



The Conglomerate

Newsletter of the Baltimore Mineral Society

www.baltimoremineralsociety.org

Volume 12, No. 3

March, 2017

Visiting the Rice Museum

by Steve Weinberger

Basmati, Sticky, Wild, Arborio and Jasmine are just a few of the many types of rice available in the grocery store, and we're sure that there is a museum somewhere that displays specimens for those interested.

This past summer, we had the opportunity to visit the most famous of the rice museums....this one officially named the "Rice Northwest Museum of Rocks and Minerals" houses a wonderful collection of minerals including the famous "Alma Rose" rhodochrosite specimen from the Sweet Home Mine in Colorado.



Our program on March 22nd will take you on a journey to the museum and show images of some of the more spectacular specimens housed therein. I'll tell you now that the museum is quite a gem!

The meeting will be held as usual at the Natural History Society of Maryland and will begin at 7:30 pm. Carolyn and I will bring the goodies to nibble on and we hope that you'll join us.

Collecting trip to Medford Quarry

from Richard Hoff

Former member Sam Linton has organized a multi-club collecting trip to Medford Quarry in Westminster that includes BMS members. The date is Friday, April 21st and time is 8 am - noon. He sends the following message.



"Be on time or don't bother showing. Park in between the main building and the main pit, facing south. Consolidate into as few cars as possible because there is not much room to park. I will sign us all in and then we will get the brief. Since we will only be getting in once each year, there will be no maximum group size.

You will need to RSVP to Richard Hoff (rhpeace at comcast.net) no later than April 19th. **You must be a 2017 paid-up member of BMS to attend.** We will collect in the derelict pit again (stay away from my hole! :)), but all standard rules apply.

You will need hard hats, steel toed shoes, reflective vests, gloves, long pants as well as the usual rock collecting tools. Minerals that can be found at Medford include calcite, malachite, chalcopryite, galena, magnetite, sphalerite and todorokite.

Just FYI, I am working to get us into Northeast Churchville and Penn/ MD for later this spring or early summer. I will be deploying in September or October, so will not have time to work on trips beyond July."

Baltimore Mineral Society

The BMS was established in order to allow its members the opportunity to promote the study of mineralogy and to act as a source of information and inspiration for the mineral collector. We are members of the Eastern Federation of Mineralogical Societies and affiliated with the American Federation of Mineralogical Societies.

Meetings are held the 4th Wednesday of each month (except November, December, June & August) at the Natural History Society of Maryland beginning at 7:30 p.m. Visit the club website <www.baltimoremineralsociety.com> for directions.

Yearly dues are \$10 for individual members and \$15 for family memberships. Send payment along with your name, list of family members, if applicable, address, phone and e-mail to: BMS, PO Box 302; Glyndon, MD 21071-0302.

Officers:

President.....Jim Hooper
<ijhooper@jhu.edu>

Vice President Al Pribula
<apribula@towson.edu>

Secretary.....Jake Slagle
<jake@marylandminerals.com>

Treasurer Carolyn Weinberger
<cscrystals2@gmail.com>

Directors:

Bernie Emery Al Pribula
Brad Grant Steve Weinberger

Conference Chair Mike Seeds

EditorMike Seeds
<mseeds@fandm.edu>

Write for "The Conglomerate"!

Send news, announcements, comments, observations, or articles to <mseeds@fandm.edu>. No e-mail? Hand in your submission at a meeting.

Non-commercial reprint permission granted to non-profit organizations unless otherwise noted.

President's Postings

by Jim Hooper, BMS President



Well while there may be a few episodic bouts of bad weather, (like we had this past Tuesday) when the Conglomerate goes to press we should be on the verge of the beginning of spring. And although we haven't had a hard winter at all we will certainly welcome temperatures above 30 degrees and we can put away our big, puffy coats and jackets.

We will have also seen the change of venue for the Delaware Mineralogical Society. Did you go? I would greatly appreciate hearing your impressions of the new setting as well as any mineralogical elements you enjoyed and/or brought home with you. Please consider jotting down a few notes about the show and send them along to me or Mike Seeds, Editor.

Also the Montgomery County Society's show in Gaithersburg is on the 18th and 19th. If you go, what did you think of it this year? We welcome your thoughts and don't worry about writing styles or such. Mike is a great editor and often helps make my scribbles intelligible.

