

MNCA Website [www.dcmicrominerals.org](http://www.dcmicrominerals.org)

# The Mineral Mite



Vol. 56 – No. 7 Washington D.C. – A Journal for Micromineralogists Sept. 2023

## September 27 3-5:30pm Kings Park Library of Burke, VA

### Program: Micro Study

by Jeff Guerber, Vice President

Our September meeting will be on Wednesday, Sept. 27, 3:00 - 5:30 pm in the Kings Park Library Meeting Room (the large room). No specific program as of publication, but we do have the new Betsy Martin Collection. If anyone has programs they can present, or suggestions of others they've heard that deal with micros, please let me know! The October meeting is scheduled for Monday, October 30, 3:00-5:30 pm in the KPL Conference Room (the small room).



### President's Message:

by David Fryauff

There will be an unusual clustering of several (3) "local geological events" on the 30th of September 2023.



#1 is the limited re-opening of the Holcim-operated Hunting Hill Quarry of Rockville, Maryland to just 10 lucky members of the Gem, Lapidary, and Mineral Society of Montgomery Co., MD (GLMSMC). For decades this roddingite-serpentinite aggregate quarry was a favorite of rockhounds until the quarry mysteriously closed its doors to mineral collectors in 2008. Fred Parker, a local Maryland collector/dealer/mineralogist made this location known in a scholarly paper (The Mineralogical Record, 2004) that described the occurrence of 60 mineral species, some of which are quite rare and coveted by international collectors. Parker went on to publish a second paper in the 2014 Mineralogical Record that reported an additional 15 Hunting Hill mineral species. A lottery will determine which 10 members of the GLMSMC will be permitted to collect in this mineral-rich and famous quarry.

#2 for those who are not selected for the Hunting Hill grand opening, there will be a chance to collect on September 30th from 7:30 am until noon at the Haines-Kibblehouse Penn-MD serpentine quarry in Lancaster, Pennsylvania. This serpentinite quarry, which is a favorite of mine, quarries the rock of the same Baltimore mafic complex as the Hunting Hill quarry but is distinct in sitting squarely within the Stateline Chromite Mining District and is one of the few locations in the world where nakauriite is found.

### Mystery Micro Mineral of the Month



Clue: Locality Jenipapo District, Itinga, Minas Gerais, Brazil. FOV=4mm.

by Aloha Pete Chin, Honolulu, Hawaii

## Micromineralogists of the National Capital Area, Inc.

### President's Message continued

#3 is the REALL BIG EVENT of September 30th, starting at noon in Griffith Park at 29 South Summit Ave., in Gaithersburg, MD. This is a pot-luck picnic for members of the GLMSMC (a non-profit 501c3 educational organization) and a member's auction which I am told boasts 106 flats of personal and heirloom mineral specimens that represent many famous and now-closed worldwide locations.

It might be worthwhile for you to consider joining GLMSMC <[www.glmsmc.com](http://www.glmsmc.com)> just to be able to take part in this very large and special auction of top-quality mineral specimens.....EVEN IF you are all dedicated hearts, souls, and minds to microminerals and micromounting!!!



*Volborthite, Malachite - 5.0 mm Hodzha-Akhmet Quarry, Uchkuduk area, Navoiy, Uzbekistan  
Photomicrography credit David Fryauff*

### Mystery Micro Mineral of the Month

by Aloha Pete Chin, Honolulu, Hawaii  
Answer: Kosnarite. Jenipapo District, Itinga, Minas Gerais, Brazil. FOV=4mm.

### Previous Meeting Minutes 6.28.2023

by Bob Cooke, secretary



The Micromineralogists of the National Capital Area (MNCA) met June 28, 2023, at the Kings Park Library in Burke, Virginia. President Dave Fryauff called the meeting to order at 3:40 PM. Other members present were Jeff Guerber, Dave Hennessey, John Kress, David MacLean, Michael Pabst, and Bob Cooke.

David MacLean was recognized for his service as past President. Michael Pabst reported that no MNCA funds were expended for the Atlantic Micromount Conference (AMC) and that the checking account balance is unchanged for the prior month. Minutes of the May MNCA meeting were approved as published in The Mineral Mite.

All agreed that the AMC held on June 3<sup>rd</sup> at James Madison University was a success. The lack of vendor sales had been accepted as a condition for holding the event and attendees compensated by enthusiastically participating at the give-away tables. Future AMCs at JMU - or other universities with a geology program - was anticipated.

Dave Fryauff stated that Tom Tucker has stored several hundred pounds of rock samples from Stoutameyer Branch, Buck Hill and Sugar Grove. Much of that material had been acquired as part of the research into an article on Stoutameyer Branch that should be published in Rocks and Minerals magazine in the near future. It was suggested that Michael Pabst ask Tom if he might host a future MNCA meeting with a focus on reexamining those rock samples for micromount potential.

Future mineral-related activities were announced. A mineral show will be held July 7/8 at Lynchburg, VA. The Desautels Micromount Symposium will be held October 6-8 in Baltimore at the Natural History Society of Maryland. Continued next page. The November meeting of NVMC will feature a presentation by Scott Duresky on his research at the Amelia Mines. On the first Wednesday of each month, Mineral Talks Lives hosts a live interview with guests from all over the world to talk about their origin stories

## Micromineralogists of the National Capital Area, Inc.

and get updated on some of the things they're working on now. Details are available at [info@mineraltalkslive.com](mailto:info@mineraltalkslive.com).

Dave Fryauff related that he and Dave MacLean visited Barry Remer at his hospice care facility earlier in the day. They unhappily reported that Barry's health has declined significantly from their previous visit. The next MNCA meeting will be on Monday, July 31 from 3-6 PM in the small conference room of the Kings Park Library, Burke, VA. The meeting adjourned at 4:30PM.

### Previous Program Reviewed 6.28.2023

by Bob Cooke, secretary

Members reviewed the Atlantic Micromount Conference which was held at JMU. They resumed distribution of Barry Remer's collection.

