

MNCA Website dcmicrominerals.org
The Mineral Mite



Vol. 52 – No. 8

Washington D.C. – A Journal for Micromineralogists

October 2019

October 23 Time: 7:30 p.m. – 10 p.m.

Long Branch Nature Center, 625 S. Carlin Springs Rd. Arlington, VA 22204

Program: TBD

by David Fryauff, Vice president

Workshop: Bring interesting micros. MNCA was able to acquire 500 micromounts from the estate of George Reimherr. The exact procedures for the distribution of those micromounts to MNCA members have yet to be decided. Pending that decision, George's micromounts will be available at monthly MNCA meetings for members to inspect.



President's Message:

by Dave MacLean

We can show off the glories of the little things we look at and photograph at the Northern Virginia Mineral Club show Sat-Sun, November 23-24. I enjoy showing adults and children what one can see with something as simple as a 10 or 20 power loupe. I am thankful for the volunteers who signed up and hope for more to service the other demonstrator slots. Save the date: AMC April 3-4, 2020



Photo of the Month



Julienite from Shमितumba, Shinkolobwe, Kambove District, Haut-Katanga, DR Congo. Crystal bundle is 3.7 mm long. Photo by Michael Pabst through the glass vial, stacking 8 images taken with a stereomicroscope.

Julienite is a rare mineral from Shinkolobwe in the Congo. It was first described in 1927 by the famous Belgian mineralogist Alfred Schoep. It was named for a mineralogist, Henri Julien, who died in the Congo at age 33. Julienite is sodium cobalt thiocyanate $\text{Na}_2\text{Co}(\text{SCN})_4 \cdot 8\text{H}_2\text{O}$.

Michael Pabst bought this specimen from Tony Nikischer of Excalibur Minerals at the recent Gem and Mineral Show in Fishersville, sponsored by the Shenandoah Valley Gem and Mineral Society

(www.shenandoahvalleyrockclub.org). Michael says that he would not ordinarily buy a water-soluble organic (carbon-containing) mineral, but this specimen has such a beautiful deep blue color and comes from a favorite locality. Schoep described the color as similar to Connellite $\text{Cu}_{19}(\text{SO}_4)(\text{OH})_{32}\text{Cl}_4 \cdot 3\text{H}_2\text{O}$. The specimen is sealed in a small glass screw-cap vial. The little cluster of pink crystals at the tip of the bundle is an unknown, although it is probably colored pink by cobalt. (According to Tony Nikischer, this specimen is likely the same specimen pictured in Mindat with minID VW0-KT7, photographed in 2007 by Jeff Weissman. Advancements in digital photomicrography now permit a better photo.)

Micromineralogists of the National Capital Area, Inc.

Previous Meeting Minutes: 9/25/19

by Bob Cooke, Secretary

Following a presentation by Thomas Hale on the Virginia Mineral Project, President Dave MacLean called the meeting to order at 9:10 PM.

No past presidents were present. Nine members were in attendance: Barry Remer, Bob Cooke, Dave Fryauff, Erich Grundel, Dave Hennessey, Kathy Hrechka, John Kress, Dave MacLean and Michael Pabst.



Minutes of the June 2019 meeting were approved as published in the Mineral Mite. Members agreed to support Thomas Hale's work with the Virginia Mineral Project and will send a letter to that effect to the VMP. Bob Cooke will draft the letter for Dave MacLean's signature.

Old business: Dave MacLean circulated a signup list for members to staff the MNCA's demonstration table at the November NVMC/GMU Mineral Show. Kathy stated that she is searching for our AMC speaker 2020. Scott Duresky will present his research on Rutherford for one talk.

New Business: Bob Cooke stated that minerals from the estate of George Reimherr are being sold by Keith Williams. MNCA authorized Bob up to \$1,000 to purchase 500 micromounts for the club. Bob reported that a work party on September 18 to clean out the storage closet at Long Branch found three boxes of micro material and an electro-plating kit. Dave Fryauff agreed to assess the micro material and recommend disposition at the next meeting. No one present recalled anything about an electro-plating kit so Bob returned it to the closet and will inform NVMC that MNCA has no interest in it.

Announcements: Dave Fryauff announced upcoming mineral activities and field trips. (Details of those trips will be announced via email since the trips will have taken place prior to these minutes being published.) The meeting was adjourned at 9:50 PM



Previous Program Reviewed: 9/25/19

by Bob Cooke, Secretary

Thomas Hale gave a presentation on the Virginia Mineral Project (VMP) which he started in the context of supporting his Masters/PhD thesis work in Science Policy/Communication at either George Mason University or James Madison University.

