

MNCA Website <u>www.dcmicrominerals.org</u>
The Mineral Mite



Vol. 57 – No. 4 Washington D.C. – A Journal for Micromineralogists April 2024

# Meeting: April 29 3-5:30pm Kings Park Library, Burke

# **Program: Eclipse / Micromineral Study**

by Jeff Guerber, Vice president

Let's talk about a REALLY BIG rock this month... like the Moon! Did you go see the eclipse on April 8? Tell us about your experience! And if you have any lunar meteorites in your collection, bring them along to show. Or other small



meteorites, for that matter. The May meeting will be on TUESDAY May 28, KPL large meeting room.

# **Mystery Micro Mineral of the Month**



Clue: Near ruins of Lombodas, Lagoa do Fogo, São Miguel Island, Azores. By Peter Chin, Honolulu, HI

#### **President's Message:** by David Fryauff

There is an interesting discussion on Mindat that was initiated by our friend, Herwig Pelckmans. He is in possession of a micro specimen labeled as artinite from somewhere



in Pennsylvania and brought this mineral to the attention of others on the Mindat discussion page.

Among a virtual bounty of PA minerals on a giveaway table, there was a "storied" Blue Ball Quarry in Blue Ball, Lancaster Co., PA. I found pyrite crystal embedded in phyllite from this site, and calcite, dolomite, and quartz. I was surprised to see some tiny hexagonal chlorite/clinochlore crystals and two other unusual minerals, one of which was composed of tiny bright white fibrous crystals forming frost-like patterns on the smooth faces of the larger calcite, quartz, and dolomite crystals. It seems like it may be a good candidate for artinite, which has been found down in the Cedar Hill quarry and the adjacent Haines-Kibblehouse Penn-Md quarry down in the state line serpentine & chromite mining district.

I thought I found thomsonite crystals, but thomsonite is not on the list of 125 minerals that Mindat lists for Lancaster County, PA. They have flat bladed crystals with straight-edged, and not to be confused with wavellite or hydromagnesite which are found throughout Lancaster County.

Continued next page.



Artinite? FOV = 6.0 mm from Blue Ball Stone Quarry, Lancaster Co., PA. David Fryauff

### Mystery Micro Mineral of the Month

Answer: **Fogoite-(Y)**. Near the ruins of Lombodas, Lagoa do Fogo, São Miguel Island, Azores. by Aloha Peter Chin, Honolulu, Hawaii

# Previous Meeting Minutes 2.26.2024

by Jeff Guerber

The Micromineralogists of the National Capital Area (MNCA) met on March 25, 2024, at the Fairfax County Kings Park Library in Burke, Virginia. Members present were Bob Cooke, Dennis Coskren, David Fryauff, Jeff Guerber, Dave Hennessey, Kathy Hrechka, Michael and Karen Pabst, and John Weidner.

The business meeting was called to order at 4:05 pm by President David Fryauff. No past presidents were in attendance. There were no objections to the minutes of the previous meeting in the Mineral Mite.

President Fryauff began by informing the club of the passing of our friend and longtime MNCA member Barry Remer the previous week. We observed a minute of silence in Barry's honor. Dave then spoke of a few memories of Barry, and Kathy Hrechka added that Barry had for many years been the liaison to the Long Branch Nature Center, our previous meeting place, for both MNCA and the Northern Virginia Mineral Club. Arrangements were not known at the time of the meeting.

Dave Fryauff, assisted by Dennis Coskren and Tom Tucker, demonstrated micromounts at the Gem, Lapidary, and Mineral Society of Montgomery County's annual show at the Gaithersburg Fairgrounds, March 16-17. He reported that a good number of people stopped by. John Weidner said that he ran into Jeff Post, who recently retired from the Smithsonian Institution, who was attending the show on his own time.

Dave Fryauff related the story of Jeff Post and Tim Rose's (both Smithsonian Institution) trip to the Middle East, that they had presented at the GLMS Montgomery County's monthly meeting. In Old Business, Dave Fryauff attended the Leidy Microscopical Society Micromount Symposium in Philadelphia.

