

## February 23 Time: 7:30 p.m. Zoom

### Program: Tucson Gem and Mineral Show 2022, Great Geology Adventure

by Kathy Hrechka

Kathy will share her adventures of the 2022 Tucson Gem & Mineral Show “The Show That Glows – Featuring the Apatite Supergroup”. She will focus on the TGMS Micromount Symposium, as well as main lectures, exhibits, and dealers. She will also journey through the newly opened Alfie Norville Gem and Mineral Museum.

### Mystery Micro Mineral of the Month



In light of the new book on Franklin and Sterling Hill Mineralogy: Can you guess the pale green crystals on brown kraisslite with tan susexite, which is partially covering the mystery crystal? Turn to page 2 for the answer.  
by Pete Chin, Honolulu, Hawaii

### President's Message:

by Dave MacLean

Last Wednesday night I saw Michael Pabst's photo talk on on minerals in the newly opened mineral Museum at James Madison University. he took the photos of the Virginia mineral collection and then the spectacular world class minerals donated by Peter L. Via. What a treat to see macro mineral specimens as attractive as the micro minerals we see thru our microscopes. I am amazed at the high-quality programs we ourselves created. The Omicron Variant of Covid-19 still stalks us. Consequently, our February 23 meeting will be on virtual Zoom.



### 48<sup>th</sup> Annual Atlantic Micromounter's Conference April 2, 2022 1-5pm Zoom

by Kathy Hrechka, chair

1pm - Dr. Robert Hazen, Carnegie Institution

3pm - Alec Brenner, Harvard University

Details for this year's conference can be found on pages 5-7. There will be no micromineral auction, rather some entertaining quizzes pertaining to geology.

### 2022 Dues are Due

MNCA Membership dues for 2022

\$15 (single) or \$20 (family)

MNCA - Michael Pabst, Treasurer

Please update your email and preferred contact information. Details are on page 14.

## Mystery Micro Mineral of the Month

by Pete Chin, Honolulu, Hawaii

In light of the new book on Franklin and Sterling Hill mineralogy, here is EVE(ite) and Adam(ite):



**Mystery mineral Eveite** Pale green **eveite** crystals on brown kraisslite with tan sussexite partially covering the eveite crystals and kraisslite. The longest crystal of pale green eveite is 3.5 mm. John Kolic (Koloicite) found this specimen from the 1010 Stope, just above 800'L Sterling Mine in 1975. The crystals were partially hidden by the sussexite, which was partially removed. It was part of 2 flats of specimens sent to and studied by Paul (later, Paulus) B. Moore that resulted in the description of then new mineral, *Kraisslite* as well as many arsenates new to Franklin and Sterling Hill. Paul B. Moore and Jun Ito (1978), "Kraisslite, a new platy arsenosilicate from Sterling Hill, NJ" *American Mineralogist*, v. 63, pp938-940.



**AND ADAMITE** (cuprian) from a different find in 1972, 920 Stope, 340'L Sterling Mine, Green (with envy) adamite with black franklinite crystals/ FOV = 7 mm. Adam and Eve from the garden of minerals!

## Letter to the Editor

by Dave MacLean, President

Your January Mineral Mite is fascinating. The article on silver sulfosalts brings to mind my parents 1913 Encyclopedia Britannica. The entry on Germanium said its source was Agyrodite  $Ag_4GeS_4$ , the only known Ge mineral at the time found in only German Southwest Africa (now Namibia) the entry said that the entire deposit of Agyrodite had all been quickly mined out.

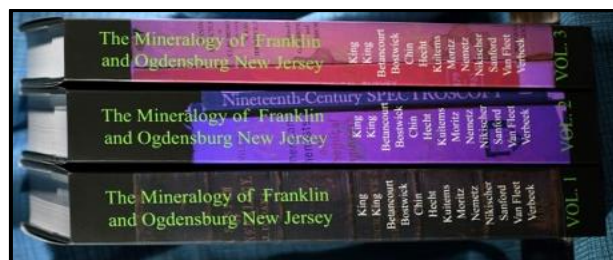
Pat Haynes's article on Friedrichite inclusions in fluorite in New Mexico was fascinating. Carol and I visited underground in a goldmine in Cripple Creek, Colorado. The guide said the gold was found in a narrow seam of fluorite in the tunnel ceiling. Some fluorite contains up to 30% yttrium substituting for calcium with sodium added. Fluorite has a loose structure and can accommodate other elements replacing calcium in its structure. German fluorite miners in SE Germany experienced lung problems from breathing an irritating gas when they fractured the fluorite. A further examination showed the gas oxidized iodide to brown iodine stains on iodide test paper used testing for chlorine. Further examination showed that the Fluorite contained uranium. Beta particles (electrons) emitted from the breakdown of uranium kicked an electron of the fluoride ions giving fluorine which remained trapped in the fluorite until liberated by breaking up the fluorite.

