

Merry Christmas - Happy Hanukkah Holiday party Dec 20 Time: 7:00 p.m.

Program: Holiday party

by David Fryauff, Vice president

We will have an evening of geology fellowship with the Northern VA Mineral Club. Tom Kim, president NVMC has invited us to his residence in Alexandria. There will be a gift-exchange table. Bring a wrapped gift (labeled either regular or micro-mount) to place on the table and exchange it for another one. For the welfare and peace of mind of all of us, please come only if you're vaccinated and in good health. Let's look out for one another.

If you think you can make it, please RSVP to Tom. Let him know if you intend to bring a snack, drink, or dessert. tomkim77@gmail.com
Location: 2301 Stokes Lane, Alexandria, VA 22307 (next to West Potomac High School)



President's Message:

by Dave MacLean

Hooray, on November 22, we met in person jointly with the Northern Virginia Mineral Club at the Kings Park library in West Springfield. Vaccinations, face mask wearing, and social distancing have driven the Covid-19 virus back. It's not gone, but we found ways to not let it best us. If you have not been vaccinated, get vaccinated. If you are fully vaccinated get a booster. Please do not forget your yearly flu shot. Flu can be serious to death.

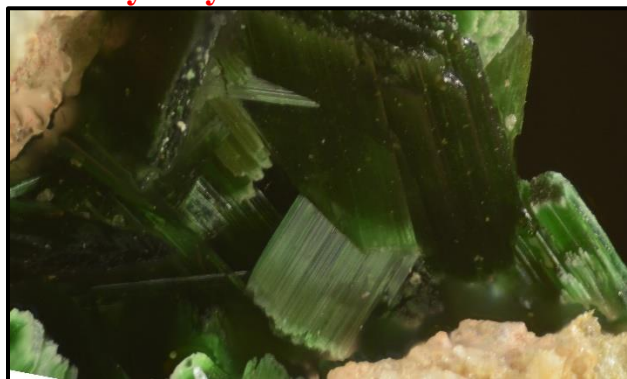
Scott Duresky gave a fascinating classic micro-mineral talk on microminerals of the pyrochlore and microlite group found at the Rutherford mine, part of the NYF pegmatite group in Amelia, VA.

We even have a Christmas party on Monday, December 20, jointly with NVMC at president of NVMC, Tom Kim's home. I encourage all of us to come and bring an optional mineral, rock, or related wrapped gift for the gift exchange. Please mark a micro gift with M for micro.

In 2022 we can meet in person or by zoom. It appears the Long Branch Nature Center is not available. It appears that we can meet at the Kings Park Library in West Springfield. Kathy Hrechka said she is looking into our spring conference in person at the Marriott in Alexandria. Let's hope Covid-19 lays low.



Mystery Photo of the Month



Clue #1. locality Atacama, Chile). FOV = 5 mm.
Clue #2. Pete acquired it directly from Terry Szenics
Photomicrography by Pete Chin, Honolulu, Hawaii



Mystery Photo of the Month – Dec

by Pete Chin, Honolulu, Hawaii

Green **Szenicsite!** Jardinera No. 1 Mine, Inca de Oro mining district, Chañaral Province, Atacama, Chile. Note the transparent thin plate in the lower left (you can see the straight-line reflection of the edge). FOV = 5 mm. Pete acquired it directly from Terry Szenics who discovered the mineral.

Previous Meeting Minutes: 11/22/21

by Bob Cooke, Secretary

Since no business meeting was held at our November 22 meeting, there are no minutes to report.



Previous Program Review: 11/22/21

by Dave MacLean, President

Minerals from the Rutherford mine, Amelia Court House, Virginia: Scott Duresky and Michael J. Pabst, presented on Nov 22, 2021

Scott Duresky described his and Michael J. Pabst's research results on minerals, especially those of the microlite and pyrochlore groups from the Rutherford mine Amelia Court House, 45 miles southwest of Richmond, Virginia.

The Rutherford mine is one of a group of pegmatite quarries in the Amelia area. There are 117 pegmatite prospects in Amelia County. These pegmatite bodies are considered an in between of LCT lithium, cesium, tantalum and NYF niobium, yttrium, and fluorine because both phosphates, tantalum, niobium, lanthanide (rare earths RE), tantalum and fluoride minerals are found there.

The Indians dug up to ten feet deep to mine mica there. Residents of Virginia began mining in 1873. The first publication about the mine was in 1883 followed by scientific studies after 1910 and 1928. The mine was a major source of lanthanide (RE), niobium, and tantalum minerals, the feldspars, quartz, and less common beryl. Minerals from the Rutherford mine include muscovite, sericite, phlogopite micas, the feldspars, quartz, less common beryl, albite, cleavelandite, fluorescent cleavelandite, rarely

apatite, fluorite, fluorite Ce, bastnasite Ce, monazite, xenotime, zircon some with up to 13% hafnium, garnets of almandine series, tantalite Mn, columbite Fe and oxycalcio pyrochlore.

Scott described the discovery that microlite and pyrochlore are both groups of minerals (11 minerals in the microlite group) containing oxygen, fluorine, tantalum, or niobium at concentrations up to 78% by weight. Examples include fluocalcium microlite (98% of microlite samples), kenoplumbomicrolite, oxycalcium microlite, oxystannomicrolite in contact with cassiterite. Some microlite series minerals contained thorium. Michael Pabst took the first micro photo oxystannomicrolite.

Scott said that the University of Richmond established a permanent display of Virginia minerals. He donated his Rutherford mine collection to the Thomas Hale Rutherford mine research collection. Scott emphasized that the success of this research depended on developing relationships with the property owner. Tony Nikascher provided X-ray EDS work to estimate the quantitative elemental composition and identify minerals. Michael Pabst took micro photos of mounted micros. Scott gained cooperation in part because he was entering and collecting to support research. He pointed out that mineral collectors often ask permission, collect, and leave without sharing with those who made collecting possible

Scott mentioned ongoing research on the Manassas quarry, Manassas, Virginia. The Richmond Gem and Mineral Society is developing a database of Virginia minerals. He also concluded that the Rutherford Mine is closed, since 1998 to all rock and mineral collectors and others. Do NOT enter for any reason; prohibido, eintritt verboten, belepni tilos.



Micromineralogists of the National Capital Area, Inc.

Minerals from the Rutherford continued

Editor's note: Scott Duresky will be speaking on Rutherford at our Atlantic Micromounters' Conference on April 1-2, 2022. We look forward to his updates.