Treasurer Michael Pabst reported on the club's treasury. Kathy Hrechka gave a brief report on the AMC funds. Michael Pabst and Kathy Hrechka discussed consolidating the Atlantic Micromount Conference (AMC) funds with the general club accounts and purchasing an additional CD. The motion passed unanimously. Michael will also approach Liz Johnson at James Madison University about hosting the AMC again this year.

Dave Fryauff mentioned that upcoming shows include the Chesapeake Mineral Show on April 20 [http://www.chesapeakegemandmineral.org/clubshow.html] and the Gem Miner's Spring Show on June 8-9 [www.gem-show.com], both at the Howard County Fairgrounds. MNCA club giveaways included a flat of lovely brown fluorite crystals and associated minerals in matrix from the Stoneco White Rock Quarry in Clay Center, Ohio, contributed by Tom Kottyan of The Mineral House and brought by Dave Hennessey. Other minerals may include (according to Mindat) calcite, celestine, galena, marcasite, pyrite, sphalerite, and sulfur. Thanks Tom! The business meeting then adjourned, and Michael Pabst presented Part 2 of his and Karen's trip to Greece: The University of Athens Mineral Museum, with emphasis on the minerals of Greece and especially Lavrion (Laurium).

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



John Weidner, MSDC treasurer demonstrated his new digital microscope, which he uses to invite students to appreciate and identify minerals. John hosts monthly programs along with other volunteer club members at the Kings Park Library.



John Weidner's digital microscope.



Dennis Coskren & Jeff Grueber



Dave fryauff sorting freebie microminerals.



Unknown micromineral from Blue Ball Stone Co. Quarry, Lancaster County, Pennsylvania

# Previous Program Review 2.26.2024

# Mineral Museum of the University of Athens, Greece

by Michael Pabst PhD, Treasurer

At the March 2024 meeting of MNCA, I showed photographs of minerals preserved in the Mineral Museum of the University of Athens. This somewhat remotely located museum proved to be well



worth some trouble to find. Here are a few photos, all taken by me using an iPhone. The first photos show minerals typical of the Lavrion District in Greece.



Hilarionite (green) and Chalcanite (blue), Hilarion Mine, Lavrion, Greece.  $Fe^{3+}{}_2(SO_4)(AsO_4)(OH) \cdot 6H_2O$ .



Gypsum. Paleokamariza, Lavrion, Greece



Glaucocerinite, Hilarion 3, Lavrion, Greece.  $(Zn_1, xAl_x)(OH)_2(SO_4)_{x/2} \cdot nH_2O$ 



Azurite, Conichalcite, Olivenite, Arsenocrandallite CaAl<sub>3</sub>(AsO<sub>4</sub>)(AsO<sub>3</sub>OH)(OH)<sub>6</sub>, Christiana 2, Lavrion, Greece.

Continued next page.

# **Mineral Museum continued**



Serpierite, Lavrion, Greece  $Ca(Cu,Zn)_4(SO_4)_2(OH)_6\cdot 3H_2O.$ 



Manganese-rich Calcite from Chalkidiki in Northern Greece

The collection is strong in Russian Minerals like Crocoite and Dioptase.



Crocoite from the type locality at the Berezovsk deposit in the Urals of Russia.



Dioptase from the type locality at Altyn Tyube, Kazakhstan.

Finally, saving the best for last, an amazing Aragonite "Sea Sculpture".



Aragonite. Exi Mine, Agrileza, Greece.

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

#### **Pigments of Greek Temples**

by Michael Pabst PhD, Treasurer

When we look at an ancient Greek temple like the Parthenon on the Acropolis in Athens, we see a marble edifice that has been reconstructed from old carved marble blocks of earthy tan color, with bright new white marble filling in the missing bits. But when the temple was built 447-432 BC, it was all new marble that was bright white, but also with much brightly colored ornamentation. Here is an illustration of the Parthenon with colors as they originally existed.