### Previous Meeting Minutes 7.31.2023

by Bob Cooke, secretary

The Micromineralogists of the National Capital Area (MNCA) met on July 31, 2023, at the Fairfax County Kings Park Library in Burke, Virginia. The members present were Bob Cooke, David Fryauff, Jeff Guerber, Dave Hennessey, Kathy Hrechka, John Kress, Michael Pabst and Tom Tucker.

President Dave Fryauff called the meeting to order at 4:30 PM. Tom Tucker was recognized for his service as past president. Minutes of the June meeting her approved as circulated in emails to attendees. (Official minutes will be published in the September edition of the Mineral Mite.)

Michael Pabst gave the Treasurer's report and stated that the only expense was the purchase of 384 micromounts from Steve Arthur for \$900. These micromounts were mounted and labeled by Rudy Bland for Betsy Martin, a recently deceased member of the Richmond Club. MNCA members endorsed the purchase but deferred the distribution/sale of the micromounts until club members had a chance to study the collection at depth.

Michael recalled that Dani, a JMU geology student, was particularly helpful in assisting Professor Elisabeth Johnson at the AMC in July. Members authorized Michael to provide a \$100 honorarium to Dani in appreciation of her service.

Michael noted that he did not have detailed records for the distribution of minerals from Barry Remer's collection. He suggested that those members who received minerals should pay \$10 to MNCA; everyone concurred. The group also agreed that all the better minerals have already been distributed and that remaining minerals may be taken without restriction. The group discussed upcoming monthly programs. Several people expressed a desire for formal programs and not just looking at donated collections. Michael Pabst agreed to present a program in August on his trip to Sweden. In November, Scott Duresky will discuss his research on the Rutherford Mines in Amelia County, VA. Jeff Guerber encouraged members to submit recommendations for additional programs.

Announcements were made for the following events:  
Aug 12: Possible GLMS-MC field trip to a quarry near Harpers Ferry, WV

Aug 18-20: Gem Miners Jubilee in Lebanon, PA

Sep 22-24: Mineral show by the Shenandoah Gem & Mineral Society in Fishersville, VA

Sep 23: Open house at Willis Mountain Kyanite Mine

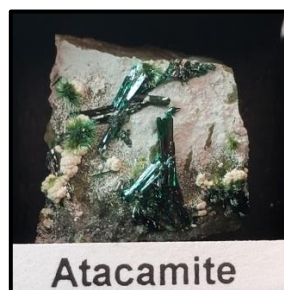
Nov 11: Rock Swap & Show of Richmond Gem & Mineral Society in Richmond, VA

The meeting adjourned at 5:00 PM.

### Previous Program Reviewed 7.31.2023

by Bob Cooke, secretary

Members in attendance previewed the micromineral collection of the late Betsy Martin. Kathy photographed two fine examples, shown below.



**Atacamite**  
*Mina La Farole,  
Copiapo, Chile*



**Wulfenite, Mimitite**  
*Mapimi Durango,  
Mexico*

Continued next page.

## Micromineralogists of the National Capital Area, Inc.



*MNCA meeting: L-R Bob Cooke, Mike Pabst, Dave Hennessey, David Fryauff, Jeff Guerber. Photo credit Kathy Hrechka*



*MNCA meeting: Betsy Martin micros by John Kress L-R Mike Pabst, Dave Hennessey, David Fryauff, Jeff Guerber. Tom Tucker, John Kress. Photo credit Kathy Hrechka*

### **Previous Meeting Minutes 8.28.2023**

by Bob Cooke, secretary

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### **Minutes 8.28.2023 continued**

President Dave Fryauff called the meeting to order at 4:00 PM. Tom Tucker was recognized for his service as past president. Minutes of the July meeting were approved as circulated in emails to attendees. (Official minutes will be published in the September edition of the Mineral Mite.)

Members agreed that the micromounts which were purchased by MNCA from the estate of Betsy Martin should be retained by the club as a “lending library” and would not be sold or otherwise given away for the foreseeable future. Bob Cooke will prepare an inventory of the collection.

Announcements were made for the following events:  
Sep: GLMS-MC field trip to Hunting Hill Quarry in Rockville, MD. This trip is a trial by the management of Aggregate Industries Travilah Quarry (quarry’s current name) prior to resuming field collecting by local mineral clubs. This trip is limited to 10 people nominated by GLMS-MC.

Sep 22-24: Mineral show by the Shenandoah Gem & Mineral Society in Fishersville, VA

Sep 23: Open house at Willis Mountain Kyanite Mine

Sep 30: GLMS-MC club-only picnic and mineral auction

Oct 6-8: The Desautels Micromount Symposium in Baltimore at the Natural History Society of Maryland

Nov 11: Rock Swap & Show of Richmond Gem & Mineral Society in Richmond, VA

The November meeting of MNCA will feature a presentation by Scott Duresky on his research at the Rutherford Mine in Amelia, VA.

The next MNCA meeting will be on September 27, 2023, at 3:00 PM in the Kings Park Library Meeting Room. The meeting adjourned at 4:30 PM.

### **Previous Program Reviewed 8.28.2023**

by Bob Cooke, secretary

Following the meeting, Michael Pabst gave a presentation about the trip which he and Karen made to Sweden in May 2023. Please note that the portion of his talk concerning the Swedish Museum of Natural History is especially fortunate as the museum is currently closed until further notice: “Due to further investigations, and roof repairs in the main building, which includes passages to adjacent spaces, the museum will be closed until further notice.” (quote from museum web site) Photos are on the next page.

