

Dec 28 3-5:30pm Kings Park Library, Burke

Holiday Mineral Parties:

by Jeff Guerber, Vice President



HOLIDAY PARTYS! We've been invited to join NVMC for their holiday party on Dec. 19 at the residence of NVMC President, Tom Kim 7-9pm. NVMC details are in email or check their website.

MNCA MEETING: In addition to the party, we will have our regular Dec 28 meeting at the library.3:00-5:30 pm. (large room). The library permits light refreshments, so bring some snacks to share and micros for a gift exchange! Plus, we'll review Barry Remer's micro collection. We'll hold the club elections in January.

Mystery Micro Mineral of the Month



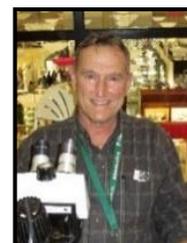
Clue: Kombat Mine, Kombat, Otavi Constituency, Otjozondjupa Region, Namibia FOV = 7mm. Ex Barlow; by aloha Peter Chin, Honolulu, Hawaii

President's Message:

by David Fryauff

David Mclean, my daughter Leilani, and I set up and manned the MNCA demo table on Saturday, which was the biggest day of the November 19th & 20th Gem Fossil & Mineral show at GMU in the Johnson Center. The weather was fine and the location was ideal for walking from the very ample parking lots up to the Johnson Center. It seemed like all our favorite dealers from previous years were there and I thought the offerings this year were excellent, except for the fact that few, if any, of the vendors had specimens in the thumbnail to micro range, but it's not like I needed more micros.

I think I am not alone when I say that the spirit of George Reimherr has been most kind to me over the past few months and I am the happy owner of some of George's best finds and nicest mounts. And if that was not enough, I am still working my way slowly through an amazing selection of freebies that I "collected" from the giveaway tables at the October 7th & 8th 66th Annual Paul Desautels Memorial Symposium. It appears that many of George's finest micros were on sale there as well, thanks to the keen eyes and smart business sense of our good friend and micro collector, Don Smoley.



Mystery Micro Mineral of the Month

Answer: Nambulite Kombat Mine, Kombat, Otavi Constituency, Otjozondjupa Region, Namibia FOV = 7mm. Ex Barlow; by aloha Peter Chin, Honolulu, Hawaii (now field collecting on Mauna Loa)

Minutes Previous Meeting 11.21.2022

by Bob Cooke, secretary

The Micromineralogists of the National Capital Area (MNCA) met at 3 PM on November 21, 2022 at the Kings Park Library, Burke, Virginia. Members present were Bob Cooke, Jeff Guerber, Dave Hennessey, David MacLean, Michael & Karen Pabst. Michael Pabst demonstrated his new short-wave UV flashlight and compared the fluorescence created by short-wave and long-wave light on several minerals. More information, to include purchase options, can be found at <https://www.engeniousdesigns.com/shop>. Michael presented a Treasurer's Report. Recent receipts included sales of micromounts from the George Reimherr collection and annual membership fees.

Members discussed options for the 2023 Atlantic Micromounters Conference. There was consensus to have in-person activities and not use Zoom or other internet-based interaction. Further deliberation was deferred pending the availability of additional information from Kathy Hrechka.

Michael Pabst agreed to contact Liz Johnson at James Madison University about the possibility of a presentation on JMU's perspectives on micromounting.

The Northern Virginia Mineral Club has not yet decided on a venue or date for its annual Holiday Party. Traditionally, MNCA participates in this Holiday party and helps sponsor it. MNCA members approved up to \$50 to help sponsor the party.

Members concluded the distribution of the George Reimherr micromount collection. Fifty micromounts at \$1 each were split between Jeff Guerber, Dave Hennessey, and Bob Cooke. Dave Hennessey purchased the two storage cabinets and unclaimed micromounts for \$100. The meeting adjourned at 5:30 PM.

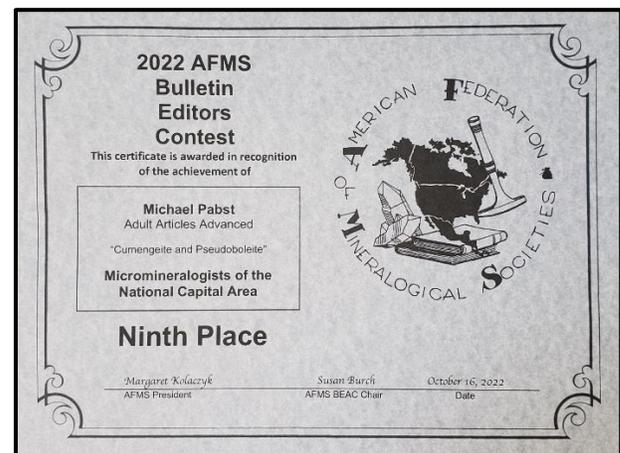
Prior Program Reviewed 11.21.2022

by Bob Cooke, secretary

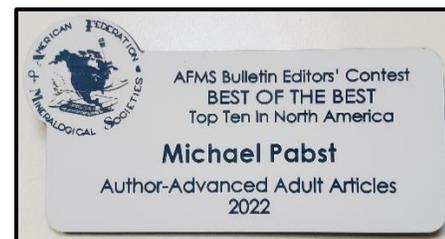
Members reviewed five flats of minerals received from the collection of Barry Reimer. In what will probably be a lengthy process, members will identify particularly valuable pieces for auction and will categorize remaining pieces according to desirability for future distribution to club members.

Congratulations Michael Pabst!