Illustration of how the Parthenon looked when new, with bright colored pigments.

The bright colors came from pigments made of natural minerals like Azurite (blue) and Malachite (green) and Hematite (red), many from the Lavrion mines, as shown in the next photo.



Pigments from the Lavrion Mines, like Azurite, Malachite, Conichalcite, Goethite, Jarosite, Hematite (right to left).

Other pigments were imported, like Lapis Lazuli.



Imported Pigments like Lapis Lazuli from Afghanistan on the left, Ochre (iron hydroxide) from Cyprus in the middle, and Hematite from the Greek island of Lemnos on the right.

Some pigments were manufactured, like Egyptian Blue and Lead White.



Synthetic pigments, including (right to left) Egyptian Blue (Cuprorivaite, calcium copper silicate, when natural), and Lead White (Hydrocerussite and Cerussite when natural), and Verdigris (copper acetate).

Continued next page.

# **Mineral Museum continued**



Pigment display shown in the Acropolis Museum in Athens, with a chunk of the mineral on the top row, the powdered mineral pigment in tubes in the middle, and the resulting color patch on the bottom.

The mineral pigment would be ground finely, then mixed with egg whites (tempura), animal glue or casein (milk protein), or natural resins. Real oil paints did not appear until the Renaissance in Northern Europe. These early paints would not have lasted long when exposed to the elements. Perhaps they were protected with wax or resin. Greek statues were also originally painted in rich colors. (All photos here were taken by Michael Pabst at the Acropolis Museum in Athens in October 2023, using an iPhone.)

### Save the Date

#### **Desautels Micromount Symposium**

The Baltimore Mineral Society is pleased to announce the

68<sup>th</sup> Annual

Paul Desautels Memorial Micromount Symposium October 4-6, 2024

> At Natural History Society of Maryland 6908 Belair Road, Baltimore, MD 21206

> Micromounters Hall of Fame Induction Mineral Talks, Silent and Voice Auctions Sales, Giveaway Tables, Trading

Details to be Announced: Mseeds@fandm.edu

## **Upcoming shows**





# Appreciation—Barry (Sumner) Remer (1940-2024)

by Sue Marcus, written for Northern Virginia Mineral Club's The Mineral Newsletter Apr 2024 Vol 54 No 4

On March 18, our friend and fellow club member Barry Remer walked on. I like the euphemism "walked on" because it comforts me.

Born in Hartford, CT, Barry was an avid mineral collector who was generous in so many ways. He contributed generously to many causes, such as the welfare of Native Americans and of the environment. He gave his time and energy to our club as president (2010-11), vice president (2009 and 2012), treasurer (2001-2006), and official greeter (2002-2001).

Barry was great with children, as shown in many aspects of his life. In retirement, he worked part-time for nature centers in northern Virginia. He enjoyed putting on programs for kids and taking care of the animals that lived at the centers.

He worked at the Long Branch Nature Center in Arlington, VA, where his presence allowed the Northern Virginia Mineral Club to meet there for many years until the Covid shutdown. He honed his skills as a naturalist and interpreter, sharing his joy of the natural world with nature center visitors of all ages. With his ongoing enjoyment of geology, including fossils and minerals, the nature center was a wonderful match for his interests and abilities.

Barry was also a retired teacher who worked in the Fairfax public school system for almost 40 years. He taught a variety of subjects, including science and math. He also spent several years as a teacher in the Fairfax School Age Childcare Program. At the Emory Rucker Shelter in Reston, he enjoyed reading to children.

Barry was always a great help at club auctions, working with the club treasurer to track who had bought what and ensuring that payments were collected and disbursed. If there were children present and he had some extra minerals left, he would give them to the kids. He was also a fixture at our club's annual mineral shows, often having a table of minerals for sale and pricing them so that anyone could afford something to take home.



Barry at a meeting of the Micromineralogists of the National Capital Area at the Long Branch Nature Center. Photo: Kathy Hrechka.