Can you recall the mineral, rock, or crystal that initially captured your interest in the hobby? Was it something you picked up while walking around? Was it something you saw in a store or at a show? Was it 'rough' minerals on a trail or gemstones set in jewelry? Share that recollection with us. And guess what, you'll be a published author.

Let's keep our ears open for outings this Spring and get some rock hunting in before the ticks and 'skeeters' get adventuresome. And keep up safe practices when out in the 'wild'. Let's get out there before the brambles take over. See you at the meeting!

Jim H

Winter Weather Policy

If Baltimore County schools cancel their evening activities our meeting will be cancelled. You can obtain this information by tuning to WBAL radio (1090 AM) or most TV stations. You usually can also find it on the web at <wbaltv.com>. We'll also try to put out a notice via e-mail.

In addition, if the parking lot at NHSM isn't cleared of ice or snow, and is unusable, we'll send out an alert to members via e-mail as early as possible.



Minutes From our Last Meeting

by Jake Slagle, Secretary



President Jim Hooper called the February 22 meeting of the Baltimore Mineral Society to order at 7:35 PM. Minutes to the previous meeting were approved by consensus.

Treasurer Carolyn Weinberger announced that the Society was solvent. She also noted that dues should be paid by now. Those unpaid would be ineligible for privileges including field trips

Unfinished Business: None

New Business:

- Carolyn Weinberger moved that the Society make a contribution based upon \$1.00 commensurate with its number of members to the Scholarship Fund of the American Federation of Mineralogical Societies Scholarship Fund. The motion was seconded and approved.

Announcements:

- Reminder of Upcoming Delaware Mineralogical Society Show on March 4 and 5 to include Symposium.
- Lynne Emery reminded of an upcoming auction being held by the Chesapeake Gem and Mineral Society on Friday, March 10.
- Carolyn Weinberger mentioned the upcoming Wil-dacres Conference to feature Bob Jones, Executive Editor of Rock and Gem Magazine.

Mineral of the Month:

- Several members showed Mexican minerals from their collections, as the presentation for this evening was a video from the 2014 Dallas Mineralogical Symposium by Peter Megaw about that country's great specimen localities.

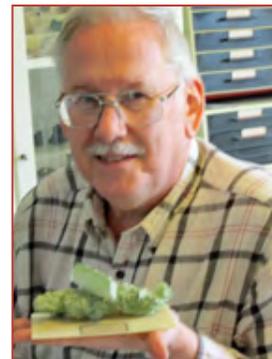
After a short break the aforementioned program ensued and was well received.

The meeting adjourned at 8:45 p.m.

Respectfully Submitted,
Jake Slagle: Secretary

Color in Minerals – Part XI: The Defects Have It

by Al Pribula



Last on the list of color-producing mechanisms listed in Part III of this series are what are called color centers. These are sometimes referred to as “F-centers,” from the German word Farbe (pronounced “far-bay” or “far-buh”), meaning “color.” That name doesn’t really tell you much—just that there must be some “center” or location which produces color for some reason. Color centers are actually defects in the crystal lattice, in which an ion or molecule with an unpaired electron is trapped in the lattice position normally occupied by a “normal” anion (i.e., one with all its electrons paired). This chromophore may be an anion such as O^- or CO_3^- (a “normal” oxide ion is O^{2-} and a “normal” carbonate ion is CO_3^{2-}) but is very often a “free” electron (i.e., one not attached to any particular atom, symbolized e^-). Since such an electron isn’t attached to an atom, it isn’t in an orbital per se. However, when a tiny particle like an electron is trapped in a small space like the “hole” surrounded by cations in the crystal lattice, it is restricted to having only certain energies as it “rattles around” in the space. (This is sometimes referred to as a “particle in a box.”) When an electron in such a situation absorbs energy, it can only make “jumps” from one of these allowed energy levels to another (analogous to moving from one orbital to another when it’s part of an atom). When it does this, it absorbs a specific amount of energy. If this energy corresponds to EM radiation in the visible light region, that color of light is absorbed and the sample will be observed to have the complementary color, just as is the case for other causes of color. A good reference on the subject can be accessed at education.mrsec.wisc.edu/background/F_center.