**Micromineralogists of the National Capital Area, Inc.**



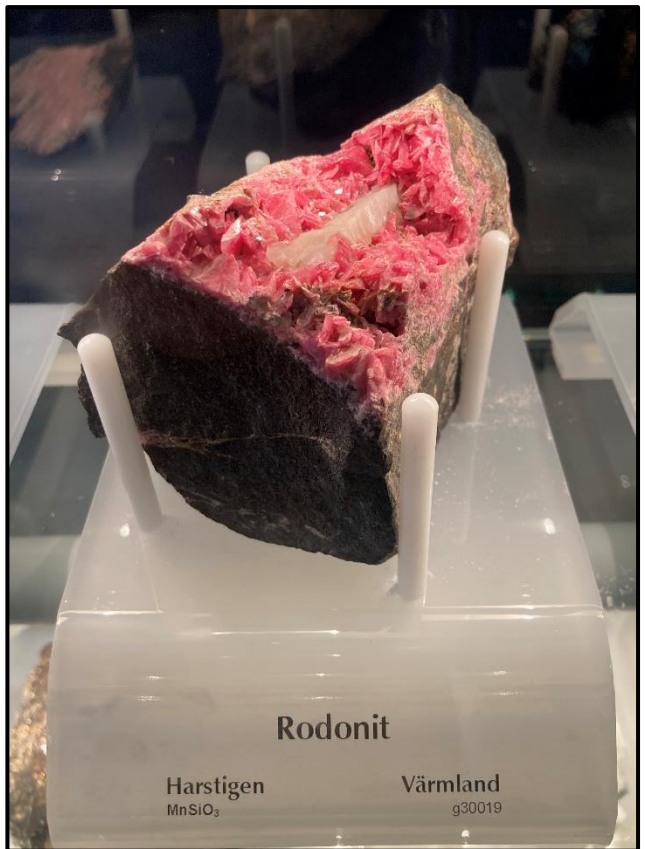
*Royal Swedish Museum of Natural History.*



*Interior of the Museum with Karen Pabst, admiring Hjalmar Sjogren's collection of minerals from roughly 1890 to 1900, in beautiful wooden cabinets with beveled glass.*



*Large Amethyst crystals from Amherst County, Virginia, part of Hjalmar Sjogren's collection.*



*Rhodonite from Sweden, from the modern systematic collection. Photo credits Michael Pabst*



*Crocoite from Dundas, Tasmania, a big specimen about 10 inches (25 cm) wide.*

## Iron Phosphates: Vivianite and Ludlamite

by Michael Pabst PhD, Treasurer

My last article featured iron arsenates. Now it's time for iron phosphates, starting with Vivianite and Ludlamite. There is one specimen of each in my collection that I acquired long ago and that are favorites of mine, especially because I was able to take good photos of them with my old Minolta film camera. There will also be other specimens with digital photos.



**Vivianite.** Vivianite is ferrous phosphate, with iron in its reduced state  $Fe^{2+}$ , but it autoxidizes to the ferric state  $Fe^{3+}$  upon exposure to light. When freshly excavated, Vivianite is pale, almost colorless. But upon exposure to light, it rapidly darkens, first to green, then blue, then dark purple, then nearly black. The color stability varies at different localities, suggesting trace contaminants might catalyze the darkening. All Vivianite specimens should be kept in total darkness. An amusing article by Alfredo Petrov has a good explanation and a beautiful photo: <https://www.mindat.org/article.php/137/A+Scientific+Study+of+the+Absorption+of+Evil+by+Vivianite>.

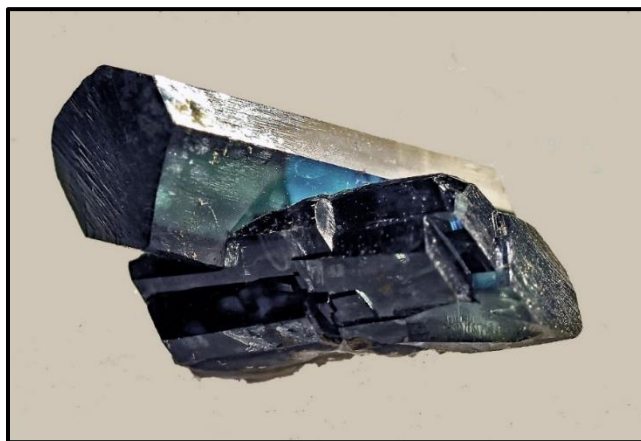
The formula for Vivianite is  $Fe^{2+}_3(PO_4)_2 \cdot 8H_2O$ , like that of the similar arsenates in the Vivianite Group, namely Parasymplesite  $Fe^{2+}_3(AsO_4)_2 \cdot 8H_2O$ , Erythrite  $Co^{2+}_3(AsO_4)_2 \cdot 8H_2O$ , and Annabergite  $Ni^{2+}_3(AsO_4)_2 \cdot 8H_2O$ , all three of which were described in previous articles. All members of the Vivianite Group are monoclinic  $2/m$  – prismatic. Hardness  $1\frac{1}{2}$ –2, sectile, with perfect cleavage. Vivianite was named for John Henry Vivian, a mine owner and mineralogist from Truro in Cornwall, England. Wheal Kine, St. Agnes, Cornwall is the type locality.

Here is my favorite Vivianite specimen in a Kodachrome slide:



*Vivianite, Blackbird Mine, Lemhi County, Idaho. FOV 9 mm. Photo and specimen by Michael Pabst, using a Minolta 50 mm macro lens and Kodachrome film. Nicknamed "Train Wreck".*

Vivianite is one of the few mineral specimens I have from the state of Florida. Phosphate mining has been a major industry in Florida. In summers during high school, I drove a big forklift at Bucyrus-Erie company in South Milwaukee, which made huge stripping shovels and draglines. The highest point in Florida was made by a Bucyrus dragline that was mining phosphate. Here is a short video of a Bucyrus dragline now mining aggregate in Florida: <https://www.youtube.com/watch?v=-vqbmVJZNM8>. In my imagination, the Florida phosphate specimen below is a connection to my youth:



*Vivianite, Clear Springs Mine, Bartow, Polk County, Florida. FOV 12 mm. Photo and specimen by Michael Pabst. Single digital photo with macro lens. Styrofoam background replaced with gray, using Photoshop.*

Continued next page.