Fluorite, wine-colored
Photo by Michael Pabst



Fluorapatite crystal in Albite matrix
Photo by Michael Pabst



Xenotime-(Y) crystals YPO_4 (brown) with Manganotantalite (Tantalite-(Mn) $MnTa_2O_6$) (black-red) in matrix
Photo by Rudy Bland

Xenotime results: Al_2O_3 4.06%, Y_2O_3 24.51%, P_2O_5 22.0%, ThO_2 10.66%, Nd_2O_3 0.60%, Fe_2O_3 21.06%, Ta_2O_5 10.59%

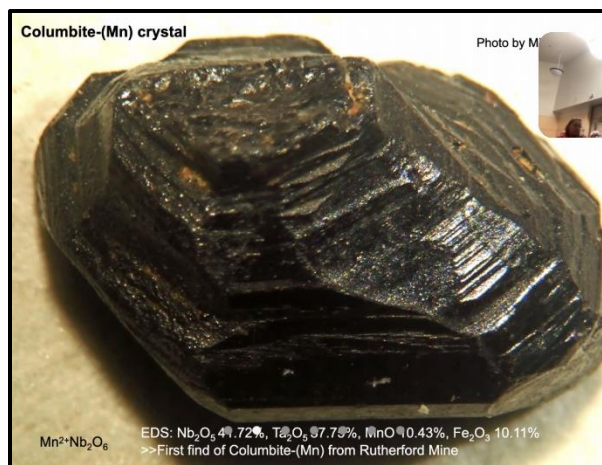


Orthoclase micro crystals on micro Tourmaline crystals, in vug of Albite, variety Cleavelandite crystals
Photo by Michael Pabst



Kenoplumbomicrolite crystals $(Pb, \square)_2Ta_2O_6(\square, OH, O)$
 \square indicates vacancies in the mineral structure.
Photo by Michael Pabst

EDS: Ta_2O_5 69.33%, Nb_2O_5 7.09%, PbO 16.09%, FeO 3.83%, CaO 3.66%



Columbite-(Mn) crystal
Photo by M

EDS: Nb_2O_5 41.72%, Ta_2O_5 57.75%, MnO 0.43%, Fe_2O_3 10.11%
-> First find of Columbite-(Mn) from Rutherford Mine

Silver Halides

by Michael Pabst PhD, Treasurer

There is a silver mineral corresponding to each of the Halide group of elements, except for fluorine.

Chlorargyrite: AgCl, silver chloride Bromargyrite: AgBr, silver bromide Iodargyrite: AgI, silver iodide

Silver fluoride, AgF, is known in chemistry, but there is no mineral counterpart, because it is unstable and water-soluble. (AgF is 6×10^7 times more soluble in water than AgI.) There are also the related isometric minerals, Miersite (Ag,Cu)I and Marshite (CuI).

The silver halides look similar. They are colorless, if pure, but are often colored by impurities. Chlorargyrite, Bromargyrite, Miersite, and Marshite are isometric $m3m$ – hexoctahedral (Chlorargyrite Group), but Iodargyrite is hexagonal $6mm$ – dihexagonal pyramidal. They are soft $1\frac{1}{2}$ – $2\frac{1}{2}$, with no cleavage, and they sometimes look waxy. They are all photosensitive, darkening on exposure to light. This is the basis of silver photography.

Chlorargyrite

My Chlorargyrite specimen is from California:



Chlorargyrite (greenish) and Hemimorphite (colorless). Blue Bell Mine, San Bernadino County, CA. FOV 3 mm. Photo by Michael Pabst using stereo microscope, stacking 24 images.



These silver halide minerals tend to be small and not especially pretty, so please click on my carefully selected photos from Mindat, which show better photos and better specimens than I possess. With these silver halide minerals, I prefer photos other than the three photos at the head of the Mindat page.

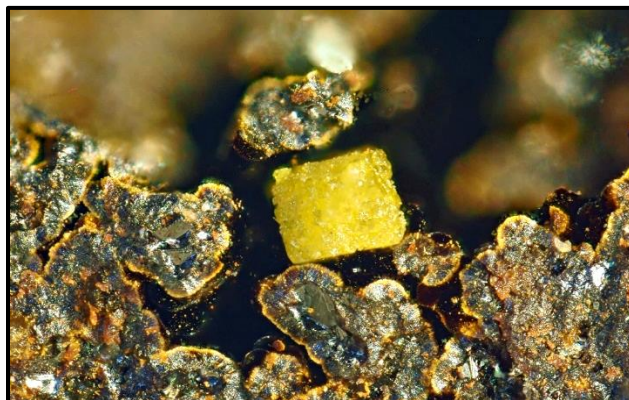
Here are some pretty Chlorargyrite specimens from Mindat:

Chlorargyrite from the Gold Hill Mine, Tooele County, Utah: www.mindat.org/photo-62310.html.

Chlorargyrite from Theuerdank Mine, Beerberg, St Andreasberg, Goslar, Lower Saxony, Germany: www.mindat.org/photo-1141314.html.

Bromargyrite

A rough octahedral crystal of Bromargyrite from Germany:



Bromargyrite, Schöne Aussicht Mine, Dernbach, Rhineland-Palatinate, Germany. FOV 1 mm. Photo taken with Mituyoyo lens + Raynox lens on Wemacro rail, stacking 24 images. (I kept trying to make this crystal focus sharply, until I realized that it was not smooth, but bumpy.)

Here is a similar photo from Mindat: www.mindat.org/photo-34140.html.

Pretty specimens from Mindat:

Bromargyrite from Poullaba vein, Locmaria-Berrien, Poullaouen, Chateaulin, Finistere, Brittany, France: www.mindat.org/photo-652989.html and www.mindat.org/photo-700396.html.

continued next page

Iodargyrite

Wikipedia informs us that 50,000 kg of silver iodide is used annually for cloud seeding. So, in a sense, Iodargyrite may be considered ubiquitous. My first Iodargyrite specimen is from Nevada:



Iodargyrite (gray). 407A Stope, Grizzly Bear Mine, Goldfield, Esmeralda County, Nevada. FOV 1 mm. Photo by Michael Pabst, using stereo microscope, stacking 15 images.

And here is an Iodargyrite from Russia, showing colorless crystals:



Iodargyrite. Poteryaevskoe Mine, Rubtsovskoe, Rudnyi Altai, Altai Krai, Russia. FOV 2 mm. Photo by Michael Pabst using stereo microscope, stacking 25 images.

Pretty Iodargyrite on Mindat:

Iodargyrite from Les Montmins Mine, Echassieres, Vichy, Allier, Auvergne-Rhone-Alpes, France: www.mindat.org/photo-317140.html.

Iodargyrite from Kintore opencut, Broken Hill South Mine, Yancowinna County, New South Wales, Australia:

www.mindat.org/photo-245129.html.