American Federation of Mineralogical Societies Bulletin Editors Advisory Committee – Awards



9th Place "Cumengeite and Pseudoboleite" by Michael Pabst



Editor's note: Michael, thank you for consistently contributing interesting articles each month with amazing photomicrography of minerals. You were honored at the AFMS banquet on October 17, 2022, in New Orleans, Louisiana, the location for the AFMS/SCFMS Convention. You also received a new name tag from AFMS. Sincerely, Kathy Hrechka

Cobaltlotharmeyerite, Cobaltsumcorite, Cobaltaustinite and Leverettite

by Michael Pabst PhD, Treasurer

There are many interesting cobalt secondary minerals, including Cobaltlotharmeyerite, Cobaltsumcorite, Cobaltaustinite, and Leverettite, that we will describe below. I have two of these in my collection, but I am missing Cobaltsumcorite and Cobaltaustinite (donations welcome).



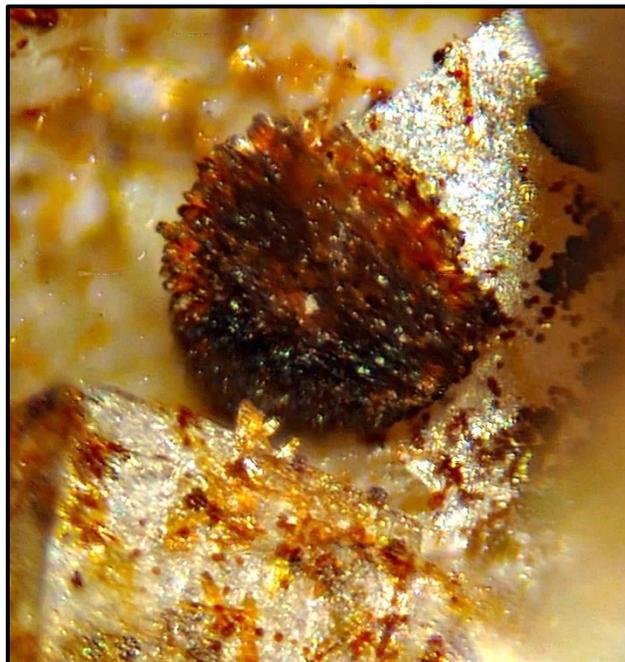
Cobaltlotharmeyerite. Cobaltlotharmeyerite, like Roselite, is $\text{CaCo}_2(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$. Both crystallize monoclinic $2/m$ – prismatic, but unlike Roselite with $\beta = 107.43^\circ$ and space group $P2_1/b$, for Cobaltlotharmeyerite $\beta = 115.15^\circ$ and the space group is $B2/m$. Cobaltlotharmeyerite is orange or brown in color, and usually the crystals form tiny orange-brown spherical clusters. Because the chemical compositions of Roselite, Anorthoselite, and Cobaltlotharmeyerite are identical or nearly so, they might have to be distinguished by X-ray diffraction. In future, Raman Spectroscopy might distinguish among Roselite, Anorthoselite, and Cobaltlotharmeyerite, but the spectra are similar, and right now the data for Cobaltlotharmeyerite on ruff.info is inadequate because the one sample that has been tested is poorly crystallized and insufficiently analyzed.

In the photo below, look for the spherical clusters of brown crystals, Cobaltlotharmeyerite, among the rose crystals of Roselite.



Cobaltlotharmeyerite (brown) and **Roselite** (rose), Aghbar, Bou Azzer, Morocco. FOV 5 mm. Photo by Michael Pabst, using stereomicroscope, stacking 24 images. (Pabst specimen #300)

Here is closeup photo of one of the balls of Cobaltlotharmeyerite from the specimen above:



Cobaltlotharmeyerite, Aghbar, Morocco. FOV 1 mm. Photo by Michael Pabst, using stereomicroscope, stacking 14 images.

Cobaltsumcorite. Cobaltsumcorite looks like Cobaltlotharmeyerite, but it contains lead instead of calcium. Cobaltsumcorite $\text{PbCo}_2(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$ versus Cobaltlotharmeyerite $\text{CaCo}_2(\text{AsO}_4)_2 \cdot 2\text{H}_2\text{O}$. They are both in the Tsumcorite Group and have the same monoclinic crystal structure. Here is a nice photo of Cobaltsumcorite by Uwe Haubenreisser from the Roter Berg mining district in Saxony, Germany: <https://www.mindat.org/photo-1192815.html>.

Cobaltaustinite. Cobaltaustinite is $\text{CaCo}(\text{AsO}_4)(\text{OH})$, and is surprisingly dull green to black, rather than pink or purple, perhaps because of minor copper Cu^{2+} which is not shown in the formula. In fact, the sample used to characterize Cobaltaustinite as a new species by X-ray diffraction had 95% Co^{2+} and 5% Cu^{2+} . The type locality is Dome Rock, Mingary, South Australia. Most of the pretty specimens on Mindat are from Aghbar in Morocco: <https://www.mindat.org/photo-552186.html>. But here is a specimen from the type locality: <https://www.mindat.org/photo-42120.html>.

continued next page

Cobaltlotharmeyerite continued

Cobaltaustinite crystallizes orthorhombic 222 – disphenoidal. Ordinary Austinite contains calcium and zinc $\text{CaZn}(\text{AsO}_4)(\text{OH})$, and it can also be colored green by copper. If copper dominates, then the mineral is Conichalcite $\text{CaCu}(\text{AsO}_4)(\text{OH})$. All are members of the Adelite-Descloizite Group and have the same crystal structure.

Leverettite. Leverettite is a cobalt and copper chloride $\text{Cu}_3\text{Co}(\text{OH})_6\text{Cl}_2$. It is a member of the Atacamite Group, and crystallizes in the Trigonal system, $\bar{3}$ – rhombohedral. (Atacamite contains only Cu^{2+} .) Leverettite closely resembles Herbertsmithite in which Zn^{2+} substitutes for Co^{2+} , and it also resembles Gillardite, which contains Ni^{2+} instead of Co^{2+} . (See June 2022 issue of *Mineral Mite* for photos of Gillardite.) The striking green color of these three minerals must be due mainly to Cu^{2+} . My specimen of Leverettite is from the Torrecillas mine in Chile. (The Torrecillas mine has many colorful arsenate minerals, including red Canutite $\text{NaMn}_3[\text{AsO}_4][\text{AsO}_3(\text{OH})]_2$, pink Magnesiokoritnigite $\text{Mg}(\text{AsO}_3\text{OH})\cdot\text{H}_2\text{O}$, and blue Lavendulan $\text{NaCaCu}_5(\text{AsO}_4)_4\text{Cl}\cdot 5\text{H}_2\text{O}$.)