The VMP intends to collect and preserve information on Virginia's minerals and geology and to educate the public about that information. It would promote education, mineral clubs and outreach programs. It would use modern technology to make archived information more appealing and accessible.

An objective of the VMP is to assess and create an overview of the last 100 to 150 years of Virginia mineral history. It would connect cultural and human aspects of the mineral business.

VMP would mobilize individuals, clubs, government agencies and industry across the state to get broad buy-in from the community. There would be story collection, interviews and document uploads. The key metric for the VMP would be to create an update of the book Minerals of Virginia (1990) by Richard Dietrich. Thomas stresses that this would be a book for the community, by the community.

In the question and answer period following Thomas's presentation, he indicated next steps would include getting letters of support from mineral clubs for the VMP. The MNCA members agreed they wanted to assist the effort and would send a letter of support.



Quartz - Double terminated reverse scepter quartz crystal from Saltville, Virginia ~3.4cm in height!

Thomas Hale - VMP

Thomas Hale is a 25-year-old Virginia mineral collector from southwest Virginia. Mr. Hale is working on updating the Minerals of Virginia book last published by R.V. Dietrich in 1990. He hopes to develop his project, known as the Virginia Mineral Project (VMP), into a thesis and use the publication as a way to obtain his graduate degree. While not a mineralogist by training, Mr. Hale has worked closely with geology departments and museums across the state. While at Virginia Tech, he curated a Virginia mineral display with the Don Dalton collection and developed the Virginia Rockhounding community group on Facebook with over VA 600 rockhounds and growing.



Over the last few years, Mr. Hale has collected around 6,000 minerals, with 300 sitting on display at his home. His passion for Virginia mineral history and updating old literature brings a new young resource to the collecting community. Over the last few months he has pulled in several community members and clubs, including Lance Kearns and R.V. Dietrich himself. If you would like to learn more about this opportunity or would like to work with Mr. Hale if you have stories or specimens from Virginia, then please email him at virginiamineralproject@gmail.com



Iridescent goethite, Virginia

Boeing 787 Dreamliner NRT-DFW

by Kathy Hrechka, Editor & retired flight attendant

I recently enjoyed the wonder of flying Boeing's 787 Dreamliner internationally in business class. My three-window (office suite) seat was rather perplexing, as there were no window shades to lower. I had never seen that before. I didn't want to bother the flight attendants with my concern, so I just went along for the ride on a fourteen-hour flight. During the flight I noticed the windows dimming to the point of almost darkness. I could still see through them, but barely. To my dissatisfaction the attendants kept the cabin dark, to encourage flyers to sleep. I was wide awake, enjoying the lovely inflight service, sorting through my complimentary amenities kit, viewing movies, and admiring the clouds and topography through my magical windows from 30,000 feet. I did not want this flight to land.

According to Boeing, the dimming effect in the windows is the result of an electrified gel sandwiched between two thin pieces of glass. As the electric current increases, the gel darkens the window. As the current drops, the gel lightens the windows. Boeing reports that some airlines order buttons below each window for individual passengers to control. On my flight, the attendants controlled the cabin window shading from a panel in their forward galley. I believe, if I had a button, I would be enjoying the science behind my shade less 787 Dreamliner windows.



Photo by Kathy, dreaming through 787 windows

Inesite and Hubeite

by Michael Pabst PhD, Treasurer

Getting back to manganese minerals, after our brief flirtation with uranium minerals like Umohoite, this article reviews two manganese silicates: Inesite $\text{Ca}_2\text{Mn}^{2+}_7\text{Si}_{10}\text{O}_{28}(\text{OH})_2 \cdot 5\text{H}_2\text{O}$ and Hubeite $\text{Ca}_2\text{Mn}^{2+}\text{Fe}^{3+}[\text{HSi}_4\text{O}_{13}] \cdot 2\text{H}_2\text{O}$. We are back with familiar pink Mn^{2+} minerals, after our recent excursion into the yellow Mn^{4+} minerals Jouravskite and Despujolsite. The great Mindat photographer Elmar Lackner has provided a beautiful photo of Inesite and Hubeite together: www.mindat.org/photo-89920.html. I attempt a similar combination photo below. These combination specimens are from the Fengjiashan Mine, Daye County, Huangshi, Hubei, China, which is the type locality for Hubeite. Here is a good picture by Elmar Lackner of Hubei Inesite alone: <https://www.mindat.org/photo-42426.html>. And here is my photo:



Here is a photo of the entire specimen:



Pink Inesite and Brown Hubeite from Fengjiashan Mine, Daye County, Huangshi, Hubei, China. FOV 3 mm. Photo by Michael Pabst, single image taken with stereomicroscope.