These silver halides are the penultimate group of silver minerals that I will describe in this series of articles. I have almost run out of interesting silver mineral specimens. Surprisingly, there are no silver silicates, whereas there are numerous copper silicates. So, if you were waiting to see the silver analog of Diopside, for example, you will be disappointed. To finish silver minerals, the next episode in the January 2022 *Mineral Mite* will be about rare silver sulfosalts. I have been writing about silver minerals since June of 2020, and during that time I acquired four rare silver sulfosalts that I think are interesting, even if they are not flashy.

After silver minerals, I am thinking about nickel minerals. Aside from Annabergite and green oxidized pseudomorphs of Millerite, good crystals of nickel minerals appear to be exceedingly rare. If anyone has an attractive nickel mineral that I might photograph, please let me know.

Geology jokes:

Q: What do geologists call a benzene ring with iron atoms replacing the carbon atoms? A: A ferrous wheel.

Q: What's wrong with a joke involving Cobalt, Radon, and Ytterium? A: its CoRn Y

Q: What element is derived from a Norse god? A: Thorium.

Q: Did you hear about the geologist who was reading a book about Helium? A: He just couldn't put it down.

source: <http://www.jokes4us.com/miscellaneousjokes/schooljokes/geologyjokes.html>

New Mexico Mineral Symposium recap

by Kathy Hrechka, Editor

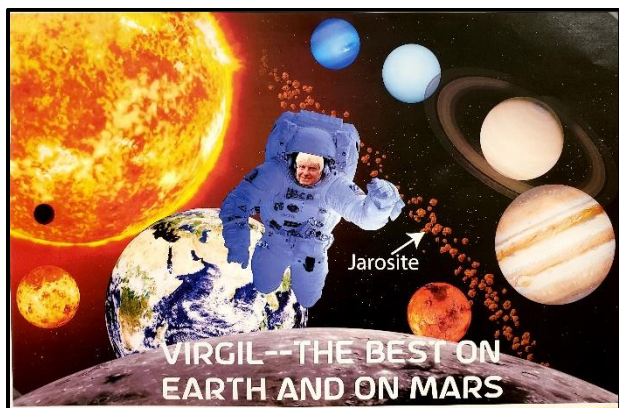
The New Mexico Institute of Mining & Technology Socorro, New Mexico held their 41st Annual Symposium on November 12-14, 2021.

I had the pleasure of attending, thanks to our October speaker (on Zoom) Patrick Rowe from Los Alamos, NM who mentioned the symposium after his talk. He encouraged us to check it out online. To my surprise, Dr. Jeffrey Post was the featured speaker, so I decided to register.

Upon landing in Albuquerque, I drove one hour South to Socorro. The view along my drive was a breathtaking geological landscape of rock formations in the desert.

Symposium attendance drew over two hundred geology friends. It was great to chat with folks like Patrick Rowe, Jeff Post, Bob Jones, Peter Megaw, Carl Francis, and my personal friends like Patrick Haynes, Scott Braley, Fred Parker, and Joan & David Wells. I also met a new friend, Nancy Attaway. She is a gem faceter who created a cubic zirconia of the French Blue for Dr. Post. I admire her because she once got to hold and study the Hope diamond at the Smithsonian. Nancy is also the girlfriend of Pat Haynes.

Dr. Virgil Lueth, Director of the Mineral Museum is credited with assembling the museum in 2015. He wore many hats at this event, including speaker moderator. While announcing his retirement, he shared his gratitude to many individuals between speakers. I noticed his magnetic personality, and care for all of us.



Friday November 12, 2021 Attendees were invited to a field trip to Copper Flat Mine, Sierra County, NM in the morning. In the late afternoon, a Friends of the Museum Reception was held in the museum atrium, followed by informal motel tailgating and social hour in individual rooms at the Comfort Inn & Suites. This year's symposium consisted of a day and a half of formal papers presented in 30-minute time blocks.

Saturday November 13, 2021

**The Maybee Quarry, Maybee, Michigan* — Christopher Stephano

**Ramblings and rumblings from the Keweenaw of Upper Michigan* — Thomas Rosemeyer

Coffee and burrito break

**A rediscovery of epidote pseudomorphs after orthoclase from the Orogrande district, Otero County, New Mexico* — Philip Simmons and Erin Delventhal

**Minerals of the Naica Mine, Chihuahua, Mexico* — Peter K.M. Megaw

Lunch provided

**From gold to lead: The mineral riches of the Leadhills-Wanlockhead mining district, Scotland* — Nathalie Brandes and Paul Brandes

**Pyrites of Navajun, Spain (Geologist/Collector Odyssey—1993/2018)* — David Stoudt

**The Himalaya Pegmatite Mine, San Diego County, California: History and minerals* — Mark I. Jacobson

The Smithsonian Gem Collection—Unearthed: Surprising Stories Behind the Jewels*— **Jeffrey Post (Featured Speaker)

An evening of Sarsaparilla and suds: cocktail hour, cash bar was followed by a buffet banquet dinner.

Sunday November 14, 2021

**Bagdad revisited* — Barbara L. Muntyan

**Lighting your minerals* — Tony Gleckler

**A mid-1950s collection of uranium ore samples from Arizona, Colorado, Utah, and Canada* — Peter Modreski and Virgil W. Lueth

**Fabulous vanadates, arsenates, and phosphates from New Mexico* — Ramon S. DeMark, Michael Michayluk, and Thomas Katonak

**Inclusions in fluorite from the Quebradas, Socorro County, and the Sandia Mountains, Bernalillo County, New Mexico* — Patrick Haynes

Silent auctions were held in the mornings, sponsored by the Albuquerque Gem and Mineral Club for the benefit of the Mineral Museum.

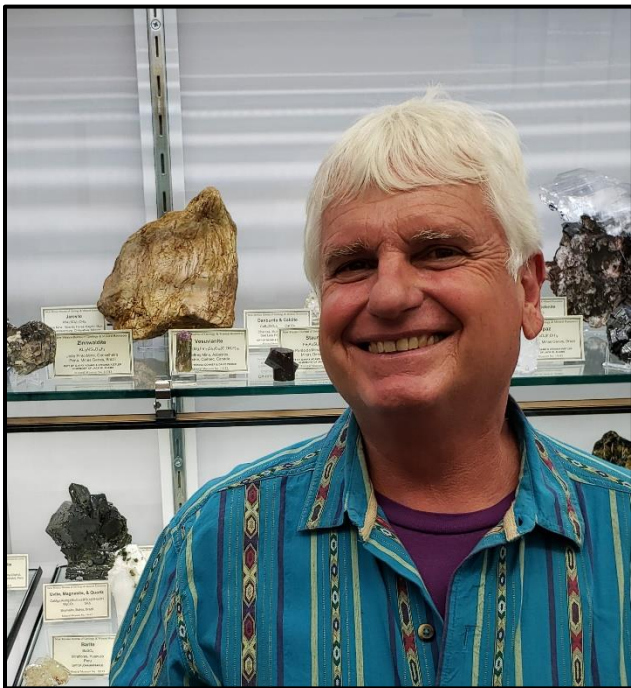
Micromineralogists of the National Capital Area, Inc.