## Iron Phosphates continued

The Vivianite specimens from the Morococala Mine, Santa Fe, Oruro, Boliva are famed for their beautiful green color, which is relatively stable:

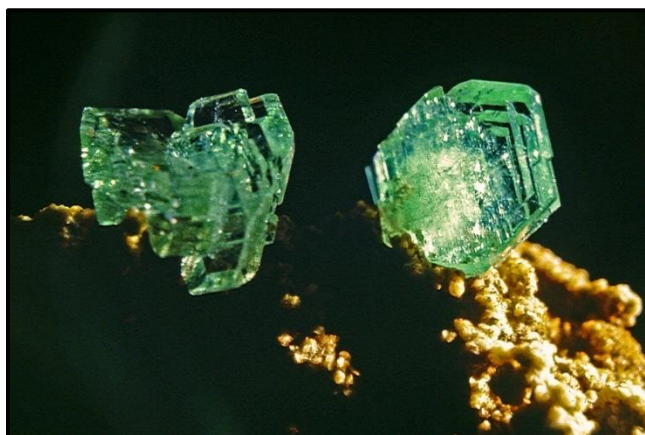
<https://www.mindat.org/photo-20917.html>.

Purple Vivianite specimens from the Blackbird Mine in Idaho are also prized:

<https://www.mindat.org/photo-225072.html>.

(Rob Lavinsky photos.)

**Ludlamite.** Ludlamite is also a hydrous ferrous phosphate  $\text{Fe}^{2+}_3(\text{PO}_4)_2 \cdot 4\text{H}_2\text{O}$ . Unlike Vivianite, Ludlamite appears stable to light. With a similar formula and crystal structure to Vivianite, it is surprising that Ludlamite is stable. Hardness  $3\frac{1}{2}$ , brittle not sectile, perfect cleavage, apple green. Ludlamite is monoclinic  $2/m$  – prismatic, with  $\beta = 100.43^\circ$ . Ludlamite was named for Henry Ludlam, a mineral collector from London. The type locality is Wheal Jane in Cornwall. Here is my favorite Ludlamite in Kodachrome:



*Ludlamite, San Antonio Mine, Santa Eulalia, Chihuahua, Mexico. FOV 15 mm. Photo and specimen by Michael Pabst, using macro lens and Kodachrome film.*

Here is a good specimen of Ludlamite from Santa Eulalia, photographed by Matt MaGill:

<https://www.mindat.org/photo-1099756.html>.

Here is my less impressive Ludlamite specimen from Idaho:



*Ludlamite. Blackbird Mine, Lemhi County, Idaho. FOV 8 mm. Photo and specimen by Michael Pabst. Digital photo using macro lens, stacking 75 images.*

Ludlamite and Vivianite can be found together, as in this example of a micro-mineral specimen from the Salsigne Mine in France, with photo by Andre Castro:

<https://www.mindat.org/photo-390422.html>. It's too bad that this next specimen from the Blackbird Mine in Idaho is too large for my collection, because it features a nice combination of the two iron phosphates: <https://www.mindat.org/photo-1311544.html>.

Earlier in my life, I spent a lot of time and money trying to take photos with Kodachrome film. After guessing the exposures, then mailing the exposed film to Kodak, and waiting several weeks, I received many boxes of duds, with perhaps one or two good slides in a box of 36. But in a few instances, I think that the results were spectacular, as in the two Kodachrome photos here (Vivianite from Idaho and Ludlamite from Florida). I am glad to have an excuse to show off these early photos.

The next few articles will continue to explore iron phosphates.

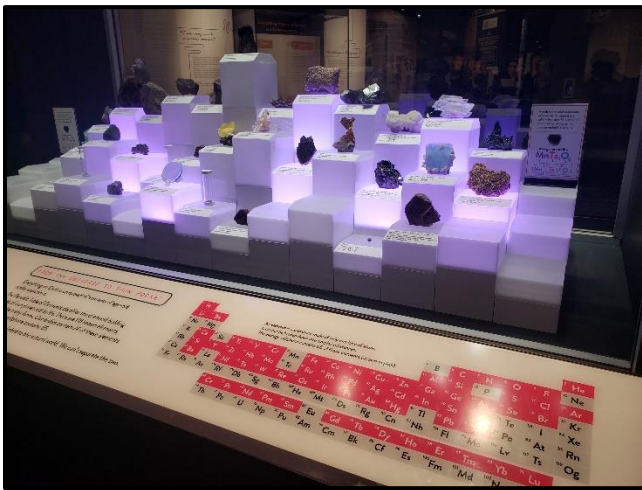
## Cellphone: Unseen Connections Smithsonian's Newest Exhibit NMNH

by Kathy Hrechka

Volunteers were recently invited to a behind-the-scenes tour of the new Cellphone exhibit, led by Exhibits Developer Christyna Solhan, and Exhibit Educator Jennifer Collins. The exhibit was designed by Dr. Josh Bell, Curator of Globalization. Our special tour was organized by Agustin Baldioli and Jonathan Rodriguez, Program Coordinators for volunteers.

The display features more than 350 objects ranging from the first commercial cellular phone to undersea cables in the Atlantic. This exhibit gives the visitor a chance to contemplate how cell phones impact our lives while connecting us to the natural world.

Since I volunteer in the Geology, Gems, & Mineral Gallery, I focused on 65 native elements on a (double sided display) that are mined for this technology. The central geological display is divided into five categories: touchscreen, camera, motherboard, battery, and case body. Colored lighting show which elements are used in which phone parts.