\*\*\*

## New: The Mineralogy of Franklin and Ogdensburg New Jersey - 3 Volumes

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.



Full details were published in The Mineral Mite Volume 54 pp 9-10, Jan 2022.

**Previous Program Review: 1/26/21**

**James Madison University Mineral Museum**  
presented by Michael Pabst and his iPhone

The small town of Harrisonburg, Virginia is home to the James Madison University Mineral Museum. MNCA members Karen and Michael Pabst live in Harrisonburg, where they can easily visit the Museum. Dr. Lance Kearns is the curator, while his wife Dr. Cindy Kearns is the collections manager.

To compare Michael's amateur photography with that of a mineral photography professional, Jeff Scovil, please consult the September-October 2020 issue of *The Mineralogical Record*. There you will see some 50 incredibly beautiful photos from the Peter Via Collection: Wilson WE (2020) The Peter L. Via Collection at James Madison University, *Mineralogical Record* 51:703-726.

There is more to the JMU museum collection beyond the recent Peter Via bequest, so even if Michael's photos are not professional level, you will be able to see some specimens that are not in the article. Here are a few iPhone photos taken by Michael Pabst.



**Dolomite** on Sphalerite, Elmwood Mine, Tennessee. A gift purchased at the Shenandoah Valley Gem & Mineral Society Show in 2019.

Official website for the  
James Madison Mineral Museum  
<https://www.jmu.edu/mineralmuseum/>



**Fluorite** exhibit



**Rhodochrosite**, Sweet Home Mine, Alma, Colorado. Peter Via Collection.



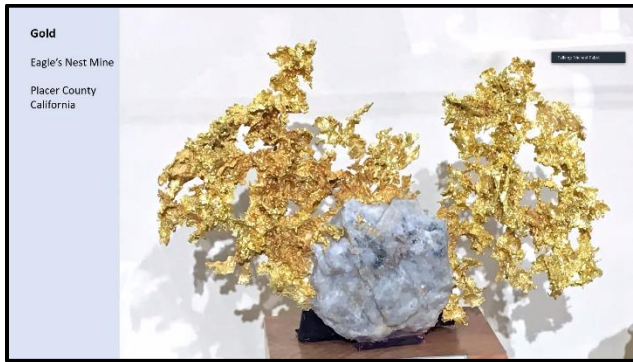
**Turquoise**, Lynch Station, Virginia. Original JMU collection.



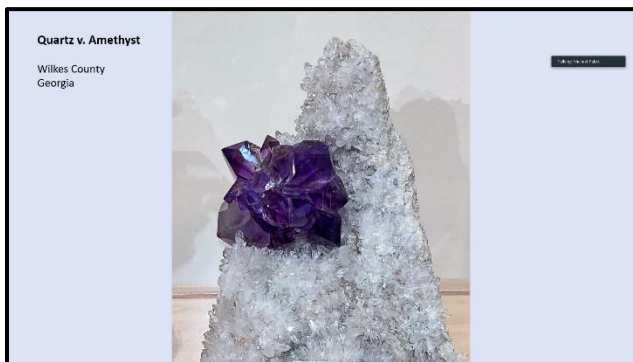
continued next page

Micromineralogists of the National Capital Area, Inc.

James Madison University Mineral Museum



Gold, Eagle's Nest Mine Placer County, Colorado



Quartz v. Amethyst, Wilkes County, Georgia



Malachite on Shattuckite, Kaokoveld, Namibia

Mineralogical Record Article

- Wilson WE (2020) The Peter L. Via Collection at James Madison University, *Mineralogical Record* 51:703-726.
- Number 5, September-October, 2020.

CLAY CENTER!

THE MINERALOGICAL RECORD

Min Record 51:703-726 No 5, Sept-Oct 202



Pyrite, Huanzala Mine, Huallanca District Peru



Calcite, Elmwood, Tennessee



Tourmaline, Lepidolite Brazil

4 Collections:

- Original JMU collection, started by Dr. Kearns with help from the University of Delaware
- Richard S. Mitchell Memorial Collection of Virginia Minerals
- Peter L. Via collection (314 specimens)
  - Total of about 1770 cataloged specimens
- Phil Cominsky and Fred Keidel micromounts (5000 specimens)

JMU website for photos:  
<https://www.jmu.edu/mineralmuseum/minerals.shtml>

Four major collections: University of Delaware, Richard S. Mitchell, Peter L. Via, Phil Cosminsky & Fred Keidel micromounts

**Atlantic Micromounter's Conference  
April 2, 2022 1-5pm virtually on Zoom**

by Kathy Hrechka, chair

**Presenter: Dr. Robert Hazen Senior Scientist at the Carnegie Institution for Science and Robinson Professor of Earth Science, Emeritus, at George Mason University**

**Title: "Mineral Informatics: Visualizing the amazing mineral kingdom "**

Abstract: "Every mineral specimen holds incredible amounts of information – each mineral is a time capsule waiting to be opened. "Mineral informatics" is an emerging approach to understanding the story of Earth, which is a 4.5-billion-year saga of dramatic transformations, driven by physical, chemical, and biological processes. Sequential changes of terrestrial planets and moons are best preserved in their rich mineral record. Earth's "mineral evolution," began with a score of different mineral species that formed in the cooling envelopes of exploding stars.