Barry organized one memorable collecting trip to Danville, KY, many years ago. Through his contact at the quarry, Barry joined Frank Hissong and Sue Marcus in collecting lovely fluorite, barite, sphalerite, and calcite specimens. Some of the pieces weighed at least 20 pounds, with crystals covering their surfaces. At additional stops along the way, we found geodes lines with quartz crystals. Unfortunately, a roadcut where millerite had been found revealed too few crystals for us to pry from a very hard host rock.

Barry picked up micromounting later in his collecting career, joining the Micromineralogists of the National Capital Area. He donated his micromounts to the micromounter club, where David Fryauff photographed some of his specimens and posted them on Mindat, citing Barry as the collector. Many of his minerals were given to young collectors just starting out in our hobby.

Barry was a caring friend to people and animals alike. He loved his pets, and he loved minerals. Much of his collection was donated to the Northern Virginia Mineral Club for sale to raise funds for scholarships.

Barry's generosity, his enthusiasm for science, his patience in explaining science to children, and his wonderful smile will be greatly missed.

#### An Interesting Specimen, an Interesting Collector by Erich Grundel

by Effett Grunder

Who was the first mineral collector? Is this a trick question? Not my field of expertise. How many specimens



does a person have to have so that we call them a mineral collector? How should I know? Ask Dr. Wendell Wilson. He knows all about the history of mineral collecting.

Why do humans collect non-essential things (are you through asking me questions?)? Humans are not like squirrels who collect acorns in order to have food for future survival. Eating our specimens is not advised unless you are a dentist (or married to one). Collecting is an optional activity that is strongly influenced by cultural and economic factors. There is one element that unites all people regardless of what they collect. If I could stick your head into an MRI instrument and show you a picture of a mineral specimen, I would see enhanced activity in the part of your brain that deals with feelings of pleasure. You are feeling that now even without an MRI. We are hard wired for this. It is in our genes.

All this leads me to bring to your attention an unexpected piece of information I recently encountered. A few years ago, a cave in Peştera Cioarei, Romania turned up a human skeleton buried with a geode. The geode was whole and was painted with red ochre. The estimated age of the find is around 48,000 years ago. This is quite amazing. It is even more amazing as you are about to learn. Here is the title of the paper describing the discovery: Cārciumara, M.; Niţu E.-C.; Cirstina, O. (2015). "A geode painted with ochre by the Neanderthal man". *Comptes Rendus Palevol.* 14(2): 31-41.

I am unable to access the paper, just the abstract, so the details are not known to me. How many of you knew our departed human relatives, the Neanderthals (also genus *Homo*), collected minerals? There probably is no way to know if the geode was painted by this individual or someone else. I return to the just asked question; how many specimens does it take to make someone a mineral collector? Because the owner can't speak for themselves, I'll say in this case one. While the geode may not fit current notions of a specimen it

does, by virtue of it being painted, appear to have had some cultural significance just like our specimens represent cultural values. Will you be buried with your specimen(s) so that 48,000 years from now anthropologists (I am optimistically assuming they won't be aliens, that despite our bad habits we are not going the way of our extinct competitors, that robots do not do all our work and AI does not do all our thinking) will dig you up and write scholarly papers about your inexplicable preferences?

Naturally this called for a digital investigation. According to the extensive Wikipedia article on Neanderthals, they also collected quartz crystals, cerussite, pyrite, calcite, and galena. The article also points out that, despite our stereotype prejudices, Neanderthals had bigger brains than *Homo sapiens* (i.e. you and me). Obviously bigger is better is not always an evolutionary advantage. Still, they must have had a similar range of intellectual abilities to their surviving relatives. After all, they did interbreed. Recent DNA analysis shows, depending on your ancestry, we have up to 4% Neanderthal genes. Are our collecting impulses connected to these genes?