*"Everything in your cellphone comes from the Earth. The mineral specimens represent 65 different elements found in the average cellphone". Exhibit credit*



*Camera: Aqua blue lighting indicates which elements are mined for construction of the camera.*



*Motherboard: Yellow lighting indicates which elements are mined for construction of the motherboard.*

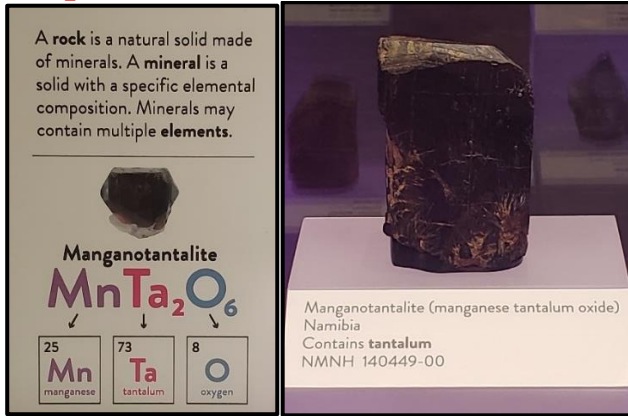


*Zircon, Silver, Sphalerite, Sulfur, Quartz*

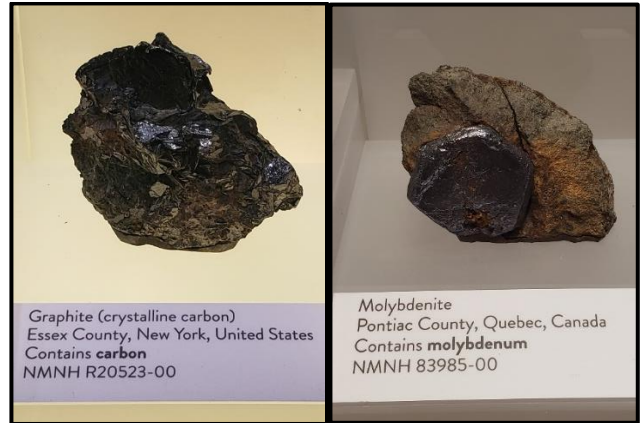


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Cellphone continued

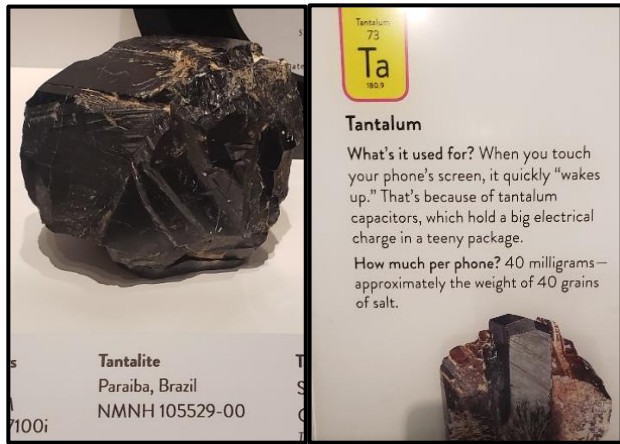


Manganotantalite contains element Ta tantalum



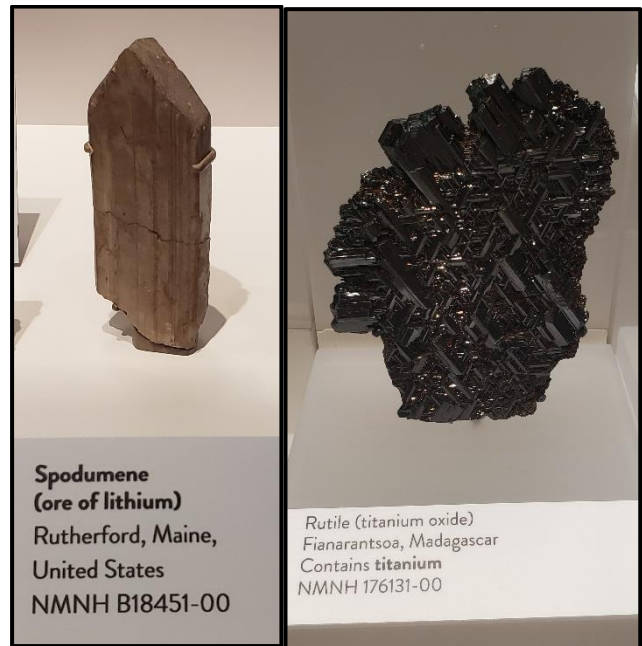
Graphite C Carbon

Mo Molybdenite



Tantalite mineral mined for Ta Tantalum capacitors.

“What is it used for? When you touch your phone’s screen, it quickly “wakes up.” That’s because of tantalum capacitors, which hold a big electrical charge”. Exhibit credit



Spodumene mined for Li Lithium

Rutile mined for Ti Titanium



Gold: powering phones, including tech staples such as gold-plated SIM cards.

The Cellphone: Unseen Connections exhibit opened in July 2023, and will continue through 2026. It is sponsored by Qualcomm with major support by T-Mobile. Photo credits Kathy Hrechka

Note by Kathy: This exhibit is a global display of how cell phones have evolved and connected us through the natural world. While my article focused on geology, that’s just a small part of this grand display.

**“Periodic Table of a Smartphone”**

by Kathy Hrechka

The Cellphone: Unseen Connections exhibit has been a long-anticipated exhibit for me, since I have been promoting an educational cart to guests in the Geology Gems, & Mineral gallery for years, “Periodic Table of a Smartphone”. My goal with visitors is to promote the highlighted 35 native elements which need to be mined for technology, specifically our cell phone.



The cart contains four mineral/ore samples; spodumene mined for Li lithium, chalcopyrite mined for Cu copper, magnetite mined for Fe iron, and bauxite mined for Al aluminum. The complimenting phone components and processed ores complete the Earth science lesson.



Dr. Mike Wise & Dr. Josh Bell cell phone researchers

Note by Kathy: I consider this cart valuable. It has become a major conversation piece for our youth as well as seniors. I also promote the periodic table of elements app which can be downloaded on our cell phones. I believe if our youth are on the internet, why not give them a purpose to learn chemistry of geology. I also direct guests to notice minerals and their chemical formulas in the mineral gallery.