Leverettite, Torrecillas mine, Salar Grande, Iquique Province, Chile. FOV 1 mm. Photo by Michael Pabst, using stereomicroscope, stacking 16 images.

Below is a photo of the same Leverettite specimen at higher magnification, trying to pick out an individual crystal.



Leverettite, Torrecillas mine, Rico Seco, Iquique, Chile. FOV 0.5 mm. Photo by Michael Pabst, using stereomicroscope, stacking 16 images.

A good Leverettite photo from Mindat by Vincent Bourgoïn: <https://www.mindat.org/photo-568648.html>.

In the next episode, there will be more secondary cobalt minerals, including a vitamin.

Desautel's Symposium 2022 Treasures

by Dave Fryauff, Vice president

During the frantic Saturday night breakdown and cleanup of the Desautel's Symposium at the Friend's School in Baltimore, I mistakenly grabbed a plastic bag of a dozen or so nondescript rocks with handwritten notes inside from a guy named Garth A. Bricker from Fallbrook, California. Garth's notes were apparently written in July 1980 when he was on a "family collecting trip" to the Hale Creek manganese mine in the beautiful coastal range of the Sierra mountains near Eureka, California.

Just take a look at some of the site photos of that mine on Mindat....it's really beautiful country and little wonder why a mineral hunter like Garth Bricker would haul his family the entire length of California to get up that way. It seems that 1940s era mine produced a remarkably rich ore with a reported 42% manganese content but closed after the war.

Desautel's continued

Mineral collectors found the place, and it appears that hundreds or even thousands of specimens of the uncommon manganese mineral inesite were found there and put "onto the market".

The famous globe-trotting Rock Currier collected there in 2010 and added his site photos and personal advisements for finding and preparing specimens of Hale Creek inesite. These are/were some of the best inesite specimens to come out of US manganese mines which probably explains The Rock's interest in the site. The Mindat.org lists 22 different mineral species for this location but boasts 80 photos of inesite and just 4 other mineral photos.

Three photos of these other mineral species were baryte (barite) and one was the zeolite phillipsite (var. 'wellsite'). And even more interesting, to me, is that friend and fellow micromounter Steve Stuart was the guy who uploaded those three photomicrographs from freebies he "collected" at the giveaway tables of the 2020 Pacific Micromount Conference in Fallbrook, California.

Apparently, Steve also collected one of Garth Bricker's handwritten notes from the giveaway table. A note stating that the specimens had been collected at the Hale Creek mine site in 1980 and that renowned mineralogist Dr. Anthony Kampf had performed "x-ray analysis" confirming the phillipsite sample as the barium-rich variety called 'wellsite'.

So, it seems that little plastic bags with Garth Bricker's notes and rocks from the Hale Creek mine may have been in circulation since 1980, and just by chance, they seem to have now come into my hands.....and under my microscope. I took my splitter to those loose Hale Creek rocks that Garth had seen fit to give away, and most of the rocks split very nicely along its many thin bands of calcite. So nicely that I found very interesting new things to discover and ended up puttering away the hours of my evenings while everyone else here had gone to bed.

I would very much have enjoyed talking to Garth about the microminerals I have discovered, inside the rough rocks that he collected, but he passed away in 2020. He was a well-loved family man, an educator, an avid mineral collector, and for many years the curator of the Fallbrook California Gem and Mineral Museum. Thank You Garth A. Bricker!!!!



Inesite $Ca_2(Mn,Fe)_7Si_{10}O_{28}(OH)_2 \cdot 5H_2O$
Hale Creek Mine, Mad River Rock, Coastal Range,
Trinity Co., California, USA Pink inesite crystals.
FOV is about 4 mm in length. Photo and specimen:
Steve Stuart.



Inesite $Ca_2(Mn,Fe)_7Si_{10}O_{28}(OH)_2 \cdot 5H_2O$
Hale Creek Mine, Mad River Rock, Coastal Range,
Trinity Co., California, USA specimen Rock Currier

A Remembrance - Barbara Sky

by Ellery Borow, past EFMLS president

It is with great sadness that I report the passing of Barbara Sky on Thursday, October 27, 2022. Please join with me in offering our condolences to her family and friends and with our shared loss of her kindness, warm smiles, and unending curiosity with all things related to our hobby. While Ms. Sky was the winner of the 1997 EFMLS Citation Award, a past EFMLS photographer, an award-winning exhibitor, a Uniform Rules judge, a Uniform Rules committee chair and more, those accolades cannot come close to describing the width and breath of Ms. Sky's interest and support of her local clubs, regional federations, and the hobby in general.

I first met Ms. Sky some 35 or so years ago at an Eastern Federation show. She had a case of minerals being exhibited and we struck up a conversation about exhibiting, the hobby, clubs and, of course, - family. Next to family, the mineral hobby was a not-so-close second in occupying her time and attention. As telephone calls at the time were expensive, we continued our friendship through the occasional meeting at shows and conventions, letters, and the use of cards and notes. Ms. Sky never tired of sharing her pride and joy in the activity of her family and visiting with them.

The sudden loss of Ms. Sky was indeed a surprise as a mere few weeks ago Ms. Sky and I shared several discussions about the hobby and performed some judging of exhibits at the AFMS annual meeting in New Orleans. Even with our long friendship there was still more to share, more to learn, and more to enjoy. Ms. Sky will be missed and long remembered as a friend to the hobby; a friend to the clubs and federations; and a friend to us all.