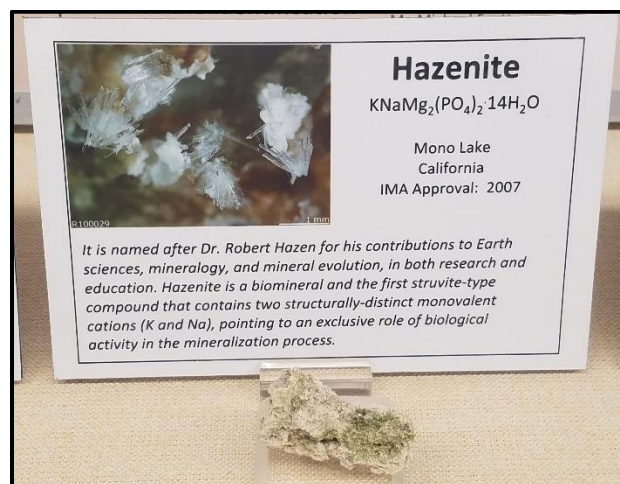
Dust and gas from those stars clumped together to form our stellar nebula, the nebula formed the Sun and countless planetesimals, and alteration of planetesimals by water and heat resulted in the 300 minerals found today in meteorites that fall to Earth. Earth's evolution progressed by a sequence of chemical and physical processes, which ultimately led to the origin-of-life. Once life emerged, mineralogy and biology co-evolved, as changes in the chemistry of oceans, the atmosphere, and the crust dramatically increased Earth's mineral diversity to the more than 5700 species known today."



Making Earth

**Short Biography:** "Robert M. Hazen, Senior Scientist at the Carnegie Institution for Science and Robinson Professor of Earth Science, Emeritus, at George Mason University, received degrees in geology from MIT and Harvard. Author of more than 450 articles and 25 books on science, history, and music, his recent book *The Story of Earth* (Viking-Penguin) was finalist in the Royal Society and Phi Beta Kappa science book competitions. Hazen has been recipient of numerous awards, including the 2021 IMA Medal, the 2016 Roebling Medal of the Mineralogical Society of America, and the 2012 Virginia Outstanding Faculty Award. In 2020 he was elected Foreign Member of the Russian National Academy of Sciences.

The biomineral "hazenite" was named in his honor. Since 2008, Hazen and his colleagues have explored "mineral evolution" and "mineral ecology"—new approaches that exploit large and growing mineral data resources to understand the co-evolution of the geosphere and biosphere. In October 2016 Hazen retired from a 40-year career as a professional trumpeter, during which he performed with numerous ensembles including the Metropolitan Opera, Royal Ballet, and National Symphony."



**Hazenite**, Mono Lake, California IMA approval 2007, named after Dr. Robert Hazen. It is located at the University of Arizona Mineral Museum in Tucson. *Photo credit: Kathy Hrechka, Tucson 2018*

Check out Dr. Hazen's website.  
<https://hazen.carnegiescience.edu>

continued next page

## Atlantic Micromounter's Conference

**Presenter:** Alec Brenner, PhD student at Harvard University

**Title:** “Little magnets, big geodynamics: Micromineralogy as a tool for studying Earth’s magnetic field and tectonics in deep geologic time”

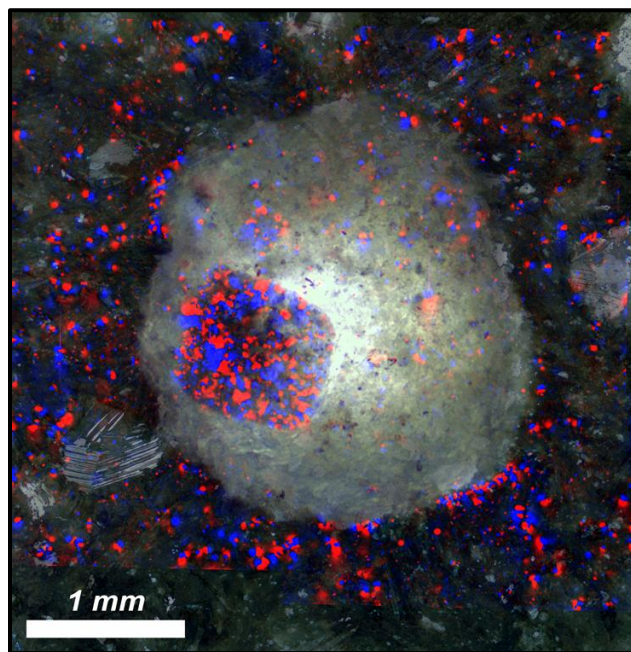
Abstract: “Many iron oxide and sulfide minerals are ferromagnetic, including magnetite, hematite, and pyrrhotite. This means that these minerals become magnetized when they form in a magnetic field and can then retain their magnetization when the field is changed or removed. As a result, these minerals - and the rocks they occur in - can preserve records of the ambient magnetic field in deep geologic time. Paleomagnetists study these ancient magnetic signals to understand the evolution of Earth's magnetic field and the motions of tectonic plates through it, among other applications.