A consequence of color centers is that they sometimes cause the chemical composition of the sample to be “off” slightly. If some fraction of the anions in a sample is free electrons, then a corresponding fraction of the “normal” anions must be missing to maintain electrical neutrality. For example, a color center is the cause of the

continued on page 4

Color in Minerals

continued from page 3

violet color frequently observed in fluorite. (This case is probably the one which has received the greatest amount of study by chemists, physicists, and mineralogists.) In pure (i.e., colorless) fluorite, there is a one-to-two ratio of calcium ions (Ca^{2+}) to fluoride ions (F^-), giving it the chemical formula CaF_2 . Since there are two positive charges and two negative charges represented in the formula, it is electrically neutral (as all matter must be). However, if some of the positions normally occupied by fluoride ions are occupied by electrons, there will be a deficit of fluoride relative to calcium and the “perfect” 1:2 ratio of ions will not be found. (Chemists use the fancy term non-stoichiometric to say that a sample deviates from its “perfect” ratio of atoms or ions.) Sometimes, however, the “missing” ion is not truly missing, but is just located in a lattice position that is normally unoccupied. So, fluorite samples sometimes contain free fluorine atoms formed when an electron has been lost from a fluoride ion. The electron then occupies the lattice position normally occupied by the fluoride ion, and the neutral fluorine atom moves to a lattice position which is normally unoccupied. (A dark violet-blue variety of fluorite found in Bavaria and other localities is called antozonite (or stinkfluss (German for “stink flow”)) because it gives off an ozone-like odor when powdered. This is due to a mixture of ozone, elemental fluorine (F_2) and hydrogen fluoride (HF) formed by the chemical reaction of this fluorine-atom-containing material with atmospheric moisture.)

What causes color centers to form in natural samples? It is believed that these are formed when gamma rays from naturally-occurring radioactive materials strike an adjacent material. This can knock atoms or ions out of their normal position (causing structural defects), even to the point of knocking them completely out of the sample. If the “missing” ion has just been knocked to another position in the lattice (and not completely out of the sample), it can often be returned to its normal position by heating the sample. This would cause the sample to return to its “normal” color. This has been observed in fluorite and in many other cases where a color center is the cause of the color. Colors due to most other causes will not be affected by heating. In some cases, the source of the defect can be from ex-

posure to visible or UV light. For example, older colorless glass which has been exposed to light for an extended time can develop a purple color. This is due to a color center involving manganese-containing impurities in the glass. The color of this so-called “desert amethyst” or “sun-colored amethyst” glass can be removed by heating.

Color centers can also be induced by artificial irradiation of a sample with gamma rays. This is frequently done to intensify or even change the color of gem materials. Colorless topaz changes to blue because of a color center formed when it is irradiated, and many other color “enhancements” are done routinely to increase the market value of gemstones. Dealers and jewelers who know that a sample has been treated in some way (whether to modify the color by irradiation or heating or dyeing, to fill in cracks, or to treat other sorts of “defects”) should make that known to the buyer, and often will do so. But, either through ignorance or purposeful deception on the part of the seller, this is not always revealed. This means that treated stones can enter the market as “natural” ones. Unfortunately, when there’s money to be made by being dishonest, honesty goes out the window for some folks. Almost every issue of the GIA publication *Gems and Gemology* contains an article concerning an artificial treatment of some gem material. Much more about gemstone treatment (discussing a variety of treatments, not just irradiation) can be found in Kurt Nassau’s book *The Physics and Chemistry of Color*, as well as in two of his other books, *Gems Made by Man* and *Gemstone Enhancement*. (Yes, he was a sort of “guru” of scientific studies on color in gemstones. He passed away in 2010.)