Inesite from Hubei. FOV 4 mm. Photo by Michael Pabst, single image with stereomicroscope.

Inesite and Hubeite continued

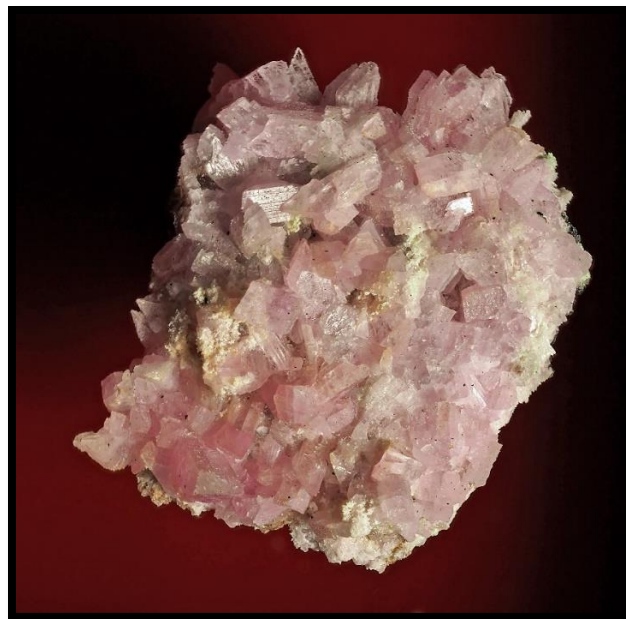


Hubeite

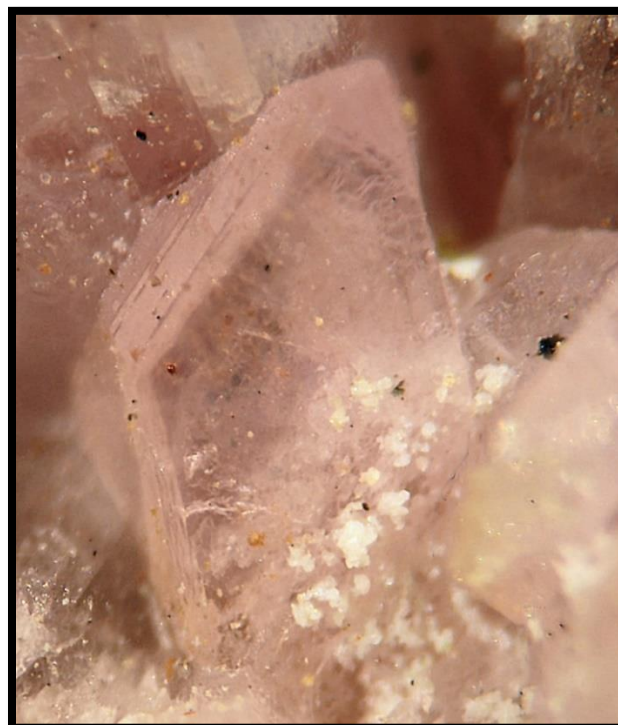
from Hubei. FOV 4 mm. Photo by Michael Pabst, single image with stereomicroscope.

In addition to the locality in Hubei, I have Inesite specimens from two other localities: Hale Creek Mine, Mad River Rock, Coastal Range, Trinity County, California; and the N'Chwaning Mines, Kuruman, South Africa.

Here are photos of Trinity Inesite by Stephan Wolfsried: <https://www.mindat.org/photo-106837.html> and <https://www.mindat.org/photo-746781.html>, and by Luigi Mattei: <https://www.mindat.org/photo-318840.html>.



Inesite from Hale Creek Mine, Mad River Rock, Coastal Range, Trinity County, California. FOV 14 mm. Photo by Michael Pabst, using macro lens and stacking 15 images.



Close-up of **Inesite** from Hale Creek Mine, Mad River Rock, Coastal Range, Trinity County, California. FOV 2 mm. Photo by Michael Pabst using stereomicroscope, stacking 8 images.