However, Earth's oldest preserved rocks have traditionally been considered inappropriate for paleomagnetic work. Billions of years of metamorphism, deformation, and tectonic events have erased most of their magnetic records, obscuring our view of early Earth's magnetic field and plate tectonics. This is especially true before about 3 billion years ago, coinciding with the evolution of some of the first life on Earth.

Fortuitously, my work in the lab of Prof. Roger Fu has identified volcanic rocks in Western Australia that retained 3.2-billion-year-old magnetizations. I will discuss our data from these rocks, which document the oldest described reversal of Earth's magnetic field, as well as large plate motions of the underlying of crust. Of particular interest to micromounters are our magnetic microscopy observations. Using a state-of-the-art magnetic microscope developed by Prof. Fu, we have directly mapped the magnetized signals in our rocks at micron scale (0.001 mm). By closely examining the textures and mineral populations associated with the magnetic minerals in our samples, we have established that they became magnetized when the rocks were chemically altered by hot seawater during a hydrothermal event 3.2 billion years ago. This alteration removed original magnetic

minerals and grew new ones via a complex sequence of co-occurring metamorphic reactions. Raman spectroscopy, electron microscopy, traditional petrographic analyses, and in-situ geochronology further constrain the timing and thermal conditions of this alteration. Our newfound understanding of how these ancient rocks became magnetized paves the way for new studies of Earth's earliest magnetic record.”



In this image, a microscopic magnetic field map (red and blue hues) is overlaid on an optical image of a gas bubble, or “vesicle” (light-colored circle in the center) within a 3.25-billion-year-old lava flow. The vesicle was quickly infilled by clays, zeolites, plagioclase, and calcite, and the plagioclase hosts millions of strongly magnetized magnetite microneedles (dark region with intense reds and blues slightly left of center).

**Biography:** “Alec Brenner is a fervent rockhound and native of McLean. He is also a fifth-year PhD student at Harvard University, where his research focuses on the mineralogical basis of magnetism preserved in Earth’s oldest rocks. This in turn informs his reconstructions of tectonics, core circulation, and surface processes on the early Earth. This research has thus far included field work in rocks about three billion years old in Australia, South Africa, and Minnesota.

continued next page

## Atlantic Micromounter's Conference

Alec first got interested in minerals after finding prehnite from the Vulcan Manassas Quarry in the gravel of his elementary school parking lot. He continued rockhounding and fossil collecting with the Northern Virginia Mineral Club, which he joined in 2007. While attending Thomas Jefferson High School for Science and Technology (TJHSST), Alec's inter-graphy collaborations with micropaleontologists and planetary scientists at the US Geological Survey, The Smithsonian Institution, and NASA's Goddard Space Flight Center. He attended the California Institute of Technology (Caltech) for his undergraduate studies, earning a BS in Geology in 2017. There, he found his true loves, including his now-wife Netgie and his current specializations in paleomagnetism, deep-time Earth history, and mineralogy.

Alec currently lives in Arlington, Massachusetts, where he hikes atop the rocks of the Avalonian Terrane, counts the days until he can resume field work in Australia (pictured), and dotes on his tabby cat Sienna. A special thanks to Prof. Roger Fu, Alec's academic advisor at Harvard's Paleomagnetism Lab, for funding and contributing his expert guidance to the work presented here. Alec also thanks his parents Sara and Paul Brenner, who tirelessly supported his odd fascinations with rocks and drove him to so many NVMC meetings and field trips as a kid."



Alec Brenner, field working in Australia

## Notes from Kathy Hrechka, conference chair

**Dr. Robert Hazen:** I have patiently waited since 2017 for Dr. Robert Hazen to accept the offer to speak at our Atlantic Micromounters' Conference. It is my opinion that the many new minerals discovered are micro mineral in size. He assured me, once Deep Carbon Observatory was completed, he could consider. We had only one problem. The conference room would have been too small, or we would have had to limit attendees. So, 2022 is perfect since we are going virtual. I am forever grateful to Dr. Hazen for reaching out to our geology community.