Dr. Jeffrey E. Post, featured speaker



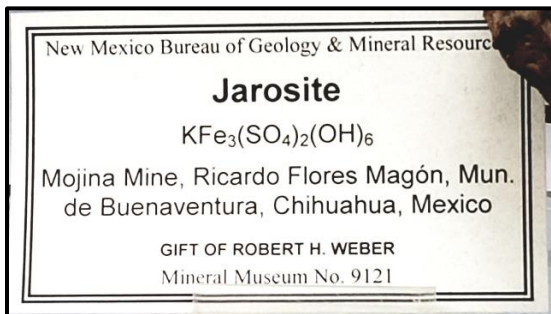
Micromineral display by Michael Michayluk



Virgil Lueth in front of his favorite mineral Jarosite because it is found on Earth as well as on Mars.



Fred Parker pointing to Smithsonite, Socorro, NM

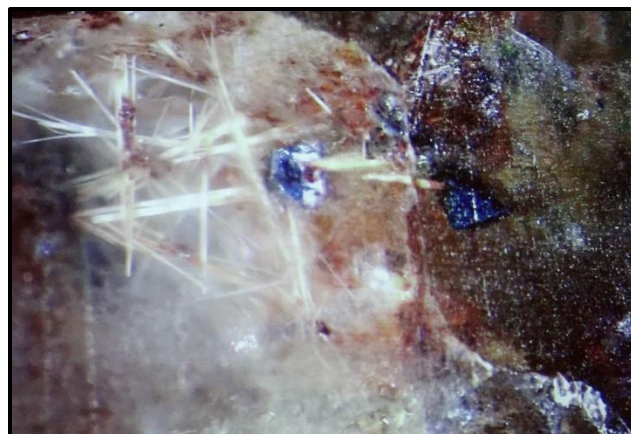


The Mineral Symposium is organized each year by the Mineral Museum at the New Mexico Bureau of Geology and Mineral Resources. Sponsors this year included *Albuquerque Gem and Mineral Club *Chaparral Rockhounds * Los Alamos Geological Society * City of Socorro *New Mexico Geological Society Foundation *Friends of Mineralogy *Grant County Rolling Stones *Friends of Mineralogy Colorado Chapter.

New Mexico Mineral Symposium cont

Inclusions in fluorite from the Quebradas, Socorro County, and the Sandia Mountains, Bernalillo County, New Mexico

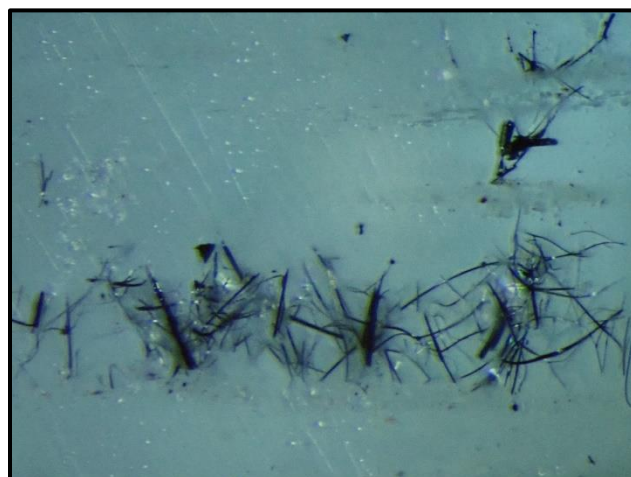
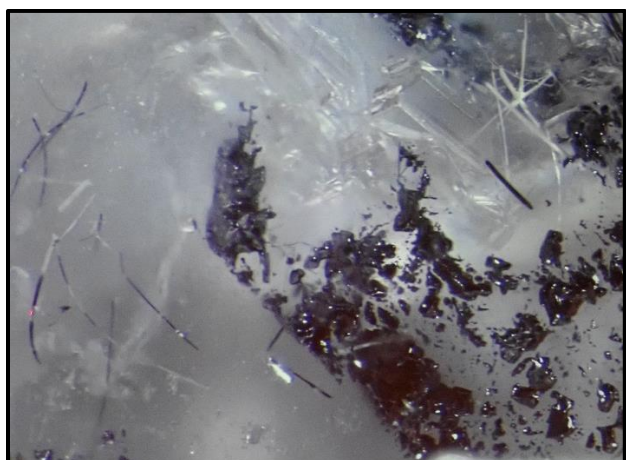
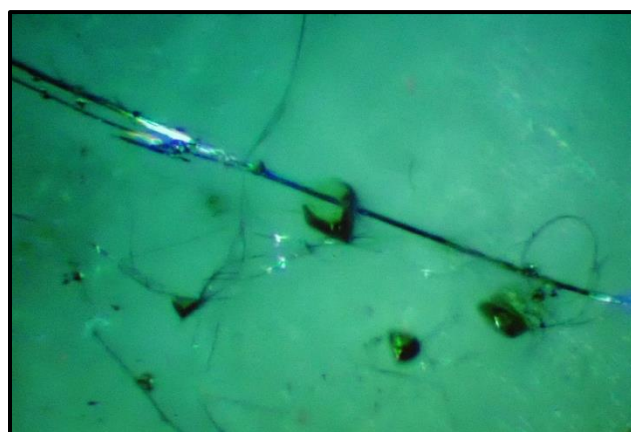
Presenter, Patrick Haynes, Socorro, New Mexico



Cerussite inclusion, Sandia Mountains



Bonet, prospect pyrite inclusion



Galena with Friedrichite & Cerussite, Sandias

Micromineral inclusions may be Friedrichite. An update will be published in the Jan 2022 Mineral Mite. *Photomicrography by Pat Haynes & photos of the screen during the lecture are by Kathy Hrechka, attendee at the New Mexico Mineral Symposium.*

Davemaoite: An Inclusion in Diamond

"The discovery of davemaoite came as a surprise," lead author Oliver Tschauner, a mineralogist at the University of Nevada, Las Vegas, told Live Science.

Tschauner and his colleagues uncovered the davemaoite sample with synchrotron X-ray diffraction, which focuses a high-energy beam of X-rays on certain spots within the diamond with microscopic precision. By measuring the angle and intensity of the returning light, researchers can decipher what's inside, Tschauner said. The sample of davemaoite within the diamond was just a few micrometers (millionths of a meter) in size.