**PERIODIC TABLE OF A SMARTPHONE**

										2 He Helium							
1 H Hydrogen	3 Li Lithium		4 Be Beryllium	5 B Boron	6 C Carbon	7 N Nitrogen	8 O Oxygen	9 F Fluorine	10 Ne Neon	11 Na Sodium	12 Mg Magnesium	13 Al Aluminum	14 Si Silicon	15 P Phosphorus	16 S Sulfur	17 Cl Chlorine	18 Ar Argon
19 K Potassium	20 Ca Calcium	21 Sc Scandium	22 Ti Titanium	23 V Vanadium	24 Cr Chromium	25 Mn Manganese	26 Fe Iron	27 Co Cobalt	28 Ni Nickel	29 Cu Copper	30 Zn Zinc	31 Ga Gallium	32 Ge Germanium	33 As Arsenic	34 Se Selenium	35 Br Bromine	36 Kr Krypton
37 Rb Rubidium	38 Sr Strontium	39 Y Yttrium	40 Zr Zirconium	41 Nb Niobium	42 Mo Molybdenum	43 Tc Technetium	44 Ru Ruthenium	45 Rh Rhodium	46 Pd Palladium	47 Ag Silver	48 Cd Cadmium	49 In Indium	50 Sn Tin	51 Sb Antimony	52 Te Tellurium	53 I Iodine	54 Xe Xenon
55 Cs Cesium	56 Ba Barium	57-71 ★	72 Hf Hafnium	73 Ta Tantalum	74 W Tungsten	75 Re Rhenium	76 Os Osmium	77 Ir Iridium	78 Pt Platinum	79 Au Gold	80 Hg Mercury	81 Tl Thallium	82 Pb Lead	83 Bi Bismuth	84 Po Polonium	85 At Astatine	86 Rn Radon
87 Fr Francium	88 Ra Radium	89-103 ★★	57 La Lanthanum	58 Ce Cerium	59 Pr Praseodymium	60 Nd Neodymium	61 Pm Promethium	62 Sm Samarium	63 Eu Europium	64 Gd Gadolinium	65 Tb Terbium	66 Dy Dysprosium	67 Ho Holmium	68 Er Erbium	69 Tm Thulium	70 Yb Ytterbium	71 Lu Lutetium
89 Ac Actinium	90 Th Thorium	91 Pa Protactinium	92 U Uranium	93 Np Neptunium	94 Pu Plutonium	95 Am Americium	96 Cm Curium	97 Bk Berkelium	98 Cf Californium	99 Es Einsteinium	100 Fm Fermium	101 Md Mendelevium	102 No Nobelium	103 Lr Lawrencium			

## Micromineralogists of the National Capital Area, Inc.

### The Baltimore Mineral Society 67<sup>th</sup> Paul Desautels Memorial Micromount Symposium October 6-8, 2023

by Mike Seeds, PhD, conference chair & editor BMS

Location: Natural History Society of Maryland 6908  
Belair Rd, Baltimore, MD 21206

#### Friday, October 6

7:00 PM Registration, Coffee, and Treats  
8:00 PM Fellowship with other Micromounters  
and informal programs given by participants  
**Short Talks and Slide Shows to be Announced**

#### Saturday, October 7

9:00 AM Symposium Opens – Trading, Giveaway  
tables, Mineral sales, Silent Auction,  
10:00 AM Silent Auction  
12 Noon Light Lunch (provided)  
2:00 PM Voice Auction  
3:00 PM **Micromounters' Hall of Fame  
Induction** conducted by Quintin Wight  
Ray DeMark and Martin Stolworthy

#### Killham Mine. A Story of a Minor Cornish Tin Mine by Martin Stolworthy

5:00 PM Dinner (at local restaurants on your own)  
7:30 PM **Notable New Mexico Microminerals** by  
Ray DeMark  
9:00 PM Symposium adjourns for the day.

#### Sunday, October 8

9:00 AM Trading, Giveaways, Conversation  
11:00 AM **Theory and Practyse of  
Micromounting** by Quintin Wight  
12 Noon Symposium Concludes

#### BMS Officers

Al Pribula [apribula@towson.edu](mailto:apribula@towson.edu) President  
Herb Close [hclose@live.com](mailto:hclose@live.com) Vice President  
Steve Weinberger [cscrystals2@gmail.com](mailto:cscrystals2@gmail.com) Treasurer  
Jake Slagel [jake@jakeslagle.com](mailto:jake@jakeslagle.com) Secretary  
Mike Seeds [mseeds@fandm.edu](mailto:mseeds@fandm.edu) Symposium Chair

**Registration:** Registrations will be accepted by mail  
or will be taken at the door either Friday night or  
Saturday morning. We encourage you to pre-register  
by mail prior to October 2nd.

**Registration Fee:** The fee for the Symposium this  
year is \$30.00 in advance or \$35.00 at the door.  
(includes dessert on Friday evening and light lunch  
on Saturday). Dinner will be on your own at local  
restaurants both Friday and Saturday evenings.

**Digital Programs:** Short informal digital  
(PowerPoint) programs are welcome on Friday night.  
We request that you notify the Chair in advance of  
the content of your program. Programs should not  
exceed 15 minutes and should be provided on a  
memory stick. It will not be possible to swap  
computers. A digital projector and laptop will be  
available.

**Sales:** Micromounts and mineral specimens of  
interest to micromounters will be available. Small  
tools, boxes, loupes, and other items also will be  
available. Contact Mike Seeds  
([mseeds@fandm.edu](mailto:mseeds@fandm.edu)) for Sales and facilities ahead  
of time if you desire to sell any items at the  
Symposium.

**Donation Auction:** Please contact Al Pribula  
([apribula@towson.edu](mailto:apribula@towson.edu)) to donate any items for the  
Saturday auctions to benefit the Micromounters' Hall  
of Fame.

**Give-Away Table:** A key characteristic of  
micromounters is our pleasure in sharing. Giveaway  
tables will be provided for the sharing of surplus  
specimens.