Color centers in fluorite are the cause of most of the colors this mineral exhibits, and have probably been studied more than those in any other material (natural or synthetic). The cause of the violet color was given above. More recent work has suggested that the F-center causing this color may need to be near an O^- site which is next to an impurity ion with a +3 charge (such as one of the rare-earth element ions). Since exposure of fluorite to calcium vapor induces a purple color, in other cases, the violet color may be due to the presence of Ca atoms as a colloidal dispersion. Some of the colors seem to be due to the presence of oxygen-containing species introduced by incorporation of water into the crystal lattice. For example, yellow is caused by O_2^- and O_3^- , and pink is caused by the presence of some unspecified oxygen-containing species. A rose-pink or red color is caused by

¹The name fluorite derives from the Latin word *fluere* (meaning “to flow”) because fluorite melts (and therefore flows as a liquid) at a much lower temperature than other minerals with which it might be confused.

continued on page 5

Color in Minerals

continued from page 4

the so-called “YO₂” center, which is a combination of Y³⁺ near an O₂³⁻. (Y = the element yttrium, one of the rare-earth elements.) A blue color is caused by the presence of Y³⁺ substituting for Ca²⁺ near a F⁻ vacancy occupied by two electrons. (Since this was known before the dark indigo-blue fluorites were discovered in China a few years ago, I assume that this refers to the more common pale blue color. I don't know if the darker blue is due to “more of the same” or to some other cause.) As mentioned above, rare-earth-element ions are sometimes implicated as being at least a partial cause of color in fluorite. A pale green color is caused by Sm²⁺ (Sm = samarium, another of the rare earths), a darker green color is caused by the presence of an e⁻ color center near a Sm³⁺ or Y³⁺ ion, and a yellow-green color is caused by an e⁻ color center near a Y³⁺ or Ce³⁺ ion. (However, one study showed that there is no relationship between the concentration of rare-element ions and the intensity of the color.) In an extensive study of the banded variety of fluorite called “blue john,” it was shown that there is no significant difference in the concentrations of 73 elements (I said that it was an extensive study!) between the purple and colorless zones, and that the purple color was due to colloidal calcium atoms as mentioned above.

After fluorite, the material best-studied with respect to color centers is halite (both as natural and lab-grown crystals). In this material, a simple e⁻ color center is the cause of a yellow or yellow-orange color. Irradiation of colorless halite with gamma rays produces this color initially, but prolonged irradiation turns the sample black. A blue color is produced from a Cl⁻ vacancy (i.e., an e⁻ color center), along with aggregates of colloidal sodium atoms and a deformation of the crystal structure to symmetry lower than isometric. (Pretty complicated!) In sylvite (potassium chloride, as opposed to sodium chloride (halite)), the e⁻ color center is magenta, and in potassium bromide (which does not occur naturally, but which has the same structure as halite and sylvite), an e⁻ color center produces a blue color. The red/orange color sometimes shown

in sylvite samples has been attributed to a color center of some sort, but has been shown to be due to inclusions of hematite and/or goethite in at least some cases.

The table below lists some additional cases in which the color of a mineral sample is caused by a color center. Additional examples will be given in later articles in the series.

Mineral	Color	Color Center
Apatite	Pink	e ⁻
Barite	Blue	SO ⁴⁻ , SO ³⁻ , SO ²⁻ , O ⁻
Calcite	Yellow	unspecified
Celestite	Blue	SO ⁴⁻ , SO ³⁻ , SO ²⁻ , O
Microcline (var amazonite)	Blue-green	involves Pb ³⁺
Scapolite	Violet	related to species in channels in the structure likely CO ₃ ⁻ or SO ₄ ⁻
Sodalite	Blue	O ⁻ (bleached by heating to 500°C and restored by X-rays)
Sodalite (var. hackmanite)	Pink	e ⁻
Zircon	Blue	e ⁻ (color also due to U ⁴⁺)
Zircon	Red	involves Nb ⁴⁺ (Nb = element niobium)

In the next few articles, I'll focus on nine of the most familiar minerals which are often used as ornamental stones, and which can be found in a variety of colors. I'll then conclude by listing the cause(s) of color in a number of minerals which haven't been covered previously and listing some additional sources of information

2017 Roster

The 2017 BMS Roster will be sent out with this issue of the Conglomerate. Please hang on to it so you have easy contact with members. Also, please notify me of any errors in your personal listing.

Grandma's Rock

by Mike Seeds

Do you like raw carrots? Do you know why? Maybe it's because Grandma slipped you a piece of raw carrot one day and said, "Here, this is good. Don't tell your Mom I gave it to you." Sometimes Grandma's play little tricks on us, and sometimes time plays the same kinds of tricks. Why do you like rocks? Do you really know?