**Alec Brenner:** I view Alec as a child prodigy of Dr. Hazen. That is my honored compliment. Our local geology club members remember Alec since he was in grade school. In preparation for Science Olympiad, he approached club members to study and memorize their collections. Needless to say, Alec was awarded first place! In his biography, notice the schools and opportunities he sought after. Alec certainly is a great young man, while he gives his parents credit for driving him in his youth to meetings and field trips, nurturing his odd fascinations of geology. What's not to like about Alec Brenner, fifth-year PhD student at Harvard University. Time to support our youth.



Alec in his youth, Science Olympiad Medalist  
*Photo by Kathy Hrechka NVMC meeting.*

## Annabergite

by Michael Pabst PhD, Treasurer

In the next few articles, we will be looking at nickel minerals. I have seen many photos and specimens of beautiful green Annabergite. This led to me to believe that there might be a variety of nice green nickel minerals that I could photograph. So, for several years, I have been looking for attractive nickel minerals, but I have not found much. There are several green nickel carbonates and silicates, but the crystallization has always been disappointing, just crusts and such.



I have a theory about this poor crystallization of nickel minerals: Iron, cobalt, and nickel sit side-by-side as transition metals in the Periodic Table, so they have many similar properties, but they are not as similar as the rare earth elements are. I think that iron, cobalt, and nickel are often found together, but iron and cobalt interfere with the crystallization of nickel minerals, because they are not sufficiently alike to fit together nicely in a crystal structure. Well, that's one idea anyway.

So, let us accept what Nature offers, and celebrate beautiful Annabergite, which crystallizes nicely in the monoclinic system  $2/m$  – prismatic,  $\beta = 105.00^\circ$ . Annabergite is a hydrated nickel arsenate,  $\text{Ni}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$ . Annabergite is a member of the Vivianite Group. (Vivianite is  $\text{Fe}^{2+}_3(\text{PO}_4)_2 \cdot 8\text{H}_2\text{O}$ .) The cobalt analog of Annabergite is beautiful red-violet Erythrite,  $\text{Co}_3(\text{AsO}_4)_2 \cdot 8\text{H}_2\text{O}$ . We will talk about cobalt minerals in later articles.

Most of the colorful green specimens of Annabergite come from Greece, like my two specimens to the right:



**Annabergite.** Km-3 Mines, Lavrion Mining District, Attica, Greece. Photo taken with stereo microscope, stacking 24 images with CombineZP. FOV 10 mm.



**Annabergite.** Km-3 Mines, Lavrion Mining District, Attica, Greece. Photo taken with stereo microscope, stacking 19 images with CombineZP. FOV 13 mm.

There are wonderful photos of Annabergite on Mindat. Here are some of my favorites:

By the great photographer Matteo Chinellato: [www.mindat.org/photo-300338.html](http://www.mindat.org/photo-300338.html).

By Fritz Schreiber, showing well the shape of individual crystals: [www.mindat.org/photo-193375.html](http://www.mindat.org/photo-193375.html).

Annabergite and Erythrite form a series. The green color of nickel in Annabergite is relatively weak compared to the strong violet color of cobalt in Erythrite, so even a small percentage of cobalt can change the green color of Annabergite to tan or pink.



## Annabergite continued

This occurs in some Annabergite specimens from the Clara Mine in Germany. See this example from Mindat, with a photo by Stephan Wolfsried: [www.mindat.org/photo-144026.html](http://www.mindat.org/photo-144026.html). The same color phenomenon can be seen in Annabergite from other locations, like this location in Italy: [www.mindat.org/photo-1034998.html](http://www.mindat.org/photo-1034998.html).

There is a “Best of Annabergite” article on Mindat, with many good photos and much more information: [www.mindat.org/a/best\\_annabergite](http://www.mindat.org/a/best_annabergite).

In the next article, we will look at some other nickel minerals, including one other well-crystallized mineral, Ahlfeldite.

\*\*\*

## GeoScrambles: Unscramble the following.

Aired TV \_\_\_\_\_

Tea bile \_\_\_\_\_

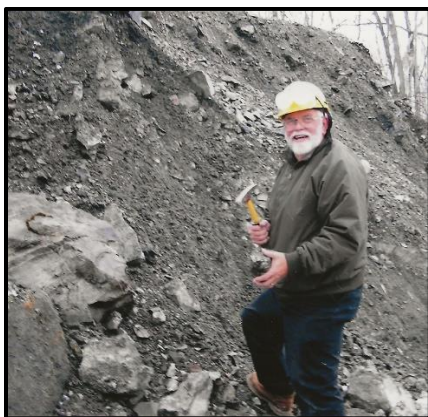
Delta idiotic \_\_\_\_\_

Diction lie \_\_\_\_\_

True libel \_\_\_\_\_

Finally, what do all these minerals have in common? Answers on page 14.

Conglomerate Dec 2021 Mike Seeds, PA editor



Mike Seeds proves that anyone can collect rocks.