Neanderthals appear to have had what we call leisure time. I <u>assume</u> they had more than utilitarian reasons for securing some of these specimens and that they experienced some pleasure in acquiring these items for purposes perhaps no different from the ones you and I have. They did not have *Rocks and Minerals* or *The Mineralogical Record* but perchance someday we will find they left behind a cave painting showing us their minerals. That might cement their legacy as the first mineral collectors.

#### Save the Date Desautels Micromount Symposium The Baltimore Mineral Society is pleased to announce the 68<sup>th</sup> Annual Paul Desautels Memorial Micromount Symposium October 4-6, 2024 At Natural History Society of Maryland 6908 Belair Road, Baltimore, MD 21206 Micromounters Hall of Fame Induction Mineral Talks, Silent and Voice Auctions Sales, Giveaway Tables, Trading Details to be Announced: Mseeds@fandm.edu

# Crystal Growth of the Blue Lagoon Geothermal Spa, Iceland

by Kathy Hrechka, editor

Blue Lagoon was named as one of National Geographic's "25 Wonders of the World" in 2012. Located on a lava field on the Reykjanes Peninsula, the spa contains a mixture of 70% ocean water and 30% natural geothermal springs with temperatures ranging from 98F-104F. The geothermal healing waters of the Blue Lagoon spa are an out of world experience during winter.

The steaming water is translucent, and pale blue with unique properties of silica, and halite. Blue Lagon is blue due to the way silica reflects visible light while suspended in the water. To understand this experience, I decided to collect a spa water sample and grow crystals once I returned home.

I poured my four ounces of Blue Lagoon spa water into a glass dish. Within twenty-four hours the tiny crystals grew. It was easy to identify halite cubes, but what were the feather like growths? I found a possible answer, while volunteering at the museum, gypsum. Since the crystals are white, I placed blue felt under the glass dish for contrast. What a great discovery of the natural world. I hope you like my research.



Pat Baldwin and Kathy Hrechka retreating in the Blue Lagoon geothermal spa on February 21, 2024. The water temperature was over 98F, while the air temperature was 30F with snowcapped mountains in the distance. We are enjoying the natural world.



# **Geology News: Iceland: Fire & Ice**

by Kathy Hrechka, editor

I recently returned from a geological tour of Iceland with my friend of forty years, Patricia. Fast forward to Friday March 22 as my morning routine diverted to viewing lava flows in real time by a drone pilot in Iceland named Isak Finnbogason. I learned that he has been documenting the eruptions in the Reykjanes Penninsula since December 2023. His archived documentaries are located on Youtube. I took a few screen shots during multiple days of his live footage for this article. I hope you like them. More importantly, follow Isak along with his 42.9K followers on Youtube and X to learn about Iceland's active volcanic updates.

Pat Baldwin and Kathy Hrechka retreating in the Blue Lagoon geothermal spa on February 21, 2024. The water temperature was over 98F, while the air temper-

ature was below 32F with snowcapped mountains in the distance. We are enjoying the natural world. Photo taken by lifeguard at the spa.





Blue Lagoon spa evacuated on March 16, 2024. A fissure eruption started on the 16<sup>th</sup> between Hagafell and Stóra Skógfell, two hills near the town of Grindavík, in southwest Iceland. This is the fourth eruption of its kind in this area since December 2023. View facing North toward Reykjavik. This internet photo awakened my attention to follow Iceland's geology in the news.



March 22, 2024 leading lava flowing, encountering a body of water, North of Grindavik on Iceland's Reykjanes Peninsula. Screenshot of video by drone pilot, Isak Finnbogason



Svarsengi volcanic system, Iceland: Close range ariel view of the five cinder cones on March 24, 2024. Isak's drone.



*Isak's drone miraculously survived flight through volcanic splatter at altitude. Isak's drone.* 

Continued next page.



"World's newest rock art" a close-range photo of lava flowing in slow-motion, while solidifying into basalt on March 24, 2024. Isak's drone.



Isak spotted geologists collecting new basalt samples on March 24, 2024. Isak's drone.