When I was very small, my Grandma Seeds had a rock sitting by the living room door. It was always there, and when I came to visit and played with blocks on the floor in front of the big console radio, I would sometimes incorporate the rock in my plans. It was big and jagged and had a few sharp edges, so Grandma would warn me to be careful with it, but she never told me I couldn't play with it. After all, it was a rock; what could I do to hurt it?



Grandma Seeds' rock.
8 cm diameter.
Photo by the author.

It was actually an interesting rock. It was granite on the bottom, an analysis based on the well known fact that most unidentified rocks are granite until otherwise specified. But on top was hard white rock mixed with hard pink bits. Now I think it was quartz mixed with feldspar.

I don't know where the rock came from. I think I remember that Grandpa and Grandma "brought it back from down south". They didn't travel much, so that could be from Tilton, 5 miles south of Danville, Illinois. That's not likely. We didn't often find rocks like that in Illinois. It could be from some exotic foreign land like Kentucky or Mississippi. After all, they had lives before I came along, so the location for the rock is a mystery.

I don't remember when I saw the rock the first time; it was always there. That probably means the rock was there before I was, and that I crawled around on the floor and banged into the rock now and then before I learned to walk. I know I played with it often. Maybe that's why I liked rocks when I was older and began collecting rocks in grade school. When Grandma passed away, I asked for only two things from her house: The kitchen clock that Grandpa wound every night at bedtime, and the rock from the living room. I still have both.

Mineral of the Month—Kyanite $Al_2O_3(SiO_4)$

by Steve Weinberger

The name kyanite comes from the Greek, *kyanos*, meaning "dark blue." It is triclinic and forms mostly in bladed crystals elongated along the "c" axis. It cleaves easily which causes a pearly luster.



Minas Gerais, Brazil
Photo: R. Lavinsky - irocks.com.
Used under the Creative Commons
Attribution-Share Alike 3.0 license

It is somewhat flexible, but can break along the "c" axis. The hardness varies from 4.5 to 7 depending on the crystal face tested. It's transparent to translucent and can have colors of pale to deep blue with overtones of violet, green, white, gray, or even colorless. The streak is colorless, and density is 3.53-3.65. Better crystals can even be cut into gemstones.

Kyanite occurs in schists and gneisses, and in quartz veins of pegmatites cutting through them. It is plentiful in New England and in the Appalachian Mountains as well as many locations worldwide. Excellent crystals have been found in Yancy County, North Carolina (those of us who have visited Wildacres have seen some of these in collections of people in the area.)

Bring in a few examples of your kyanites and be ready to explain any interesting facts about them.

References.:

Bernard & Hyrsl. *Minerals and their Localities*.
Sinkankas. *Mineralogy for Amateurs*.

The rock has changed a little. It seems smaller now and not as imposing as it was when I was small. When I was using my blocks to build stockades around it, the rock had small, bright yellow blobs scattered over its surface. I've had it quite a few years now and it sits on my office desk. But the yellow blobs have shrunk and some have disappeared. I suspect they are something alive – lichen perhaps. I wonder if I should water it, or give it a little more light. After all, it got me started on a great hobby, so I owe it.

Safety Matters: A Case for Attitude

by Ellery Borow, Safety Chair from EFMLS Newsletter, March 201

I have an embarrassing story to tell. I am neither proud of, nor happy about relating the story, but here we go. Perhaps you can learn from my mistakes.

Several years ago I was persuading a rock up and out of a hole. The rock was damp and mostly covered with mud. The embarrassing part of the story is that as the rock was protesting, yet grudgingly moving upward, I hurriedly took off my gloves, and with bare hands finished wrestling the rock out of the hole.

Yes I, a huge advocate of safety took off my gloves to get a better grip to maneuver the stone. Surely you can see my dilemma and embarrassment! What I should have done was to select and work with the proper gloves before beginning the procedure of moving that rock.

Safety is an attitude. Safety should be automatic. When I didn't do the right thing, I felt embarrassed. No one saw my mistake, but I know I made it. I'm not going to beat myself up for having made it, but it does call to mind that none of us is perfect, errors occur, but, if attitude is any indication, I felt bad about make a safety mistake.

So what are the lessons to be learned here? Make safety automatic. Do give safety all the additional thought necessary to make everything one does - safe.