Inesite and Hubeite continued

The third locality for Inesite is the N'Chwaning Mines, Kuruman, South Africa. This specimen also features Bultfonteinite $\text{Ca}_2(\text{HSiO}_4) \cdot \text{F} \cdot \text{H}_2\text{O}$. Here are three photos from the same specimen.



Inesite and Bultfonteinite (white) from N'Chwaning Mines, Kuruman, South Africa. FOV 13 mm. Photo by Michael Pabst, using macro lens and stacking 25 shots.

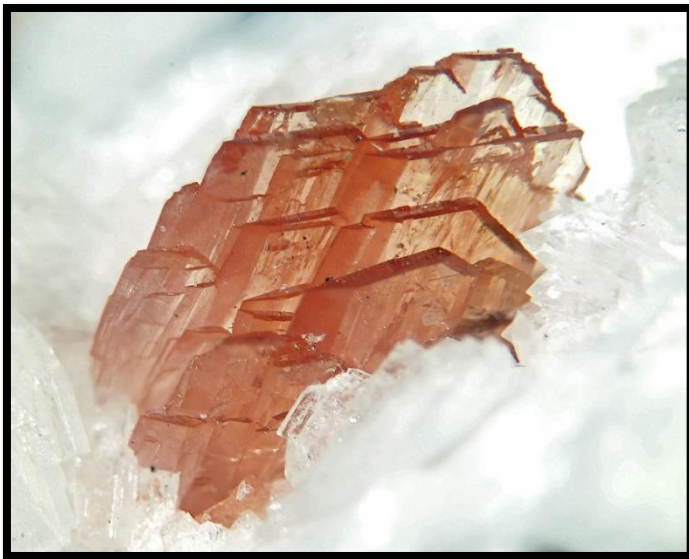


Close-up of **Inesite** from N'Chwaning Mines. FOV 7 mm. Photo by Michael Pabst, using stereomicroscope, stacking 24 images.

Inesite resembles Rhodonite $\text{Mn}^{2+}\text{SiO}_3$. Both are triclinic 1^- -pinacoidal inosilicates, although the three angles differ between Inesite and Rhodonite. Both have Mohs hardness of $5\frac{1}{2}$ -6.

Hubeite is also triclinic 1^- -pinacoidal with hardness $5\frac{1}{2}$, like Inesite and Rhodonite. However, Hubeite is a sorosilicate, whereas Inesite and Rhodonite are inosilicates. The essential Fe^{3+} in the formula of Hubeite darkens the color from pink to brown.

There is a pretty cousin of Hubeite, namely Ruizite $\text{Ca}_2\text{Mn}^{3+}_2[\text{Si}_4\text{O}_{11}(\text{OH})_2](\text{OH})_2 \cdot 2\text{H}_2\text{O}$, also a sorosilicate, that we will examine in the next article.



Inesite from N'Chwaning Mines. FOV 5 mm. Photo by Michael Pabst, using stereomicroscope, stacking 20 images.

Continued next page

Mineral Collecting Field Trips:

by David Fryauff, Vice-president

Oct. 11: National Limestone Middleburg Q. Middleburg, Pennsylvania Friday, October 11 @ 0845. Full safety gear. Meet at the Quarry office, 3499 Quarry Road., Middleburg, PA 17842 with full safety gear (helmet, shatter-proof eye protection, steel toes, long trousers) and a signed, dated "Hold Blameless Waiver" (ATTACHED) for each person. Depending upon working conditions, weather, time, & interest, we might also be able to collect at the National Limestone Quarry #2 at 217 Quarry Rd., Mt. Pleasant Mills, PA 17853. RSVP by Oct 9th with Sam Linton at cooldragonshirts@yahoo.com



Oct. 13: Polk Marl Pits, Middleton, Delaware
Invitational field trip (Delaware Mineral Society invitational field trip on Sunday, Oct. 13 from 11 am to 2 pm at the Polk Marl Pits, Middleton, DE. Please arrive in full standard safety gear. Kids over 10 years old are permitted as long as they are part of family membership in an EFMLS club, have the full standard safety gear, a parent present, and coverage under the attached "Hold Blameless Waiver" (ATTACHED). Directions: Turn right into Contractors Sand and Gravel, 1131 Marl Pit Road, Middletown, DE. Drive to the pit entrance and weigh station. Meet with team leader Tom Pankratz in the lot at the weigh station. RSVP at tjpankratz@verizon.net 302-239-0140.