Condolences can be sent to Barbara's daughter: Clara Anderson, 428 Melanie Meadows Lane, Baldwin, MO 63021

Adapted from EFMLS November 2022 Newsletter

Note from Kathy Hrechka: Barbara was a member of MNCA forever and was a legacy volunteer. I valued her geology friendship for over forty years, and know she will be greatly missed by our geology community.



Barbara Sky 1990 MNCA Photo by K. Hrechka

Obituary: Barbara Anne (Charlton) Sky passed away Thursday, October 27, 2022, in Chesterfield, Mo. She was born September 19, 1930, in Columbia, Mo., the only child of Harry and Mary (Polson) Charlton. Barbara was a graduate of the University of Tennessee. She was the wife of William Sky, who preceded her in death October 26, 1983. They met on a ship, and were married November 27, 1953, in Knoxville, Tenn.

She is survived by their four children: retired USAF Major Jim (Kerry) Sky of Omaha, Neb.; Clara (Steven) Anderson of Ballwin, Mo.; Jeanne (Kevin) Igoe of Laurel, Md.; and Alice Sky of Kansas City, Mo. Barbara is also survived by five grandchildren: Melissa (Ryan) Callahan, Thomas Igoe, Stacey (fiancé Michael Willenborg) Anderson, Mary (Nick Vinning) Igoe, and Michael Igoe, as well as three great-grandchildren. She was fortunate to be loved by extended family and many friends.

Full obituary, Schrader Funeral Home website:

[Obituary | Barbara Anne \(Charlton\) Sky of Ballwin, Missouri | Schrader Funeral Home, Inc.](#)

New Mexico Institute of Mining & Technology 42nd Annual Symposium

by Kathy Hrechka, editor & webmaster

I recently attended the symposium in Socorro, New Mexico on November 11-13, 2022. Many friends were present, including Dr. Carl Francis & wife, Scott Braley, Patrick Haynes & Nancy Attaway, Fred & Carol Parker, Joan Karrie & David Wells, Herwig & Christine Pelckmans, Patrick Rowe, and Christine. The symposium provided a geology forum for both professionals and amateurs interested in mineralogy.

Dr. John Rakovan is the new Mineralogical/Senior Mineral Museum curator of New Mexico Bureau of Geology & Mineral resources at the New Mexico Institute of Mining & Technology, Socorro, NM.



Dr. John Rakovan is featured in front of his exhibit.

The featured speaker was Dr. John Jaszczak A.E. Seaman Mineral Museum in Michigan.

Friday evening Nov 11: 5-7pm Friends of the Museum Reception—Bureau of Geology atrium

Saturday Nov 12: 8am-9pm Presentations/speakers

*Crystal faces and forms—**John Rakovan**

*The many faces of New Mexico fluorite—**Herwig Pelckmans**

(Coffee and Burrito break, favorite by Kathy)

*A copper bowl with a silver lining—**Tom**

Rosemeyer

*120 years of the A.E. Seaman Mineral Museum of Michigan Tech—**John Jaszczak**

*Colorado mining scams, frauds, and poor business practices—**Ed Raines**

*A tour of the outstanding crystallized minerals of the Colorado mineral belt—**Phil Persson**

*Crystal Peak: Lesser-known mineral finds—**Mark Jacobson, Brad Meese, Thomas Cheatham, Joseph Dorris, and Markus Raschke**

*Wieliczka salt mine, Kraków, Poland—**David Stoudt**

*Criminal Minerals: Investigating minerals that break the Laws (of classical crystallography)—**John Jaszczak** (Featured Speaker)

Saturday Evening: Sarsaparilla & Suds, Banquet

Sunday Nov 13, 2022: 8am-1pm

*New Mexico minerals/mines along old Route 66—

Anna Domitrovic

*A shining past—a glowing future—The Steeple Rock mining district, Grant County, New Mexico—

Patrick Rowe

*New Mexico copper, cuprite, and delafossite—

Ramon DeMark, Michael Michayluk, and Tom Katonak

*New Mexico Originals: Type specimens from the Land of Enchantment—**Nathalie and Paul Brandes**

*Occurrences of orbicular granite in New Mexico—**Tom Katonak, Dave Wells, and Joan Karrie**

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

“John Jaszczak is Director and the John and Phyllis Seaman Endowed Curator of the A. E. Seaman Mineral Museum of Michigan Technological University. He is also a professor of physics at Michigan Tech, where he has taught and conducted research since 1991. His childhood love of minerals inspired him to become a scientist—first in chemistry and then in physics, but always with minerals in mind. John grew up in the Cleveland, Ohio area and was a junior member of the Parma Lapidary Club.

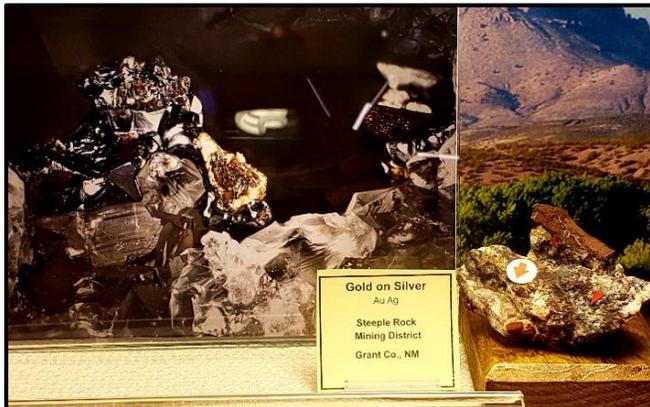
He earned his BS degree in physics from Case Western Reserve University, while there he joined the Micromineral Society of the Cleveland Museum of Natural History. Moving to Columbus, Ohio, he earned his MS and PhD degrees in physics from Ohio State University. During his graduate studies, he was a member of the Columbus Rock and Mineral Club.