Lone bulldozer at work during snowstorm and fumes of sulfur dioxide, constructing walls of basalt to divert new lava flows. Isak's video on March 21, 2024, Isak's drone.



Map of eruptions: Dec 23,2023 \* Jan 24,2024 \* Feb 8,2024. Blue Lagoon is located directly West of new fissure (blue square diagram) eruptions. The geothermal power plant is also close by. Internet photo



Jan 24, 2024 Lava approaching Grindavik on Iceland's Reykjanes Peninsula. There is huge earthen separation and a lava tube under the town, which caused evacuation on Dec 18, 2023. Isak's drone



Selfie of thirty-year-old drone pilot Isak Finnbogason signing out after five hours of recording on March 22, 2024 <u>Isak@icelandfp.is</u>

## Leidy Micromount Symposium 2024

by David Fryauff, President

The Leidy Microscopical Society was organized in 1858 as part of the Biological and Microscopical

section of the Philadelphia Academy of Sciences. It honors Dr. Joseph M. Leidy (1823-1891), a pioneer in comparative anatomy and zoology and a world renown parasitologist, paleontologist and mineralogist.



How could I have been ignorant of this great American scientist, investigator, and teacher? How could I have been so long unaware of the Leidy Microscopical Society? Much of my adult life has been devoted, virtually fixated on the microscopical study of mosquitoes and malaria, Simulid black flies and Onchocerca, Phlebotomine sand flies and Leishmania....and now TINY MINERALS. As luck would have it, I journeyed north to Philadelphia in 2017 and attended the annual Micromount Symposium of the Leidy Society. It was a great gathering, and I was among friends and others who would become my friends. When COVID finally relented and normal inperson meetings could resume I was excited to attend the 2023 meeting, but a March snowstorm barred my way.

This year, the weather held, and I made the trip in bright, mild sunshine. I knew from experience how fascinating and bounteous the giveaway tables had been at the one Leidy Symposium I had attended and this time I came well-prepared to add more mineral weight to the tables. I was happy to see my good friend and fellow Mindat photomicrographer, Steve Stuart and found an open seat right beside him.

Don McAlarnen was there as the organizer and Chairman of the Symposium and John Ferrante was there in good form as well. Eric Brosius was there, and we talked about favorite Pennsylvania sites for collecting. He gave me, for US, a flat of Phoenixville pyromorphite that had been collected in 2014. I met Christel Hoffman; an amazingly talented bead expert and we talked about old trade beads I had collected in Liberia and Ghana. I met a gentleman named Ed Johnson who had a selection of excellent well-priced minerals.... Most notably for me were his unique "drillbit twinned" cinnabar crystals that came from Donyetsk, Ukraine--Another good reason to turn back the Russian invaders. It turned out that Ed and I had both attended Wagner College as undergrads, both of us as Biology majors, and both of us graduating in 1975....but never knew or met the other until we met at the 2024 Leidy meeting!!! I should also thank Ed for a fine miniature of Stolzite from the type locality in Germany.

**Speaker: Steve Stuart – "The Hugh McCulloch Story"** Steve Stuart gave a great Friday afternoon. Program on Hugh's collection of minerals which were scrupulously recorded in longhand and carefully enclosed in hundreds, perhaps thousands of "crushproof" Winston cigarette boxes. Wisely and thankfully, Hugh, a renown New Jersey dermatologist, never smoked. Knowing of Steve's talk, I brought up

my original Hugh McCullough Winston pack containing #9718 - Scapolite, #9725 - Sphalerite, and #9230 - Reibeckite, all from Buckwheat Dump, Franklin NJ. Note: Steve posted his first photo to Mindat in 2004, and now has over 2,500 images on Mindat.