## WILDACRES – 2022 Spring Session May 16-22 in Little Switzerland, NC

forwarded by Mary Bateman, EFMLS Editor  
It is official—the dates for the spring 2022 session of Wildacres will be May 16-22, 2022

**SPEAKER-IN-RESIDENCE:** We are very fortunate to have another fabulous Speaker-in-Residence for the Spring Session -- Dr. Nathalie Brandes. Dr. Brandes is a geologist, author and distinguished college professor and researcher. She is Professor of Geosciences at Lonestar College - Montgomery in Conroe, Texas, where she has been teaching for the past 17 years. In 2019, she was presented the Faculty Excellence Award in recognition of outstanding teaching methods and dedication to student success in the classroom and beyond.

Her current research focuses on ancient mining techniques as well as the history and geology of classic mineral localities. Her Wildacres presentations will focus on the last major gold rush in the United States (Goldfield, Nevada), silver mines in Norway, Mining in the Ancient World, the History of Mineralogy, and the Geology of Birthstones. Attached is a more detailed biography of her expertise.

**CLASS SCHEDULE:** Listed in Feb EFMLS News  
**OTHER INFORMATION:** While the cost of the session is increasing by \$10.00 for a double occupancy room, it is a modest increase and one that is still more than a bargain compared to other entities' classes and instructions. The fee includes a week of excellent instructors, room and board, a great speaker-in-residence, the ambiance, and serenity of being in the great Blue Ridge Mountains, and the comradery of fellow members of the many aspects of the hobby. This year you will have the opportunity to decide if you would like to have a single room or share it. Single rooms will have an additional charge. More information will be forthcoming as soon as it is available. In the meantime, if you have any questions, please feel free to contact one of us.

### Wildacres Workshop Staff:

Suzie Milligan, Registrar at [smilligan@stny.rr.com](mailto:smilligan@stny.rr.com) or 607-687-5108 or Mark Kucera, Director at [mark\\_j\\_kucera@yahoo.com](mailto:mark_j_kucera@yahoo.com) or 914-423-8360

## Micromineralogists of the National Capital Area, Inc.

### 45<sup>th</sup> Annual Micromount Symposium

#### Leidy Microscopical Society of Pennsylvania

Friday March 11, 2022, noon to 6pm

Saturday March 12<sup>th</sup>, 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)

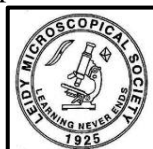
#### Reservations/ Admission:

**Make checks payable to; Don McAlarnen,**

916 Senator Rd, East Norriton, PA 19403

(610) 584-1364 Questions: Email:

[donmcarnen@outlook.com](mailto:donmcarnen@outlook.com)



### 31st Annual Chesapeake Gem, Mineral, Jewelry & Fossil Show April 23, 2022

#### New Location: Howard County Fairgrounds

2210 Fairgrounds Rd. West Friendship, Md 21794

Saturday, April 23, 2022, 10 AM – 4 PM

Minerals, original jewelry, fossils, rough & cut gemstones - Silent Auctions, Door Prizes - Free minerals for kids

[www.chesapeakegemandmineral.org](http://www.chesapeakegemandmineral.org)

#### Directions:

From Baltimore take I-70 to Rt. 32 south; Turn right on Rt. 144 west Fairgrounds Road is half a mile on the right.

From Washington area – Routes 29 or 95 North to Rt. 32 west/north; turn left on Rt. 144 west- Fairgrounds Road is a half of a mile on the right.

### Rochester Mineralogical Symposium

#### April 8-10, 2022, on Zoom

by Ray McDougall, Chairman

Hello RMS Family, we are going to focus our energy on making RMS 2022 a more robust event online. We will include longer feature talks and are looking at more ways to improve social connection and have fun over the course of the event. Follow us on Facebook. It is our primary internet presence and is updated when new information is available. Thank you all for of your time and thoughtful input on this.

<https://www.facebook.com/RochesterSymposium/photos>



### Gem, Lapidary & Mineral Society of Montgomery Co., MD Mar 19-20, 2022

#### 56<sup>th</sup> Annual Gem, Mineral, Fossil & Jewelry Show

Date/Time: March 19-20, 2022, Sat 10-6, Sun 11-5

Location: Montgomery County Fairgrounds: Building #6 16 Chestnut St. Gaithersburg MD 20877



### 56<sup>th</sup> Annual Gem, Mineral, Fossil & Jewelry Show

Date/Time: March 19-20, 2022 Saturday 10-6, Sunday 11-5  
Location: Montgomery County Fairgrounds; Building #6  
16 Chestnut St. Gaithersburg MD 20877

**Featuring:**

Hourly Door Prizes	20+ Vendors of minerals, beads, fossils, gems & jewelry
Gold Panning	40+ Exhibits by club members - including junior exhibits
Fluorescent Minerals	Learn to make a gemstone in the shop
Raffle Prizes	Mini Mine, Free minerals & activities for children
Free Parking	Demonstrations of Faceting, Beading, Jewelry Making, Physics