After doing research at Argonne National Laboratory for two years as a postdoctoral appointee, he and his family moved to the Upper Peninsula of Michigan. John’s mineralogical interests currently focus on unusual crystal shapes, graphite, diamonds, hemimorphic minerals, and the minerals from the famous Merelani gem mines in northern Tanzania from which he has helped describe the two new minerals merelaniite and richardsite. Jaszczakite was named in his honor by Bindi and Paar in 2016.”

42nd New Mexico Mineral Symposium brochure

Patrick Rowe's Micromineral Display

Steeple Rock Mining District, NM



Gold on Silver, Steeple Rock Mining - Grant Co., NM



Gold Steeple Rock Mining - Grant Co., NM



Descloizite, Steeple Rock Mining - Grant Co., NM



Gold Steeple Rock Mining - Grant Co., NM

Fred & Carol Parker - Guest Exhibit

Dr. Don Rakovan & Monica - Exhibit

Guest Exhibit
Lifelong Mineral Collector
Fred Parker

Fred was first introduced to minerals at 11 years of age, when he found prehnite in a building excavation near his house in Livingston, New Jersey. Recognizing his interest, his father took him to Franklin, where he became addicted to minerals and especially Franklin minerals. A decade later he attended college to pursue his appreciation of minerals and geology. He eventually earned degrees in Geology and Materials Science, which paid the bills for 41 years.

To date, Fred has authored/co-authored 15 refereed materials- and mineralogical-related articles and five patents, in addition to numerous other articles and presentations related to his mineral collecting interests.

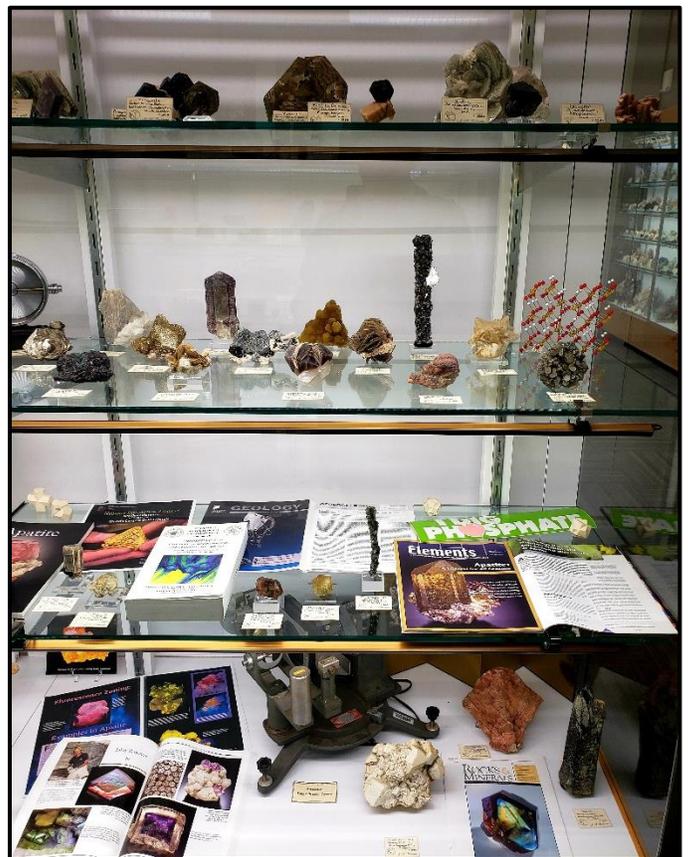
Now retired, and a New Mexican since 2014, Fred has more time to enjoy the prolific minerals and collection locations of the Land of Enchantment. He lives in Albuquerque with his wife Carol and dog Redford.

This display reflects Fred's collecting specialties: Franklin-Ogdensburg, Maryland, New Mexico, classic East Coast locations, and a potpourri of miscellaneous U.S. locations. Enjoy!



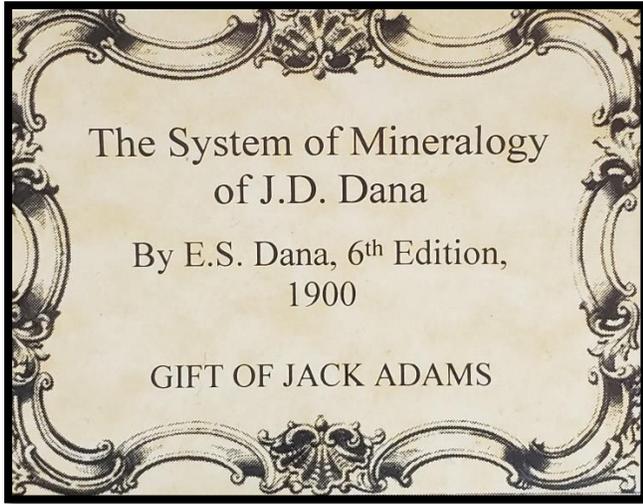
Guest Exhibit
Senior Curator, Mineral Museum
John Rakovan

John Rakovan was born in Buffalo, New York, lived in Michigan, but spent his formative childhood years living in Rhode Island. While in Michigan he frequently collected Potoskey stones with family. Mineral collecting became a more serious avocation when in 1975 he met Sal Avella, a mineral collector and dealer from Smithfield, Rhode Island. In 1981 Sal and John were involved in the discovery of the Hopkinton, Rhode Island sceptered amethyst site. Mineral collecting opened his eyes to science and led John to pursue education in mineralogy. From 1/1998 to 8/2022 he was a professor of mineralogy at Miami University in Oxford, Ohio. On 9/2022 John took the position of mineralogist and senior mineral museum curator at the New Mexico Bureau of Geology and Mineral Resources. John's research focuses on fundamental aspects of mineralogy including crystallography, crystal chemistry and crystal growth. Since 2001, he has been an executive editor for and regular contributor to Rocks & Minerals Magazine. John, a fellow of the Mineralogical Society of America since 2007, was honored by the naming of a new mineral, rakovanite, in 2010. In 2020 he was awarded the Carnegie Mineralogical Award. Because of the mentorship of his long-time friend Carl Francis, John decided to specialize in his mineral collecting on apatite and layer silicates; minerals that he studies in his professional research. John and his wife Monica have regularly visited New Mexico, a place very close to their hearts, for the last 32 years. They were first introduced to New Mexico Tech as undergraduates while visiting friends who were students here.