Oct. 19: Vulcan Manassas Quarry Manassas, Virginia Saturday, Oct. 19th at 0730 at the quarry office for sign in & safety brief. Address is 8537 Vulcan Lane, Manassas, VA. Please arrive in full standard safety gear at 0730 for an 0800 start. We are out at noon. Vulcan Manassas allows kids as long as they are part of family membership in an EFMLS club and have the full standard safety gear, a parent present, and coverage under the attached "Hold Blameless Waiver" (ATTACHED). RSVP to me, Dave Fryauff, by Oct 16th at fryauffdj@gmail.com 240-277-7206

Nov. 16: Haines-Kibblehouse Penn-Maryland Serpentine Quarry. Saturday, Nov. 16th, at 0730 at

the quarry office for sign in & safety brief. Address is 303 Quarry Rd., Peach Bottom, PA. Please arrive in full standard safety gear at 0730 for an 0800 start. We are out at noon. This quarry allows kids over 10 years old as long as they are part of family membership in an EFMLS club and have the full standard safety gear, a parent present, and coverage under the attached "Hold Blameless Waiver" (ATTACHED) RSVP to me, Dave Fryauff, by Oct 16th at fryauffdj@gmail.com 240-277-7206

Have fun, be safe, & good hunting. Take lots of photos!!! Dave Fryauff 240-277-7206



GeoWord of the Day and its definition:

chromophore A chemical element that causes color in a mineral (e.g., Fe²⁺ in olivine).

gold amalgam A variety of native gold containing mercury; a naturally occurring *amalgam* composed of gold, silver, and mercury, the gold averaging about 40%. It is usually associated with platinum and occurs in yellowish-white grains that crumble readily.

kri novite (kri'-nov-ite) A green triclinic meteorite mineral of the *aenigmatite* group: NaMg₂CrSi₃O₁₀.

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

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

The Chesapeake Gem & Mineral Society Auction - Oct 11, 2019

Date: Friday, October 11th, 2019

Time: 7:30 pm (viewing at 7:00 pm)

Place: Westchester Community Center

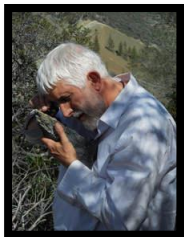
2414 Westchester Ave., Oella MD 21043

Items that can be found are Gemstones, Cutting rough, Jewelry, Minerals, Fossils, Books, Magazines, and Lapidary equipment.

chesapeakegemandmineral.org

What's New in Minerals?

by Herwig Pelckmans, Belgium



Recently some interesting new minerals have been described. One of them is **hyršlite**, named after the Czech mineralogist, gemologist, author and mineral dealer Jaroslav Hyršl. For those of you who might not know him by name: he is one of the very few dealers whose Inn Suites room is always open late. His room was always on the second floor, till he got “promoted” and finally made it to the ground level in 2019. His material is mainly rare, systematic minerals, but he has gems and books and more expensive specimens as well. Being the leading author behind the excellent reference work "Minerals and their Localities", he is also extremely knowledgeable about almost any mineral you want to talk about. He is a good friend of Alfredo Petrov and above all, he's a very friendly and nice guy.

The formula of hyršlite, $Pb_8As_{10}Sb_6S_{32}$, shows us it is a lead sulfide, more specific a lead sulfosalt (that is part of the sartorite group). The type locality is the Uchucchacua Mine, located in the Oyon province of Peru. Knowing Jaroslav and his personal interests, the new mineral in his honor was very well chosen: a rare sulfide mineral, and from Peru, a country he loves and where his better half comes from!

The new mineral was described by Frank Keutsch, professor of chemistry at Harvard and an internationally respected specialist in sulfides and sulphosalts. The full reference of the description is: Keutsch, F.N., Topa, D., Makovicky, E. (2018): Hyršlite, $Pb_8As_{10}Sb_6S_{32}$, a new $N = 3;3$ member of the sartorite homologous series from the Uchucchacua polymetallic deposit, Peru. European Journal of Mineralogy 30, p. 1155-1162. Some more info about hyršlite can be found on: <https://www.mindat.org/min-51559.html>

Talking about **sartorite**, a recent study of mine showed that the real history behind the minerals dufrénoysite, sartorite and “skleroklas”/ “scleroclase” is hardly known. Even Am. Min. articles as recent as 2003 have it completely wrong. So, I wrote someone at MSA to ask whether a well-researched article on the true history of those minerals would be acceptable

for publication in the Am. Min. I'm curious to see their reply. (and yes, Mindat too has quite a few errors regarding these minerals).