Speaker: Jose Santamaria – "Classic and New Southeastern Microminerals" Jose Santamaria of the Tellus Museum in Georgia gave Saturday's presentation via zoom. His presentation was nicely embellished with scores of colorful mineral photomicrographs from such special locations as Grave's Mountain, Girard, and Indian Mountain. I believe I heard him say that the legendary Indian Mountain phosphates are found over an expanse of 42 thousand acres!!! A great time, stimulating and friendly. I will definitely look forward to attending the Leidy Micromount Symposium in 2025, weather permitting.



# **MNCA Demonstrates Micromounting:**

# Gem, Lapidary& Mineral Society of Mongomery County, Maryland

by David Fryauff, President

A good number of us MNCA Micromineralogists of the National Capital Area also belong to the Gem Lapidary and Mineral Society of Montgomery County, Maryland. Naturally we take the opportunity each year to set up a demonstration of Microscopy applied to tiny minerals and the beautiful, perfect crystals that can only be seen in such small specimens.

I also set up a personal exhibit entitled "Microminerals and Photomicrography" which showcased many of the photogenic microminerals that George Reimherr, Fred Parker, & I have found over the years at the legendary Hunting Hill Quarry in Rockville, Montgomery Co., Maryland. Our demonstration table was equipped with Paul Smith's club microscope and his Mineral Beauties carousel... still beautiful and captivating after all these years. One of the other big draws of our MNCA demo table was the free mineral specimens and the \$5 loupes. Thanks to Tom Tucker, Jeff Guerber, Robert Clemenzi, and Dennis Cosgrove for spending some time with me at our demonstration table this year. David Hennessey was also present at the show as a dealer of some really choice and very reasonably priced miniature and small cabinet-sized mineral specimens.



Seeing microminerals with the help of mom at our 2024 MNCA demonstration table. Microscope & Mineral Beauties carousel thanks to past MNCA president Paul Smith.



Young man using a simple hand lens (loupe) to see & choose from free mineral specimens collected over the years by Barry Remer and donated to MNCA



Azurite & Malachite from the legendary Rossville PA roadcut. An old specimen, newly acquired from Erick Meier of Broken Back Minerals, Inc.



**Pyromorphite** from the Dunbrack mine in Nova Scotia. FOV = 4.0 mm. Specimen from the giveaway table at 2023 Desautels



A new acquisition of an old Ray Mine, Pinal Co. AZ specimen of Chalcotrichite, Native Copper, and dendritic black Tenorite....of the Giveaway tables at the 2024 Leidy Micromount Symposium in Richboro/Philadelphia, PA



# Micro Club Zoom Session - Australia

April 16 Part II of the Minerals of the East Eifel, Germany, presented by Frank Loman. Register <u>www.crocoite.com</u>.



*Fluorite*, In den Dellen quarries, Nieder-mendig, Mendig, Laach lake volcanic complex, Eifel, Rhineland-Palatinate, Germany. Width of view 3mm.

Micromount Club Zoom Host: Steve Sorrell resides in Melbourne, Australia and hosts various geology persons of interest at his micromount meeting each month on Zoom. "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. The next three Micromount Club Zoom sessions are now open for registration.

\*Micromount Club Zoom Meeting 2024-003. Tuesday **16th April** at 4pm EDT. Part 2 of the minerals of the east Eifel, Germany, presented by Frank Loman. \*Micromount Club Zoom Meeting 2024-004. Tuesday **14th May** at 4pm EDT. From Aosta to Sicily, a mineralogical journey through Italy, presented by HenkSmeets.

\*Micromount Club Zoom Meeting 2024-005. Tuesday **18th June** at 4pm EDT. Schwaz-Brixlegg mining district in Tyrol, Austria, presented by Gerhard Brandstetter.

Screen shots from Frank Loman's presentation of Minerals of the East Eifel, Germany









# The Great North American Eclipse

by Jeff Guerber, Vice-president

On Monday, April 8<sup>th</sup> a full solar eclipse, nicknamed The Great North American Eclipse, will happen and will be able to be seen from Texas at 1:40 p.m. Dallas, is right in the path of totality of this year's solar event for three minutes and 51 seconds, making it the longest duration across North America.