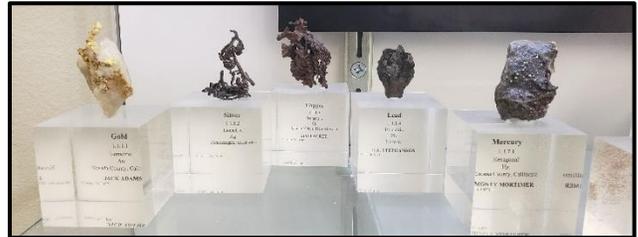



Photos by Kathy Hrechka

Kathy's Favorite Exhibit: J.D. Dana



“The Dana Systematic Classification was developed by James Dwight Dana and first published in 1837. The classification was originally based on simple chemical tests, morphology, hardness, streak, specific gravity, blowpipe analysis, luster, and color. The classification now includes information gleaned from Xray diffraction, electron diffusion, optical & electron microscopy, spectrographic & microprobe examination.” *J.D. Dana exhibit in museum*

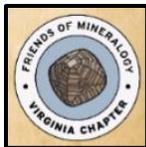


We cannot forget about Smithsonian!



Photos by Kathy Hrechka

**Friends of Mineralogy
Virginia Chapter FMVA**
by Thomas Hale, President



[NOVA Trap Rock Quarries Publication
Video](#) by Thomas Hale on YouTube!



NEW BOOK ON VIRGINIA TRAP ROCK QUARRIES!

The first major publication on Virginia's mineral resources in thirty years.

This publication combines a detailed review of the region's mineralogical and geological heritage, including a deep dive into the aggregate industry and its importance in society. Through this industry and mineralogy approach, the publication will be immensely useful for teachers, tourists, collectors, and nature enthusiasts wanting to learn more about Virginia's mineralogical history. Biographies of some of the most important people involved in mineral collecting in the trap rock quarries and Virginia's mineral history are presented along with many of their collecting stories, which are published here for the first time.

\$35 PER COPY

-  6" x 9" Size
-  144 pages
-  87 Mineral Species
-  12 NOVA Quarries

 **WATCH NOW**

Why buy this book?

FULLY COLORED IMAGES

The NOVA Trap Rock Quarries publication provides over 100 colored photographs to help illustrate the region's beautiful mineral diversity and rich geologic history!

COMMUNITY DRIVEN

Created by the community for the community, this publication is a true passion project for those wanting to preserve the state's mineral resources for future generations!

SPECIMEN IDENTIFICATION

Our team has worked hard to help differentiate between similar mineral species across various quarries. Now you will know the difference between prehnite from Bealeton and Goosecreek. We also include a mineral checklist for each locality.

EDUCATIONAL AND INDUSTRY RESOURCES

This publication is perfect for teachers looking to find modern information about rocks and minerals in Virginia. Our book provides a template for teachers to educate about the NOVA trap rocks and engage in much broader geology topics!

**TO PURCHASE A COPY, PLEASE EMAIL
FMVAPUBLICATIONS@GMAIL.COM**

Friends of Mineralogy Virginia

by Ken Rock, MSDC Editor

Friends of Mineralogy Virginia (FMVA) Inc. is a nonprofit organization dedicated to promoting and expanding the study of mineralogy and the hobby of mineral collecting. Its mission is to **promote and preserve Virginia mineral and mining heritage while expanding the knowledge of minerals more broadly through community programs and industry partnerships.**

Many of us have talked with or seen representatives from FMVA at local gem and mineral shows or have picked up one of their brochures or information sheets. I was fortunate to meet with Tom Hale and two other team members recently at the Northern Virginia Mineral Club's Gem & Mineral show at George Mason University. **I learned that FMVA is a service organization that strives to serve as the "connective tissue" between the public and the state's mining sector, academic institutions, and political offices.**

FMVA's parent organization, Friends of Mineralogy, was founded in 1970 with the goal of bridging the communications gap between amateur mineral collectors and professional mineralogists, mineral dealers, and mining companies. The Virginia chapter was founded by a team of mineral collectors, curators, geologists, and mineralogists interested in promoting the Commonwealth's mineral resources. FMVA provides an impressive array of programs and resources including:

- 1) A [Teacher Manual](#), "Mineralogy & Geology of Virginia." A great resource for teachers wanting to learn more about the most important rocks and minerals in the state.
- 2) [Virginia Mineral Directory](#). This 2022 Virginia Mineral Directory is a one-stop document for all things related to Virginia rockhounding and geoscience!
- 3) [FMVA YouTube Series](#). FMVA hosts monthly speakers on the last Thursday of each month. Speakers come from all around the globe and are leading experts in mineralogy and geology topics.
- 4) [Mindat.org](#). Mindat.org is the world's largest open database of minerals, rocks, meteorites, and the localities they come from.

5) [Macrostrat](#). A platform for geological data exploration, integration, and analysis. This geologic map database includes over 225 maps from data providers around the world.

6) [Rockd](#). Instant access to more than 155 geologic maps.

7) [Rockhounding 101 Course](#). An introductory class provided to the public to help beginners learn more about the hobby and explore their own collecting interests. The class hosts five virtual sessions and twofieldtrips.

8) [Virginia Rockhounding](#). A community Facebook group with over 11,000 citizens across the Commonwealth who share a passion for learning about Virginia's natural resources.

In addition to all these activities, FMVA works closely with industry and teachers' associations to get educators into quarries to learn about mining and the aggregate industry. In 2022, FMVA published its first book on NOVA trap rock quarries. This is the first colored book on Virginia's mineral resources and hopes to be the first in a lineup of new books across each province.