There are many types of gloves - select the proper ones for the task.

I had initially put on work gloves that protected by fingers, but when damp with mud, had not provided sufficient gripping power. Once the proper gloves have been selected, wear them! There are gloves for water protection, hammer handle shock protection, cushioned for chisel holding, for better gripping power, for permitting greater dexterity, and for general purpose uses.

Gloves come in different sizes. Guys with small hands take note: if you can't find a man's glove in a small size, then use a woman's glove. Fit is important and no one will know unless you select the frilly pink polka-dot ones. There are gloves that are heavy, thin, leather, cotton, canvas, synthetic, rubber tipped or dotted for gripping power, cut resistant, armored, fluorescent colored, cuffed, and on and on. Gloves come in a variety of prices. They are often cheap enough to have extra pairs - one for each task at hand - if you will pardon the pun.

Safety as an attitude is important. It is something we can do something about. Here is a great quote to keep in mind by Austrian analyst Viktor Frankl: "The last of human freedoms is to choose one's attitude in any given set of circumstances."

Be safe, wear safety. Your safety matters. And by the way, I did get that rock out of the hole, but it did leave its muddy mark on me.

Quiz: Know Your Topaz!

by Al Pribula

Question: Which of the following topaz varieties are really some other mineral?

Bohemian Topaz
False Topaz
Madeira Topaz
Spanish Topaz

Brazilian Topaz
Gold (or Golden) Topaz
Occidental Topaz
Star Topaz

Bahia Topaz
Indian Topaz
Oriental Topaz
Topaz Quartz

Citrine Topaz
King Topaz
Smoky Topaz
Topaziolite

Answers on page 8

Zincite

from RockCollector, June 2004

Zincite is, in general, a collector's stone. Due to its relative softness on the Moh's scale of 4 to 4.5 it is prone to scratching and is not considered hardy enough for wear in rings although it can be successfully used in other jewelry such as necklaces and brooches. Consequently many cut-stones tend to reside in collections. As a mineral it is found predominantly in one locality, namely in Franklin and Sterling Hill in New Jersey, U.S.A. There are, of course, other lesser deposits around the world, Tasmania, Spain and Poland have been reported, however, production from these areas fail to compare with the output of the New Jersey mines.

The mineral is basically zinc oxide with traces of manganese. It is blood red in color and gives an orange-yellow streak when tested. This is distinctive. It is the manganese that is considered to be the agent responsible for the red color, and the depth of color tends to be in relation to the content of manganese present.

Zincite is a metamorphosed weathered ore deposit, which when mined is usually found in red granular or platy masses, associated with black franklinite and white calcite, making it relatively easy to identify. Willemite may also be present in the ground mass. Once mined, the crystals have to be exposed by chipping away the calcite and franklinite that surrounds them. Crystals of zincite are hemimorphic, residing in the hexagonal system and consisting of a single basal plane and a hexagonal pyramid. Natural zincite is generally found as irregular transparent pieces, and rarely as crystals exceeding 6 mm in size and 3 carats in weight.

Few stones have been cut from this material, but those that have, exhibit the deep red color to great effect. Synthetic zincite has been grown by hydrothermal methods. The crystals so formed are generally small yellow crystals. Manganese not being present in synthetic stones probably accounts for the lack of the blood red color that is so distinctive of the natural stone. Synthetic stones do emit a dull to bright yellow fluorescence where natural stones do not fluoresce at all.

Another type of "synthetics" are the vapor phase crystals accidentally produced as a by product of the zinc based paint industry in Silesia, Poland. Here, the zinc vaporized in the kiln, mixed with the oxygen in the stack, and subsequently crystallized in the ventilation shafts of the smelters. These crystals have been known to exceed

lengths of 150 mm and diameters of 16 mm or more. These crystals cannot in reality be classed as "man made", but more as being caused as a result of man

Composition	ZnO (Zinc Oxide: Zinc 80.3%, Oxygen 19.7%)
Color	Orange-Yellow to deep red. Coloring due to Manganese content.
Hardness	4 -- 4.5
S.G.	5.4 -- 5.7
R.I.	2.013 o & 2.029 e rays.
Birefringence	Uniaxial positive 0.016
Cleavage	Perfect. Prismatic plus basal parting. Brittle
Fracture	Conchoidal
Lustre	Subadamantine
Opacity	Translucent to transparent
Streak	Orange to yellow- distinctive.
Tests	Soluble in nitric or Hydrochloric acid