Davemaoite is believed to play an important geochemical role in Earth's mantle. Scientists theorize that the mineral may also contain other trace elements, including uranium and thorium, which release heat via radioactive decay. Therefore, davemaoite may help to generate a substantial amount of heat in the mantle, Tschauner said. The discovery of davemaoite shows that diamonds can form farther down in the mantle than previously thought, and it suggests that they might be the best place to look for more new minerals from the mantle.

Named davemaoite after prominent geophysicist Ho-kwang (Dave) Mao, the mineral is the first example of a high-pressure calcium silicate perovskite (CaSiO_3) found on Earth. Another form of CaSiO_3 , known as wollastonite, is commonly found across the globe, but davemaoite has a crystalline structure that forms only under high pressure and high temperatures in Earth's mantle, the mainly solid layer of Earth trapped between the outer core and the crust.

Davemaoite has long been expected to be an abundant and geochemically important mineral in Earth's mantle. But scientists have never found any direct evidence of its existence because it breaks down into other minerals when it moves toward the surface and pressure decreases. However, analysis of a diamond from Botswana, which formed in the mantle around 410 miles (660 kilometers) below Earth's surface, has revealed a sample of intact davemaoite trapped inside. As a result, the International Mineralogical Association has now confirmed davemaoite as a new mineral.



Photo: Diamond with Davemaoite inclusion

The researchers named the mineral davemaoite, after the well-known geophysicist Ho-kwang (Dave) Mao. Aaron Celestian, Natural History Museum of Los Angeles County, California

The original lead author is Oliver Tschauner, a mineralogist at the University of Nevada, Las Vegas, for Live Science. Article was originally published on Live Science by Rasha Aridi, science journalist based in Richmond, VA. She has written for Science magazine and Science News for Students. Photo adapted by www.smithsonianmag article. Article condensed for The Mineral Mite by Kathy Hrechka

Davemaoite

Formula: CaSiO_3

Crystal System: Isometric

Member of: Sillimanite Subgroup > Stoichiometric Perovskites Group > Perovskite Supergroup

Name: Named in honor of Ho-kwang (Dave) Mao (毛鸿光) (b. 18 June 1941, Shanghai, China), Chinese-American geologist at the Geophysical Laboratory of the Carnegie Institution for Science. He is an expert on high pressure mineralogy and with Peter M. Bell achieved the first verified static pressure in excess of 1 Megabar in the lab. Among many prizes, he was awarded the 2005 Roebling Medal (Mineralogical Society of America) and the 2007 Inge Lehmann Medal (American Geophysical Union).

Type Locality: K1-K8 kimberlite pipes, Orapa, Letlhabane, Central District, Botswana

This page provides mineralogical data about Davemaoite.

IMA status: Approved, Pending publication

Approval year: 2020

Nickel-Strunz: 9.10.

10th (pending) ed.: 9: SILICATES (Germanates)

H: Unclassified silicates

D:

Mindat: page is kindly sponsored by Kathy Hrechka

New: The Mineralogy of Franklin and Ogdensburg New Jersey - 3 Volume set

by Pete Chin, Honolulu, Hawaii



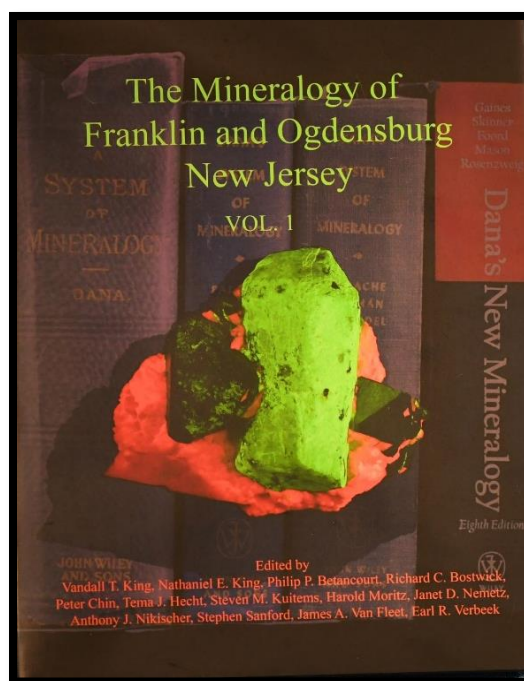
The book is, for a lack of an appropriate word, a STUPENDIUM, 1400-page, 3 volume photographic compilation of the almost every known mineral species and more from Franklin and Sterling Hill. The mineralogy and geology of Franklin and Sterling Hill have been intensely studied and written about in hundreds of publications for about two centuries. While commercial mining activities have ceased decades ago, thousands, if not tens of thousands of mineral specimens, have been collected and scattered to the four corners of the Earth. A portion of Franklin and Sterling Hill mineralogical legacy has been fortunately preserved in the museums and private collections of the world. But many mineral specimens including type specimens are locked away in drawers collecting dust.

This book blows away some of that dust and reveals the significance and magnificence of the minerals from the two deposits. Since at least the 1970's, efforts to produce a picture book of Franklin and Sterling Hill minerals have failed, that all changed when the Franklin Mineral Museum in 2012 initiated a photographic treatise of Franklin and Sterling Hill minerals book project. It was envisioned to be the photographic complement to Pete Dunn's 1995 monograph, "Franklin and Sterling Hill, New Jersey: The World's Most Magnificent Mineral Deposits".

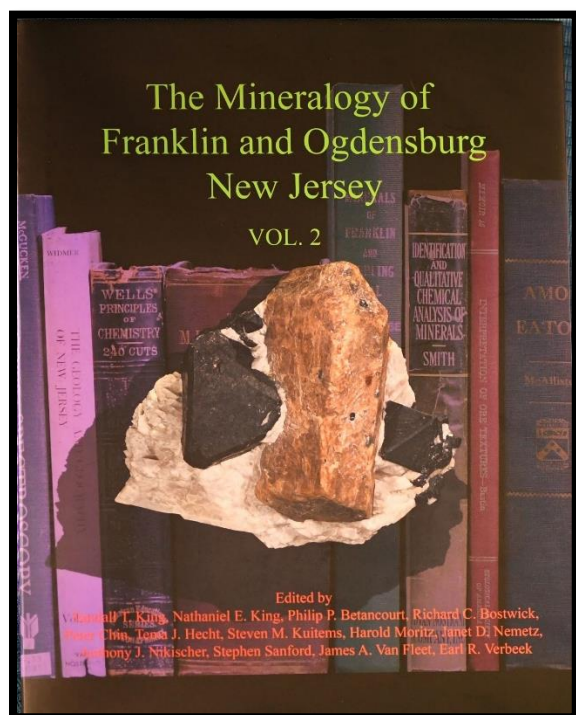
The project has since expanded to include new minerals discovered since the publication of the monograph, and thus updating it. The project was backed financially by numerous donors, especially the Hauck family. A band of volunteers lead by Van King worked tirelessly to bring the project to fruition, the successful culmination of a 9-year cooperative endeavor involving international institutions, universities, analytical services, and individual

collectors spanning two continents, North America, and Europe. The book is not merely a compendium of stunning photogenic mineral specimens, although there are quite number of those in the book, it also serves as a vital visual resource to aid in mineral species identification especially of rare species. To achieve this end, thousands of specimens and photographs including photomicrographs were carefully reviewed and then selected to best represent the species and as well to show important assemblages that contained them. In order to realize this objective, specimens, especially of rare species, had to be as accurately identified.

