dues, which are \$15.00 for adults (18 and older), \$5.00 for junior members (ages 6-17), and \$20.00 for families. There is a \$6 surcharge for printed and mailed copies of the Agateer.

Visit the official website of the Madison Gem and Mineral Club at <http://madisonrockclub.org>

Madison Gem and Mineral Club
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