Children (11 and under) Free! Ages 12 and over \$6  
Scouts in Uniform Free! 4H youth with 4H identification Free!  
More info at: [www.glmcmc.com](http://www.glmcmc.com)

Show this flyer for \$1 off admission price  
(applies to each member in your group)



FROM DC, VA NOT TO SCALE

## Micromineralogists of the National Capital Area, Inc.

### Friends of Mineralogy Virginia Chapter FMVA

by Thomas Hale, President

*Leaders of Virginia Mineral  
Societies & Affiliates of Friends  
of Mineralogy Virginia,*

You are cordially invited to our  
2<sup>nd</sup> Annual Leadership Council Meeting on **February  
3<sup>rd</sup> at 6:00pm EST**. We encourage all of our friends  
and fellow communities to attend, even if you are in  
different states.

Last year was a difficult time for our mineral  
community, but it was also full of new relationships,  
activities, and community growth. Our goal with 2022  
is to expand our community outreach and vision with  
new activities and cooperation. At the start of each  
year, the annual leadership council will be held to  
provide a platform for discussion, brainstorming, and  
community action to accomplish mutual goals and  
overcome obstacles facing our hobby. This is a perfect  
opportunity to express challenges societies are facing  
and ways groups can work together to accomplish  
activities that benefit the entire mineral community. A  
full agenda will be sent closer to the meeting, but  
below are the key components to this event:

- Community Introductions
- Key Opportunities & Obstacles faced in 2021
- 2022 Safety Program and Field Trip Opportunities
- 2022 Virginia Mineral Directory
- 2022 State Programming, Resources and Events
- **2022 Community Action Plan:** What are three goals we can accomplish together?

Please reach out if you have any questions. We would  
like to have at least one representative from each of the  
mineral societies in attendance, but you are welcome  
to bring more members of your leadership team.

Thomas N. Hale President, Friends of Mineralogy  
Virginia Chapter Inc.

Director, Virginia Mineral Project

Phone: (540) 529-4506

Email: [friendsofmineralogy.virginia@gmail.com](mailto:friendsofmineralogy.virginia@gmail.com)



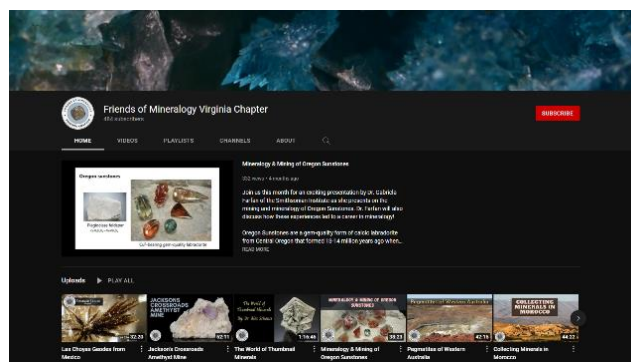
FMVA Dues for 2022 open on January 1st. The 2022  
Virginia Mineral Directory is set to release on Febru-  
ary 10th. <https://friendsofmineralogyvirginia.org/join/>

Thanks again to everyone who has stood by FMVA  
throughout this year. Our organization continues to  
grow and redefine how mineral societies contribute to  
education, industry support, and community  
programming. Reach out if you require further  
information or have any follow-up questions.

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!



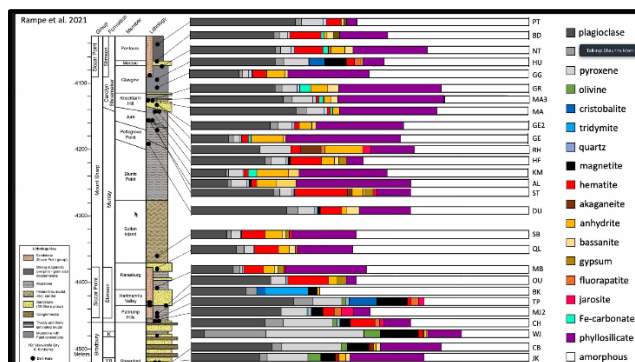
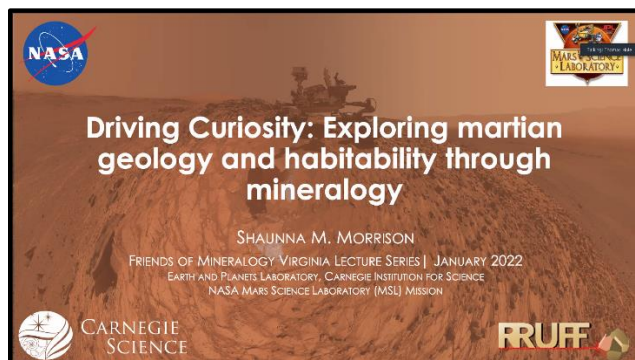
<https://friendsofmineralogyvirginia.org>