Van King and the editorial staff tried their best to avoid the rare species syndrome, "so rare as to be not on the rock" by selecting specimens of species with proven pedigree/ provenance or confirmed by EDS, XRD, Raman and EMP analyses and even in one case, synchrotron single crystal XRD. During the course of analytical work, species new to the deposit and at least one mineral new to science were discovered. In fact, scientific work is still ongoing on a number of unknowns identified and depicted in the book. Distribution date for the three-volume work is set for some time in January with tentative target price of \$150 for the 3-volume set. To reserve and order your copy of this monumental work, please contact Van King at newryqs@gmail.com.



Mineralogy of Franklin continued



From Van King: by Pete Chin

Good news, everybody. The Mineralogy of Franklin and Ogdensburg, New Jersey is on one of the ships of this company and they will begin passage through the Panama Canal soon. Scheduled to begin passing through December 2. The books are in the red and green containers. I have a list of your intentions of wanting a set, but message me as the rubber will soon meet the road. The additional good news is that the Port Of New York is not as overwhelmed as other US ports. I don't see that there will be books sent out before early January. After 9 years in the making!!!!

45th Annual Micromount Symposium by the Leidy Micromount Society 3/22

Friday March 11, 2022, noon to 6pm

Saturday March 12th, 2022, 9am to 6pm

Advent Lutheran Church, 45 Worthington Mill Road, Richboro, Pennsylvania 18954

Table space (for two days): \$25.00 (half table)
\$40.00 (full table) 6ft

Visitor's Fee (no table): \$5.00 Friday & \$10.00 Saturday (includes lunch)

Reservations/ Admission:

Make checks payable to; Don McAlarnen,

916 Senator Rd, East Norriton, PA 19403

(610) 584-1364 Questions: Email:

donmcalarnen@outlook.com

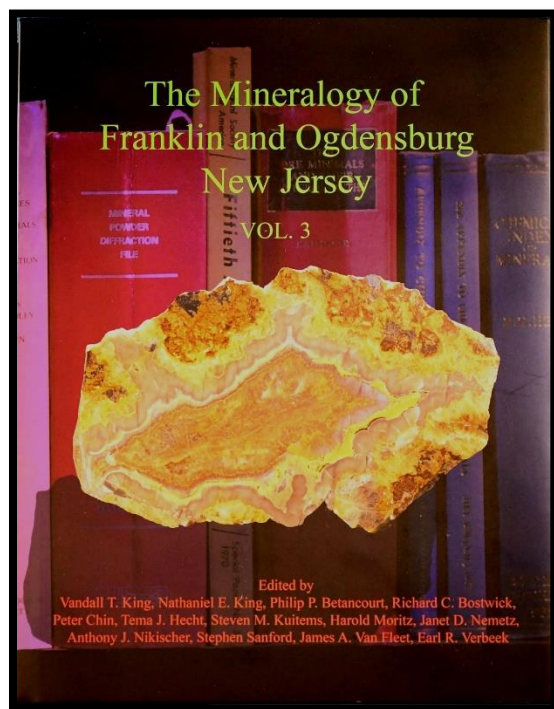
Leidy Microscopic Society of Pennsylvania



Atlantic Micromounter's Symposium April 1-2, 2022 update

by Kathy Hrechka, chair

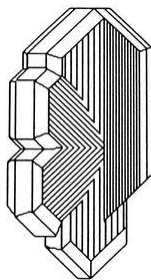
Our intention is to have an in-person symposium at the usual location, Marriott in Alexandria, Virginia. Perhaps two of our speakers would be broadcast on Zoom, for the folks who are unable to attend. The micromineral auction would only be for attendees on location. I am trying to work with the hotel.



Rochester Mineralogical Symposium April 8-10, 2022, on Zoom

by Ray McDougall, Chairman

Hello RMS Family, we've passed our deadline for RMS decisions and want to share our situation with you. Over a number of weeks, I spoke with many of you (all of whom care deeply about the RMS) and now we are moving forward. My conversations included a broad cross-section of our RMS community – all ages, a variety of backgrounds/interests, US, Canada, even Belgium. At the very outset of chats about RMS there has been a range of reactions, from an assumption it's going ahead in-person to surprise we're even considering in-person.



However, as I asked a few different questions, very common ground has emerged as well. When I ask, "would you personally attend" (assuming all is the same as today, with some improvements like reopened borders etc., and assuming strict safety protocols - vaccination, masks and distancing), the answers are split, almost evenly (the leader was "no", but very close). People who said yes said they would expect full vaccination and mask requirements, etc. Dealer rooms, eating meals in public settings together, the hospitality suite, staying up drinking with mineral friends, singing with mineral friends... there is not much enthusiasm, and a lot of hesitation. But that's only partly indicative.

So, we are going to focus our energy on making RMS 2022 a more robust event online. We'll spread the event over more than one day, April 8-10, we will include longer feature talks, and we will be looking at more ways to improve social connection and have fun over the course of the event. (For the latter, there are some good ideas and cool technologies out there – we'll have to explore feasibility/cost.)

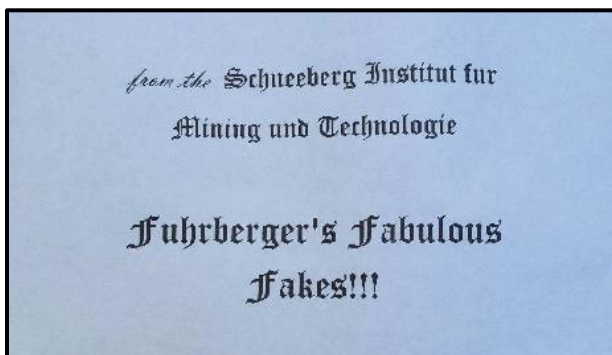
Stay tuned for details! If you are not already following our page on Facebook, please do, as it is our primary internet presence and is updated when new information is available. Thank you all for your time and thoughtful input on this.

Auf Smithsonite

by Pat Haynes, Socorro, New Mexico



The following specimen was purchased on February 20, 1973, for \$10 from Mineralia in Costa Mesa, California. The dimensions are 7.7 wide x 9.7 x 6.5 cm.