In the past, these have come from dozens  
of localities across the U.S., Canada, and other  
countries. Please help to make this a valuable part of  
the Symposium by bringing good material to share.

**Display:** Items of historical interest will be on  
display, including items from the Baltimore Mineral  
Society Historical Collection of micromounts and  
copies of the Hall of Fame Citations.

**Zoom:** Some parts of the Symposium will be  
available by Zoom. These parts will include the Hall  
of Fame presentations, the Hall of Fame  
announcements of honorees for 2024, talks on  
Saturday and Sunday morning. (No refreshments,  
lunch, giveaways or other rocks are available by  
Zoom.) For a Zoom invite email Mike Seeds  
[mseeds@fandm.edu](mailto:mseeds@fandm.edu).

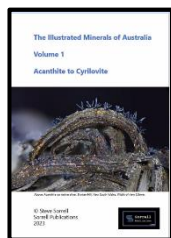
The Mineral Mite September 2023

## Micro Club Zoom Meeting - Australia Aug 15, 2023 review

by Kathy Hrechka

### Program: Minerals of Australia The “C” List – Part 1 Cacoxenite to Chromite by Steve Sorrell

Steve gave us a preview of some of the 348 species of 1,050 minerals featured in his new book.



“Australia is a big country, over 7.6 million square kilometres in area, comprising the mainland of the Australian continent, the island State of Tasmania, and a number of smaller island Territories. It is the oldest, flattest, and driest continent. Australia is comprised of five mainland States: New south Wales, Queensland, south Australia, Victoria, Western Australia, and the island of Tasmania, as well as two Territories: the Australian Capital Territory and the Northern Territory.” A few example minerals are featured here.



## Sept 19, 2023 (4:00 pm ET)

Program: Henk Smeets will present the Minerals of the Azores.

Steve Sorrell resides in Melbourne, Australia and hosts various geology persons of interest at his micromount meeting each month on Zoom. You can sign up for Steve’s programs, while enjoying friendly faces within our geology community around the globe.



“The vast majority of presentations, apart from the first few sessions, have been recorded and are available on my YouTube Channel. You can now register for upcoming sessions. Once registered, you will receive an email and the opportunity to save the Zoom session in your (Google, Yahoo, or Outlook) calendar, and this will be in your local time zone.” Steve’s website

Register for this and other future Zoom sessions here:

[Micromount Club Zoom Sessions - Crocoite.com](https://www.crocoite.com)

[steve@sorrellpublications.com](mailto:steve@sorrellpublications.com)

*MNCA Editor’s note: thanks to Steve Sorrell from Melbourne, Australia, we have been connecting with new mineral friends around the world for the past three years. I have learned that he is a master photomicrographer, as well as an author of mineral books and a talented artist.*

**Mineral Talks Live Sept 6 @ 1pm ET**

Speaker: John Cornish Mineral dealers

[John Cornish Minerals](http://JohnCornishMinerals.com)



Topaz, pegmatite No. 206 pit at the Volyn deposit, Ukraine. Photograph by Vsevolod Chournousenkominine geologist and courtesy of Martin Stevko.

“John Edwin Cornish is a notable figure in mineralogy and paleontology. His passion for crystals began at age 29 when he rediscovered minerals at a friend & #39’s house. Before this, he worked as a Teamster, River Rafting Guide Trainer, and Woods Runner, reflecting his love for physical work and adventure. John & #39’s field collecting took him to places like the Spruce claim and Rock Candy mine, unearthing impressive specimens.

He actively engaged with the Friends of Mineralogy and the Mineralogical Record, sharing his discoveries and knowledge. Among his remarkable findings are a new genus and species of a fossil whale and a massive flightless swimming bird, both donated to the Washington State Museum of Natural History and Culture. Establishing his business, John Cornish Minerals, attending mineral shows, and educating others through his Geology ROCKS! program contributed to his prominent role in the field”. Register in advance for this webinar: <http://go.mineraltalkslive.com/register>

After registering, you will receive a confirmation email containing the link joining the webinar.

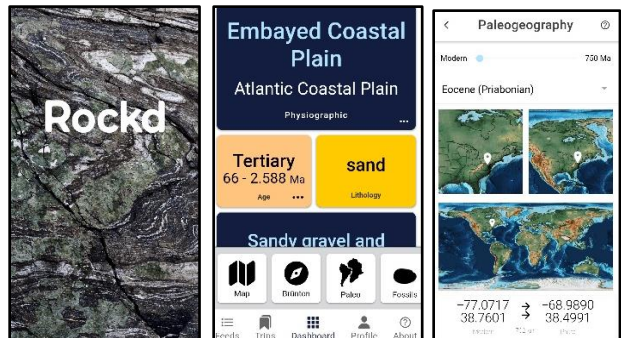
Mineral Talks LIVE - Brought to you by Dr. Raquel Alonso-Perez of The Mineralogical and Geological Museum at Harvard University (MGMH), Dr. Eloïse Gaillou of l’École des Mines de Paris, and The Society of Mineral Museums Professionals (SMMP) and Bryan Swoboda of BlueCap Productions.

**D. Fryauff’s Micromineral of the Day**



Cupro-adamite, Mina Ojuela, Mapimi, Durango, Mexico FOV 24 mm. Photomicrography by David Fryauff

**Rockd App: Recommended by MSDC attendee at Zoom meeting 6.7.2023**



Note from Kathy: I installed the app and noticed that it offers many options of local geology, including elements. I’ll be sure to test it out while traveling.



## Micromineralogists of the National Capital Area, Inc.



American Federation of Mineralogical Societies

(AFMS)  
[www.amfed.org](http://www.amfed.org)

**Please read the AFMS bulletin attached in original monthly email to MNCA members.**

2023 Purpose of the AFMS: To promote popular interest and education in the various Earth Sciences, and in particular the subjects of Geology, Mineralogy, Paleontology, Lapidary, and related subjects, and to sponsor and provide ways to coordinate the work and efforts of all interested persons and groups; to sponsor and encourage the formation and international development of Societies and Regional Federations and thereby to strive toward greater international good will and fellowship.