continued next page

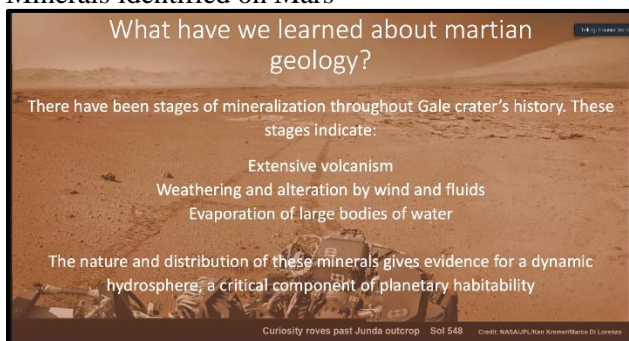
## Friends of Mineralogy VA continued

Speaker series:

**January 28: Driving Curiosity: Exploring Martian Geology and Habitability Through Mineralogy** by Dr. Shaunna M. Morrison



### Minerals identified on Mars



screen shots by K. Hrechka

**Next speaker on Zoom:**  
**February 25 at 7pm “The Mineral-Security Nexus”** by Thomas Hale

## Micromineral News from Australia Next meeting is on Feb 9 at 2pm EDT

by Kathy Hrechka, Editor

Steve Sorrell from Melbourne, Australia hosts a program every other Tuesday at 2pm (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.



register <https://crocoite.com/index.php/2021/07/the-micromount-club-zoom-sessions/>

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=PLwdOHcjmducFKcDw8d2qgAoEEEB0M7vht>

## Mineral Talks Live: Feb. 2 - 1pm EDT Bob Jackson Geology Adventures



Each month, 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](http://www.amfed.org)

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

2022 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:

**February 2022**

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

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

**?: The Gem, Lapidary and Mineral Society of  
Washington, DC - GLMS-DC meeting**  
[www.glmsdc.org](http://www.glmsdc.org)

**16: The Baltimore Mineral Society BMS  
7pm Zoom**  
[www.baltimoremineralsociety.org](http://www.baltimoremineralsociety.org)

**23: Micromineralogists of the National Capital  
Area, Inc. - MNCA 7:30pm Zoom**  
[www.dcmicrominerals.org](http://www.dcmicrominerals.org)

**28: Northern VA Mineral Club – NVMC meeting  
7:00 pm**  
[www.novamineralclub.org](http://www.novamineralclub.org)

**Atlantic Micromounter's Conference  
April 2, 2022 at 1 – 5pm**

by Kathy Hrechka, chair

**1pm - Dr. Robert Hazen**, Senior Scientist at the Carnegie Institution for Science and Robinson Professor of Earth Science, Emeritus, at George Mason University

**3pm - Alec Brenner**, fifth year PhD student at Harvard University

## Micromineralogists of the National Capital Area, Inc.



### GeoWord of the Day and its definition:

**deliensite** A pale yellow or grayish white orthorhombic mineral:  $\text{Fe}^{2+}(\text{UO}_2)_2(\text{SO}_4)_2(\text{OH})_2 \cdot 3\text{H}_2\text{O}$ .

**psammite** (psam'-mite) (a) A clastic sediment or sedimentary rock composed of sand-size particles, a sandstone. The term is equivalent to the Latin-derived term, *arenite*. (b) A term formerly used in Europe for a fine-grained, fissile, clayey sandstone (as distinguished from a more siliceous and grittier one) in which "the component grains are scarcely distinguishable by the unassisted eye" (Oldham, 1879, p.44). (c) A term regarded by Tyrrell (1921, p.501-502) as the metamorphic derivative of arenite. Etymol: Greek "psammos", "sand". See also: *psephite*; *pelite*. Also spelled: *psammyte*.

**schwartzembergite** (schwartz'-em-berg-ite") An adamantine yellow or reddish-brown mineral:  $\text{H}_2\text{Pb}_5\text{I}^{3+}\text{O}_6\text{Cl}_3$ .

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](mailto: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.

### Geo Scrambles answers from page 9

Aired TV - Dravite  
Tea bile - Elbaite  
Delta idiotic - Liddicoatite  
Diction lie - Indicolite  
True libel - Rubellite  
Finally, what do all of these have in common?  
They are all tourmalines.

**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

**MNCA Purpose:** To promote, educate and encourage interest in geology, mineralogy, and related sciences. [www.dcmicrominerals.org](http://www.dcmicrominerals.org)

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](http://www.efmls.org)  
\* American Federation of Mineralogical Societies (AFMS) [www.amfed.org](http://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:

\*Dr. Robert Hazen  
\*Alec Brenner  
\*Dave MacLean  
\*Michael Pabst  
\*Kathy Hrechka  
\*Thomas Hale  
\*Pete Chin  
\*Mary Bateman  
\*Don McAlamen