PS Noids are actually found at the Kelly Mine. The Kelly crinoids are painted coppery.

Friends of Mineralogy Virginia Chapter FMVA

by Thomas Hale, President



FMVA Community Briefing #11

Submissions Requested: FMVA is in full swing with its Northern Virginia Quarries publication set to release next spring. Please provide any articles, photos, stories, etc. if your local clubs or members have visited or collected the NOVA traprock quarries.

FMVA submitted its 2021 Virginia Mineral Directory with teacher resources, links, and articles to the virtual booth for the VAST Conference. A big shoutout to Rob at VTCA for allowing us to collaborate with the VTCA booth. A case will be raffled at the virtual fair and FMVA will work with curating it next year.

FMVA will be meeting with Loudoun County Schools this week to discuss the Virginia Academy of Sciences mentorship. Our team is excited to work with around 80 students over the next year.

The Richmond Club held its annual rock swap on November 13th. The swap was a massive success, and the community is excited for what lies ahead next year! Shout out to our board member, August Dietz, who is the show chair for that event.

Thomas Hale will be taking on the position of historian for the Richmond Club. After the passing of Betsy Martin, Thomas will be ensuring that the club records and Virginia historical data is preserved and digitized for future generations.

Please find the recording for the October Speaker Series talk on our YouTube channel. It has also been attached below.

Scott Duresky and Thomas Hale will be at the Northern Virginia Mineral Club's meeting next week to discuss the Rutherford Mine Research Collection.

The FM-PA Chapter hosted its 2021 Symposium over the weekend. The event was a success and congrats to Bill Stephens and his board for bringing the community together after a tough year of event closures.

The next update will release on December 1st, and it will be the first edition of the monthly wrap-up article as discussed in the last brief.

Reach out if you have any questions or require further information!

NEW WEBSITE NOW ONLINE! Please let us know what you think about FMVA's new website! We would love to hear your thoughts and feedback. If you notice issues, just reach out to us. This will expand and grow with new partnerships and activities. <https://friendsofmineralogyvirginia.org>

IMPORTANT: The VMP has been working behind the scenes for the last few months strengthening the Virginia mineral community and establishing relationships with new affiliates and industry partners. Over the last year, our [social media group](#) has attracted **10.5K Virginian's** who share a passion of rockhounding and wanted to stay in touch throughout the pandemic.

FM-Virginia has been the primary organization hosting virtual speaker series and providing outreach and social media engagement. If you want to stay up to date with the VMP outside these newsletters, then please join the FMVA mailing list via Mailchimp: [REGISTER HERE](#).

In addition, FMVA and its committees (including VMP) provides a weekly briefing for our affiliates and industry contacts interested in information and progress on the multiple ongoing initiatives. FMVA has recently updated its [website](#), so make sure to check it out!

<https://www.friendsofmineralogyvirginia.org/>

Email: friendsofmineralogy.virginia@gmail.com

Thomas Hale is the founder and President of FMVA.

Read the FMVC November Report in attachment of The Mineral Mite, December edition.

Dec 3 FMVA: Las Choyas Geodes from Mexico
Speaker, Beth Heesacker, Oregon

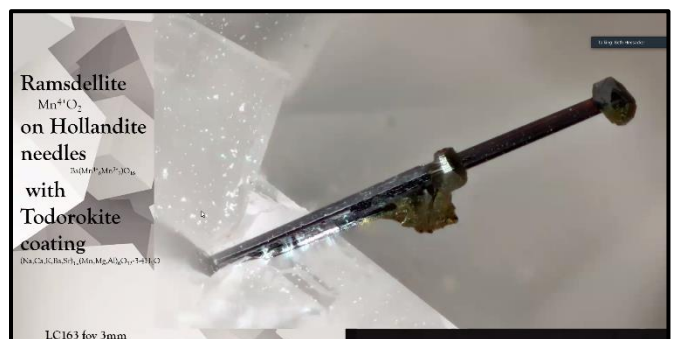
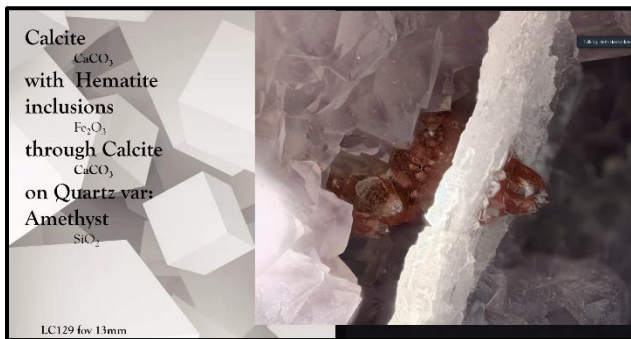
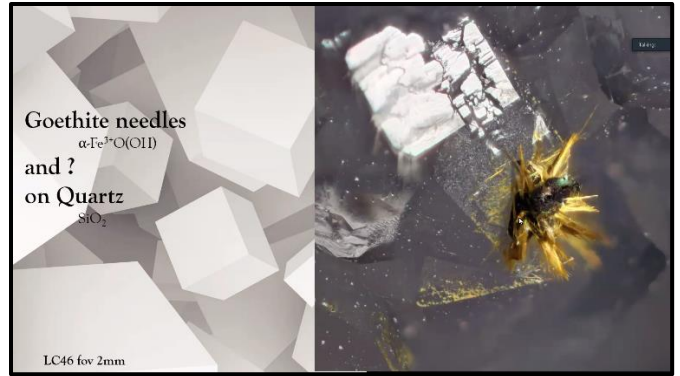
Beth's biography & screen shots on next page

Las Choyas Geodes from Mexico

Presenter, Beth Heesacker, Oregon
 by Thomas Hale, President FMVA

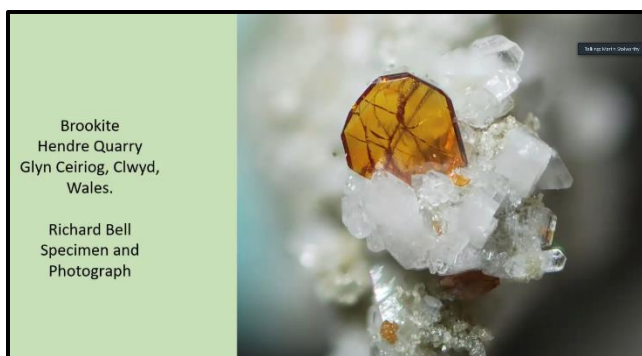
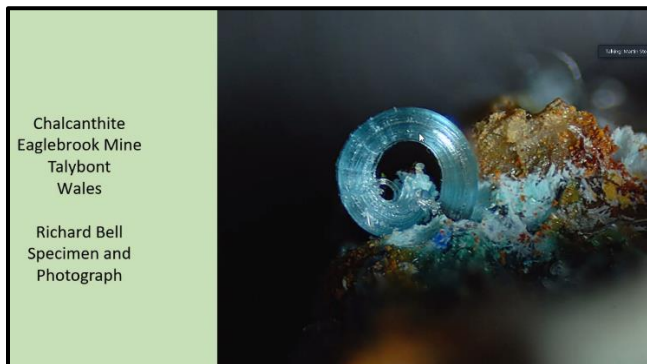
Beth is a Past-President of the Northwest Federation of Mineralogical Societies and am President of the Pacific Northwest Micro Mineral Study Group. She currently edits two newsletters: the Pacific Northwest Friends of Mineralogy Newsletter, and the Bulletin of Friends of Mineralogy national newsletter.