To learn more about FMVA and the great variety of programs and resources it offers, check out the website: www.friendsofmineralogyvirginia.org. If you have questions or would like to connect in person, you can contact FMVA: phone 540-529-4506 friendsofmineogy.viginia@gmail.com



Cindy Schmidlein, MSDC Vice President & Thomas Hale, President, The Virginia Mineral Project. Photo by Ken Rock. Article reprinted with permission by Ken Rock, editor for the Mineralogical Society of the District of Columbia Dec 2022 issue

Micromineral News from Australia

by Kathy Hrechka

Sign up for the next Micromount Club Meeting
December 22, 2022 @ 1pm ET (verify time)
Speaker: Frank Loman, “Khibiny Alkaline Complex and its Minerals”

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



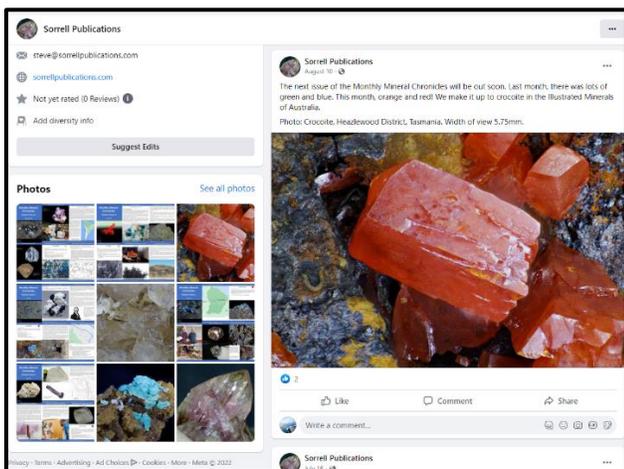
Register for this and other future Zoom sessions here: <https://crocoite.com/index.php/2021/07/the-micromount-club-zoom-sessions/>

steve@sorrellpublications.com

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

The Micromount Club Facebook group presentations are available through the following link:

<https://www.youtube.com/playlist?list=PLwdOHcjmducFKcDw8d2qgAoEEEEB0M7vht>



Screenshot of Steve’s website newsletters, K. Hrechka

Mineral Talks Live - Dec 7 @ 1pm ET

Speaker: **Dr. Jeffery E. Post, Smithsonian**

“Dr. Jeffrey Edward Post, a native of Wisconsin, received Bachelor of Science degrees in geology and chemistry from the University of Wisconsin - Platteville, and his Ph.D. in chemistry, with a specialty in geochemistry, from Arizona State University.



Prior to joining the Department of Mineral Sciences at the Smithsonian Institution in 1984, he was a Postdoctoral Research Fellow for three years in the Department of Geological Sciences at Harvard University. He was Chairman of the Department of Mineral Sciences 1989-1994 and 2014-2019, and since 1991 has served as Curator of the U.S. National Gem and Mineral Collection. Dr. Post was the lead Curator for the Janet Annenberg Hooker Hall of Geology, Gems and Minerals that opened in 1997.

His areas of research interest include mineralogy, gemology, and geochemistry. He has published more than 140 scientific articles in these fields. He is the author of *The National Gem Collection*, and the recently published: *The Smithsonian National Gem Collection—Unearthed: Surprising Stories Behind the Jewels.*”

Bryan Swoboda, Blue Cap Productions, Honolulu, HI
info@mineraltalkslive.com

Register in advance for this webinar:
<http://go.mineraltalkslive.com/register>

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

Mineralogical Society of Southern California 56th Annual Pacific Micro Mineral Conference Jan 27-28, 2023

submitted by Quintin Wight

Location: The Fallbrook Mineral Museum
123 W. Alvarado St., Fallbrook, CA

FRIDAY, January 27

3:00-6:00 PM: On-site Registration, greeting friends, setting up scopes, \$1 sales table opens

6:00-7:00 PM: Dinner (on your own) Several cafes and a great Mexican restaurant are within a few blocks of the museum

7:00-8:00 PM: Evening talk by Robert Housley "The 16 New Te Minerals Species of Otto Mountain"

8:00-9:00 PM: Contributed Talks and Mineral Photos

SATURDAY, January 28

8:00-9:00 AM: Doors open, on-site Registration, filling give-away and sales tables

10:00 AM: Welcome, Special Announcements and Morning speaker introduction

10:15-11:30 AM: Morning Presentation by Paul Adams "Three high temperature calc-silicate skarns in Southern California"

Noon – Lunch (on your own)

1:30 PM: VERBAL AUCTION donated specimens

3:00 PM: SILENT AUCTION of donated specimens, mineralogical books/magazines, maps, etc.

3:15-4:30 PM: Afternoon Presentation by Dan Evanich "Recent Collecting in the Majuba Hill Mine"

4:30-6:00 PM: Microscope time, scouting the give-away and sales tables

6:00-7:00: Dinner (on your own)

7:00 PM: Contributed talks and Mineral Photos

SUNDAY Field Trip, January 29

People planning on participating in the field trip should probably plan to stay in Barstow, rather than Fallbrook on Saturday night. We will meet Sunday morning at 9 am at a central location in Barstow and either collect at a nearby mine, continue to Otto Mountain, or continue farther to the Singer Mine at Goodsprings NV.

Registration \$20: Al Wilkins, PMC Chair
23202 Via Celeste Coto de Caza, CA 92679-3919
\$20. checks payable to MSSC

Questions: contact rhousley@its.caltech.edu.

**47th Annual Micromount Symposium
hosted by Leidy Micromount Society
March 10-11, 2023**

Friday March 10, 2023, noon to 6pm

Saturday, March 11th, 2023, 9am to 6pm

**Location: Advent Lutheran Church,
45 Worthington Mill Rd, Richboro, PA 18954**

Friday speaker - Brittany A. Cymes, Ph.D.

TOPIC: Microscopy of Solar Wind Particles Trapped in Lunar Surface Minerals.