**Celebrating 50 years!**  
The Rock & Gem magazine is recognized as the official magazine of the AFMS.  
Free archived downloads

[Rock & Gem Magazine Archive : Free Download, Borrow, and Streaming : Internet Archive](#)



Eastern Federation of Mineralogical and Lapidary Societies

(EFMLS)  
<https://efmls.org>

**Communication and Involvement  
Are the Keys to Our Success!**

**Please read the EFMLS bulletin attached in original monthly email to MNCA members.**

### Local Geology Club Meetings:

#### September 2023

**6: Mineralogical Society of the District of Columbia**  
MSDC 7:30pm **Zoom** Speaker Dr. Tim Rose  
[www.mineralogicalsocietyofdc.org](http://www.mineralogicalsocietyofdc.org)

**11: The Gem, Lapidary and Mineral Society of Montgomery County, Maryland - GLMSMC**  
Meeting 7:30 pm [www.glmsmc.com](http://www.glmsmc.com)

**??: The Gem, Lapidary and Mineral Society of Washington, DC - GLMS-DC meeting** 7 p.m.  
Chevy Chase Community Center, 5601 Connecticut Ave; Washington, DC. [www.glmsdc.org](http://www.glmsdc.org)

**18: Northern VA Mineral Club NVMC** 7:30pm on **Zoom** Speaker Casper Voight  
[www.novamineralclub.org](http://www.novamineralclub.org)

**20: Baltimore Mineral Society BMS meeting**  
[www.baltimoremineralsociety.org](http://www.baltimoremineralsociety.org)

**27: Micromineralogists of the NCA, Inc. MNCA**  
3-5:30pm Kings Park Library, Burke  
[www.dcmicrominerals.org](http://www.dcmicrominerals.org)

### **Micromineral Symposium 2023:**

**October 6-8, 2023, 67<sup>th</sup> Annual Paul Desautels Memorial Micromount Symposium** Baltimore, Maryland at the Natural History Society of Maryland on Belair Road. (New location) Details on p. 8.

## Micromineralogists of the National Capital Area, Inc.



### GeoWord of the Day and its definition

**izoklakeite** A metallic lead-gray orthorhombic mineral:  $(\text{Pb}, \text{Ag})_{26.5}(\text{Cu}, \text{Fe})_2(\text{Sb}, \text{Bi})_{19.5}\text{S}_{57}$ .

**moorhouseite** (moor'-house-ite) A pink monoclinic mineral of the *hexahydrite* group:  $(\text{Co}, \text{Ni}, \text{Mn}^{2+})\text{SO}_4 \cdot 6\text{H}_2\text{O}$ .

**phillipsburgite** (phil'-lips-burg-ite) A green monoclinic mineral:  $(\text{Cu}, \text{Zn})_6(\text{OH})_6[(\text{As}, \text{P})\text{O}_4]_2 \cdot \text{H}_2\text{O}$ . It is the arsenate analogue of kipushite.

**tedhadleyite** A dark red to black triclinic mineral:  $\text{Hg}^{2+}\text{Hg}^{1+}_{10}\text{O}_4\text{I}_2(\text{Cl}, \text{Br})_2$ .

**zvyagintsevite** (zvy''-a-gint'-sev-ite) A metallic white cubic mineral:  $(\text{Pd}, \text{Pt}, \text{Au})_3(\text{Pb}, \text{Sn})$ .

All terms and definitions come from the [Glossary of Geology, 5th Edition Revised](#).

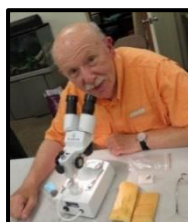
GeoWord of the Day is brought to you by: EnviroTech! [envirotechonline.com](http://envirotechonline.com).

### Barry Remer update. Please visit him.

by Kathy Hrechka

We learned that Barry is now bedridden, and happy to converse with us. We so love Barry and remain his family within our geology community. Please visit him or send a card to brighten his day. Sincerely, Kathy

**Barry Remer**  
Potomac Place  
3236 Locker Street  
Falls Church, VA 22042  
Potomac Place phone  
571-378-0295



### Micromineralogists of the National Capital Area [www.dcmicrominerals.org](http://www.dcmicrominerals.org)

We are temporarily meeting at Kings Park Library in Burke, 3-5:30pm (forth Monday) until we locate a permanent meeting place.

**MNCA Purpose:** To promote, educate and encourage interest in geology, mineralogy, and related sciences.

President: David Fryauff  
Vice President: Jeff Guerber  
Secretary: Bob Cooke  
Treasurer: Michael Pabst  
Editor/Historian: Kathy Hrechka  
Website: Kathy Hrechka  
AMC Conference: open

#### The society is a member of:

- \* Eastern Federation of Mineralogical and Lapidary Societies (EFMLS) [www.efmls.org](http://www.efmls.org)
- \* American Federation of Mineralogical Societies (AFMS) [www.amfed.org](http://www.amfed.org) affiliation

**Dues:** MNCA Membership **Dues 2023**  
\$15 (single) or \$20 (family) donations  
**MNCA - Michael Pabst, Treasurer**  
270 Rachel Drive  
Penn Laird, VA 22846

#### Editor's Note: By Kathy Hrechka

Send your articles and photos to your editor.  
**Club Article Deadline is 1st of each month.**  
**The Mineral Mite will be emailed by 5th.**  
**No newsletter July/August**

### Inducted into Editor's Hall of Fame – 2018 EFMLS Trophy 2021 Small bulletins

#### Newsletter inputs:

- \* David Fryauff
- \* Jeff Guerber
- \* Michael Pabst
- \* Bob Cooke
- \* Kathy Hrechka
- \* Pete Chin
- \* Mike Seeds



**ite September 2023**