She and her husband have been rockhounds, until about 12 years ago a couple of guys came to one of the club meetings and talked about micro minerals. She fell in love. Since then, Beth has acquired a huge micro mineral collection. She has over 17,000 specimens in her computer-based catalogue. She designed the relational database using Access. She has mastered the art of photomicrography, while stacking as many as three hundred photos to achieve clarity of microminerals.



**Micromineral News from Australia
November 30 recap: “Mines &
Minerals of Wales” Martin Stolworthy**

by Kathy Hrechka, Editor



Steve Sorrell from Melbourne, Australia hosts a program every other Tuesday at 5pm (EDT) with various geology persons of interest at their micromount meeting. You can sign up for Steve’s programs, and meet new presenters, while enjoying friendly faces within our geology community around the globe.



Steve’s next meeting is on Dec 16 at 2pm EDT
steve@sorrellpublications.com

The Micromount Club Facebook group has been meeting on Zoom every other week, hosted by Steve Sorrell in Australia. All presentations are available through the following link:

<https://www.youtube.com/playlist?list=PLwdOHCjmd ucFKcDw8d2qgAoEEEB0M7vht>

Mineral Talks Live: Dec 1 recap

by Kathy Hrechka, Editor

Bryan Swoboda, Blue Cap Productions in Honolulu interviewed Jean-Claude Boulliard, Director of the Mineral Collection of the Sorbonne in Paris, France. Jean-Claude took viewers on a walking tour.



Each month, on the first Wednesday at 1pm EDT Bryan Swoboda, presents various mineral persons of interest on Zoom. All MLT lectures are complementary to our geology community through Dr. Rachel Alanzo Perez from the Mineralogical & Geological Museum at Harvard University, and Dr. Eloise-Gaillou, curator of the Mineralogy Museum Paris School of Mines in France representing the Society of Mineral Museum Professionals SMMP. Each program is recorded, so you can view archived speaker topics. <http://go.mineraltalkslive.com>

To join, register in advance for future webinars:

<http://go.mineraltalkslive.com/register>

Micromineralogists of the National Capital Area, Inc.



American Federation of
Mineralogical Societies

(AFMS)
www.amfed.org

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

2021 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.

Congratulations! **Matt Charsky** Arlington, Virginia was recently voted as 1st Vice President of the American Federation, representing the EFMLS.

University of Arizona Alfie Norville Gem and Mineral Museum at the Historic Pima County Courthouse, Is Now Open!

By S. Kaminski, Mineralogical Society of Arizona

A new gem, and mineral museum has opened in Tucson, Arizona. The University of Arizona Alfie Norville Gem & Mineral Museum (UAANGMM) is located within the historic Pima County Courthouse, an iconic and historic building of magnificent Spanish Revival architecture in the heart of Tucson

*Full article published in the AFMS News Sept 2021



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:

December 2021

3: Mineralogical Society of the District of Columbia
MSDC 7:30 [Zoom www.mineralogicalsocietyofdc.org](http://www.mineralogicalsocietyofdc.org)

13: The Gem, Lapidary and Mineral Society of Montgomery County, Maryland - GLMSMC
7:30 pm www.glmsmc.com

?: The Gem, Lapidary and Mineral Society of Washington, DC - GLMS-DC meeting
www.glmsdc.org

15: The Baltimore Mineral Society BMS
7pm www.baltimoremineralsociety.org

20: Northern VA Mineral Club – NVMC meeting
7:00 pm – **Holiday party in person** at Tom Kim's residence, 2301 Stokes Lane, Alexandria, VA 22307 (next to West Potomac High School) Let Tom know if you intend to bring a snack, drink, or dessert. tomkim77@gmail.com.

We are partnering with MNCA.
www.novamineralclub.org

20: Micromineralogists of the National Capital Area, Inc. - MNCA 7:00pm **Holiday party in person** at Tom Kim's residence, 2301 Stokes Lane, Alexandria, VA 22307 (next to West Potomac High School) Let Tom know if you intend to bring a snack, drink, or dessert. tomkim77@gmail.com
We are partnering with NVMC.
www.dcmicrominerals.org

Micromineralogists of the National Capital Area, Inc.



GeoWord of the Day and its definition:

ferrierite-Mg A white monoclinic zeolite mineral with Mg as the principal interchangeable cation: $(\text{Mg}, \text{K}, \text{Ca})_{4.4}(\text{Si}, \text{Al})_{36}\text{O}_{72} \cdot 20\text{H}_2\text{O}$.

klockmannite (klock'-mann-ite) A metallic reddish-violet to slate-gray hexagonal mineral: CuSe . It tarnishes blue-black and is found in granular aggregates.

orthowalpurkite A yellow orthorhombic mineral: $(\text{UO}_2)\text{Bi}_4\text{O}_4(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$. It is the orthorhombic dimorph of walpurkite.

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

GeoWord of the Day is brought to you by: EnviroTech!

envirotechonline.comwordoftheday@agiweb.org

AGI was founded in 1948, under a directive of the National Academy of Sciences. It is a not-for-profit 501(c)(3) organization dedicated to serving the geoscience community and addressing the needs of society. AGI headquarters are in Alexandria, Virginia.



Micromineralogists of the National Capital Area

Meetings are held via Zoom, due to Long Branch closings.

Meeting: The 4th Wed. of each month 7:30 -10 p.m.
Long Branch Nature Center (No meetings July & Aug) 625 S. Carlin Springs Road, Arlington VA 22204

Phone (703) 228-6535 (Long Branch is still closed)

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

President: Dave MacLean

Vice President: David Fryauff

Secretary: Bob Cooke

Treasurer: Michael Pabst

Editor/Historian: Kathy Hrechka

Website: Kathy Hrechka

AMC Conference: Kathy Hrechka

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 2022

\$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:

* Dave MacLean

* David Fryauff

* Michael Pabst

* Kathy Hrechka

* Thomas Hale

* Pete Chin

* Tom Kim

* Pat Haynes