Protective eyewear is recommended for catching a glimpse of the solar eclipse. Jeff provided complimentary ISO certified eyewear to club members at our February meeting. Hopefully Jeff will keep us informed of the eclipse if we can view it from our area.



The total solar eclipse will be visible along a narrow track stretching from Texas to Maine on April 8, 2024. A partial eclipse will be visible throughout all 48 contiguous U.S. states.

Want to download this map and view other versions? <u>Visit NASA's Scientific Visualization Studio.</u>

#### NASA's Scientific Visualization Studio:

The path of the eclipse continues from Mexico, entering the United States in Texas, and traveling through Oklahoma, Arkansas, Missouri, Illinois, Kentucky, Indiana, Ohio, Pennsylvania, New York, Vermont, New Hampshire, and Maine. Small parts of Tennessee and Michigan will also experience the total solar eclipse. The eclipse will enter Canada in Southern Ontario, and continue through Quebec, New Brunswick, Prince Edward Island, and Cape Breton. The eclipse will exit continental North America on the Atlantic coast of Newfoundland, Canada, at 5:16 p.m. NDT.



American Federation of Mineralogical Societies

(AFMS) www.amfed.org

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

2024 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.

April 2024 Local Geology Club Meetings

1: Northern Virginia Mineral Club NVMC Meeting 7:30pm www.novamineralclub.org

**3: Mineralogical Society of the District of Columbia MSDC** Meeting 7:30pm on Zoom www.mineralogicalsocietyofdc.org

8: The Gem, Lapidary and Mineral Society of Montgomery County, Maryland - GLMSMC Meeting 7:30 pm <u>www.glmsmc.com</u>

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

**17: Baltimore Mineral Society BMS meeting** <u>www.baltimoremineralsociety.org</u>

**29: Micromineralogists of the NCA, Inc.** Meeting 3 – 5:30pm Kings Park Library, Burke, VA <u>www.dcmicrominerals.org</u>

# "Miner" Mike Kaas Recommends Book

Material World: The Six Raw Materials That Shape Modern Civilization - Sand, salt, iron, copper, oil, and lithium. Deckle Edge, Nov 7, 2023, by Ed Conway





#### GeoWord of the Day and its definition

**abhurite** (ab-hur'-ite) A colorless rhombohedral mineral:  $Sn^{2+}_{21}O_6Cl_{16}(OH)_{14}$ .

**geothermal metamorphism** A type of deep-seated static metamorphism in which a regular downward increase in temperature attributed to deep burial by overlying rocks is the controlling factor. Cf: thermal metamorphism; load metamorphism; static metamorphism.

**johninnesite** (john-in'-nesite) A light yellowishbrown triclinic mineral:

 $Na_2Mn^{2+}{}_9(Mg,Mn^{2+}){}_7(AsO_4){}_2(Si_6O_{17}){}_2(OH)_8$  .

**piezocrystallization** (pi-e"-zo-crys"-tal-li-za'-tion) Crystallization of a magma under pressure, such as pressure associated with orogeny. Obsolete concept.

All terms and definitions come from the <u>Glossary of Geology</u>, 5th Edition Revised.

GeoWord of the Day is brought to you by: EnviroTech! <u>envirotechonline.com</u>.

### "Miner" Mike Kaas Recommends Book

Material World: The Six Raw Materials That Shape Modern Civilization - Sand, salt, iron, copper, oil, and lithium. Deckle Edge, Nov 7, 2023, by Ed Conway



Micromineralogists of the National Capital Area www.dcmicrominerals.org

We are temporarily meeting at Kings Park Library in Burke, 3-5:30pm (forth Monday or Wednesday) 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 \*American Federation of Mineralogical Societies (AFMS) www.amfed.org affiliation

**Dues:** MNCA Membership **Dues 2024** \$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 the 1st of each month. *The Mineral Mite* will be emailed by the 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 \* Pete Chin \* Mike Kaas \* Kathy Hrechka \* Erich Grundel