Biography: Dr. Brittany Cymes is a postdoctoral researcher at the U.S. Naval Research Laboratory where her principal focus is analyzing newly released Apollo 17 samples with electron microscopy and microanalytical approaches. These special lunar samples, first placed into frozen curation in 1972, are revealing new information to scientists thanks to advances in technology over the past fifty years. Dr. Cymes received her doctorate in geology from Miami University and her research interests revolve around mineral alteration processes and surface chemistry in different environments. She specializes in using electron microscopy to study planetary materials to better understand processes taking place across the Solar System and beyond

Saturday speaker - Robert A. Carlton, Ph.D.

Topic: Mineral Analysis for the Micro-Mineral Collector

Biography: Dr. Robert Carlton worked for nearly 40 years in the research and development of fiberglass insulation, orthopedics, and pharmaceuticals. His specialty is solidstate analysis with a particular interest in microscopy. Robert retired from fulltime employment in early 2016. He is now teaching microscopy and consulting on solid-state analysis. He is also applying his analytical experience to minerals as an avocation. Robert is President of the Philadelphia Society for Microscopy and a member of the Leidy Microscopy Society. Robert's education is in chemistry with a Ph.D. from Lehigh University. He has taken numerous courses at McCrone Research Institute on microscopy from Skip Palenik and Walter McCrone. Robert worked for pharmaceutical companies Rhone-Poulenc Rorer (Aventis, Sanofi), Elan (NanoCrystal), and GlaxoSmithKline in microscopy and solid-state analysis for 24 years. He published a book on Pharmaceutical Microscopy in 2011 with Springer

Table space (for two days): \$25.00 & \$40.00 (full table, 6ft) Visitor's Fee (no table): \$5. Fri & \$10. Sat Registrations (includes lunch) Make checks payable: Don McAlarnen, 916 Senator Rd, East Norriton, PA 19403 (610) 584-1364

Questions: Email: donmcalarnen@outlook.com

Micromineralogists of the National Capital Area, Inc.



American Federation of
Mineralogical Societies

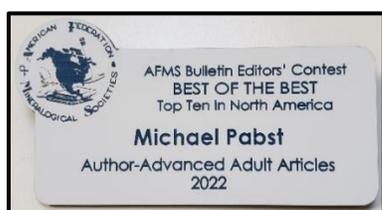
(AFMS)
www.amfed.org

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

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 Michael Pabst!

The American Federation of Mineralogical Societies Bulletin Editors Advisory Committee Awarded Michael Pabst 9th Place for his article "Cumengeite and Pseudoboleite" which was published in The Mineral Mite 2021. Michael was honored on October 17, 2022, in New Orleans, Louisiana, the location for the AFMS/SCFMS Convention. Michael received a certificate as well as a new name tag.



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 2022

7: Mineralogical Society of the District of Columbia
MSDC 7:30 Zoom
www.mineralogicalsocietyofdc.org

**12: 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.glmisd.org

21: Baltimore Mineral Society
www.baltimoremineralsociety.org

**19: Northern VA Mineral Club – NVMC Holiday
party** invites MNCA to Tom Kim's residence 7-9pm
2301 Stokes Lane, Alexandria, VA 22307.
www.novamineralclub.org

28: Micromineralogists of the NCA, Inc. – MNCA
3-5:30pm Kings Park Library, Burke
Holiday Gathering- micro gift exchange
www.dcmicrominerals.org



Merry Christmas!



Happy Hanukkah

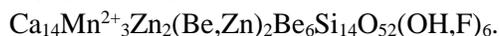
Micromineralogists of the National Capital Area, Inc.



GeoWord of the Day and its definition:

iced firn A mixture of ice and firn; firn permeated with meltwater and then refrozen. Syn: *firn ice*.

samfowlerite A vitreous colorless or white monoclinic mineral:

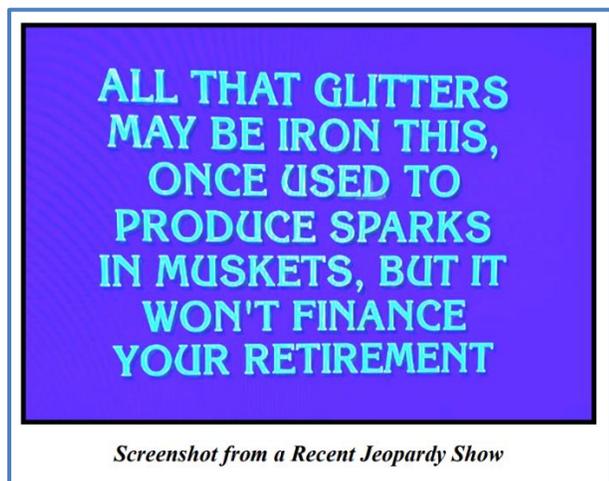


All terms and definitions come from the [Glossary of Geology, 5th Edition Revised](#).

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.

JEOPARDY QUESTION



Screenshot from a Recent Jeopardy Show

Correct answer "What is pyrite?"

*Adapted from Mineral Minutes-November 2022
by Ken Rock, MSDC Editor*

Micromineralogists of the National Capital Area

www.dcmicrominerals.org

We are temporarily meeting at Kings Park Library in Burke, 3-5:30pm (forth Wednesdays) until we locate our 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 2023

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

MNCA - Michael Pabst, Treasurer

270 Rachel Drive

Penn Laird, VA 22846

Editor's Note: By Kathy Hrechka

Send your articles and photos to your editor.

Club Article Deadline is 1st of each month.

The Mineral Mite will be emailed by 5th.

No newsletter July/August

Inducted into Editor's Hall of Fame – 2018

EFMLS Trophy 2021 Small bulletins



Newsletter inputs:

- * David Fryauff
- * Jeff Guerber
- * Michael Pabst
- * Bob Cooke
- * Kathy Hrechka
- * Thomas Hale
- * Ken Rock
- * Quintin Wight