Quiz: Know Your Topaz! Answers

from page 7

Which of the listed topaz varieties are not really topaz? Most likely, all of them! The only possible exception is "Star Topaz," which might be topaz, but is usually in fact yellow star sapphire. The names Bohemian Topaz, Brazilian Topaz, Bahia Topaz, Citrine Topaz, False Topaz, Gold (or Golden) Topaz, Madeira Topaz, Occidental Topaz, Spanish Topaz, and Topaz Quartz are all applied to yellow or golden quartz (i.e., citrine).

Indian Topaz, King Topaz, Oriental Topaz, and sometimes Brazilian Topaz are names used for yellow-brown corundum (i.e., yellow-brown sapphire). Smoky Topaz is another name for smoky quartz, and Topaziolite is another name for yellow-brown andradite garnet. Yeah, you've got to be careful when someone offers to sell you a "... topaz!"

Source:

H. Albert Gilg, Topazius: A Story of Fact and Fiction in Topaz: Perfect Cleavage (Lithographie)

Mark your Mineral Calendars:

ATLANTIC MICROMOUNTERS CONFERENCE

March 31 – April 1, 2017

Speaker: Mike Wise, Smithsonian Institution
Location: Springhill Suites by Marriott, Alexandria.
6065 Richmond Hwy, Alexandria, VA 22303
Phone (571) 481-4441

Details: <www.dcmicrominerals.org>
Tab Events - Conference

Kathy Hrechka, MNCA Conference Chair

AUCTION!

Gem Lapidary and Mineral Society
of Montgomery County (GLMS/MC)

11109 Rosemont Drive, Rockville, MD
(near Tuckerman Lane and Old Georgetown Road)
Open to all – members and non-members, dealers.

Saturday May 6 (rain date Sunday May 7)
10:00am auction preview
11:00am live auction starts

(Note: we are unable to accept credit cards)

A large quantity of lapidary equipment, lapidary
supplies, cutting material and slabs.

There are many flats of rough cutting material
and slabs that will be auctioned off.

For updated information and rain date notifications
please see the GLMSMC facebook page at:
<www.facebook.com/groups/984241208329511/>

44TH ROCHESTER MINERALOGICAL SYMPOSIUM

April 20 – 23, 2017

Radisson Hotel, Rochester Airport
175 Jefferson Road, Rochester, NY 14623

Speaker schedule, registration
<<http://www.rasny.org/minsymp/>>

AFMS Convention - Ventura, CA



Founded in 1947, the American Federation turns 70 years old this year and will celebrate the occasion at their annual convention in Ventura, CA on June 9 – 11. The convention will be hosted by the California Federation so we know there will be fabulous displays and wonderful dealers! For info about attending, visit <www.2017cfms-afmsshow.com/>.



"Hold it right there. I'll be back in a minute."

The Conglomerate

Mike Seeds, Editor
516 Bald Eagle Ct;
Lancaster, PA 17601



Upcoming Events

March:

18-19: Montgomery County show at the fairgrounds in Gaithersburg. Discount flier and directions at <www.glmsmc.com/show.shtml>.

22: BMS meeting at Natural History Society of MD, Belair Rd, Baltimore - 7:30 pm.

31 - April 1: Atlantic Micromount Conference, Alexandria, VA. See <dcmicrominerals.org> for more info.

April:

4: Gem Cutters Guild of Baltimore meeting at Meadow Mill. See <gemcuttersguild.com> for info. 7:30 pm

10: Passover begins

14: Chesapeake Gem & Mineral Society meeting will have a talk by Tony Wilner on Tiger Eye. See <chesapeakegemandmineral.org> for directions and more info.

16: Easter

20-23: Rochester Mineralogical Symposium, Rochester, NY.

22: Earth Day

26: BMS meeting at Natural History Society of MD. "Annual Tucson Review" by Al Pribula, Mike Seeds and Jake Slagle - 7:30 pm

May:

13: Chesapeake Gem & Mineral Show

24: BMS meeting at Natural History Society of MD. Program to be announced.

29: Memorial Day