Another new mineral of interest is **goldschmidtite**. Most people do know the famous [old but still very valuable for ID-purposes] reference work “Der Atlas der Krystallformen” by Victor Goldschmidt. Well, the new mineral was not in his honor. :-)

There is quite a story behind it, and this story will be published in a future BAM newsletter.

Some basic info on goldschmidtite can be found on: <https://www.mindat.org/min-53053.html>

Yet another new mineral of interest is **smamite**.

You probably have no clue where the name for this new arsenate comes from. SMAM is short for S(ain)te Marie-aux-Mines (French for “the Holy Mary of the Mines”), a small but famous little mining town in NE France. Nowadays home to the second largest mineral show in Europe (bearing the same name SMAM), it used to be the heart of a very active mining area. The type material is from a mine in that mining area, the “Giftgrube Mine”.

Some basic info about smamite can be found on: <https://www.mindat.org/min-53573.html>

A more correct name for the type locality would just be “Giftgrube”, since the word “Grube” in German means quarry. “Gift” is also German and means “poison”. The name for the mine is well chosen, since arsenic (besides copper and silver) used to be mined there since the 16th century. No doubt many of the early miners got poisoned by working the ore veins. More info about the Giftgrube can be found on: <https://www.mindat.org/loc-269317.html>

Minerals from this locality have already been studied a few years ago, when another newbie arsenate was found: **giftgrubeite**. That mineral has since also been found at the Gabe Gottes Mine. “Gabe Gottes” is also German and stands for “The gift of God”. Both mines exploited the same ore vein, the Sankt Jacob vein and are in fact connected underground. However, the mineralogy of the mines is slightly different. Mindat mentions no less than 8 type locality minerals for the Gabe Gottes Mine, most of them arsenates. More info about the Gabe Gottes Mine can be found on: <https://www.mindat.org/loc-1743.html>.

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.

AFMS Purpose: 2019

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 other related subjects, and to sponsor and provide means of coordinating the work and efforts of all persons and groups interested therein; to sponsor and encourage the formation and international development of Societies and Regional Federations and by and through such means to strive toward greater international good will and fellowship.

The A.F.M.S. Newsletter is published monthly except January, July and August by the American Federation of Mineralogical Societies. Address corrections and changes Subscription Information, Distribution Questions: Each Regional Federation Club is entitled to receive three (3) copies of the AFMS Newsletter. These are usually sent to the President, Editor and Federation Director or Secretary.

Subscriptions are \$4.50 per year Remit payment to the AFMS Central Office Checks should be made payable to "AFMS"

Address maintenance and mailing labeling are the responsibility of the AFMS Central Office. All Central Office Steve Weinberger PO Box 302 Glyndon, MD 21071-0302

<central_office@amfed.org> 410-833-7926

Content – Letters Editorial Comments – Submissions
Any communication concerning the content or format of the newsletter should be sent to the Editor
<editor@amfed.org>

Deadline is the 1st of each month preceding publication (i.e. April 1 for the May issue)

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Eastern Federation of
Mineralogical and
Lapidary Societies

(EFMLS)
www.amfed.org/efmls

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

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

Geology Events:

October 2019

2: Mineralogical Society of DC – MSDC meeting
Smithsonian NMNH, Constitution Avenue lobby
7:30 pm to head up to the Cathy Kerby Room.
www.mineralogicalsocietyofdc.org

7: The Gem, Lapidary and Mineral Society of Montgomery County, Maryland - GLMS-MC
7:30 pm - Rockville Senior Center, 1150 Carnation Drive, Rockville, MD
www.glmsmc.com

11-13: Desautels Micromount Symposium
Location: Friends School of Baltimore
5114 N. Charles Street Baltimore, MD 21210
Mineral talks, silent & voice auctions, sales, trading
Registration - Mike Seeds, mseeds@fandm.edu

18: The Gem, Lapidary and Mineral Society of Washington, DC - GLMS-DC meeting
7:00-10pm - Chevy Chase Community Center,
5601 Connecticut Ave., NW, Chevy Chase, MD
www.glmsdc.org

23: Micromineralogists of the National Capital Area - MNCA meeting
7:30–10pm Long Branch Nature Center
625 South Carlin Springs Road in Arlington, VA
www.dcmicrominerals.org

28: Northern VA Mineral Club - NVMC meeting
7:30–10pm Long Branch Nature Center
625 South Carlin Springs Road in Arlington, VA
www.novamineralclub.org

**Atlantic Micromounters' Conference
April 3-4, 2020 Holiday Inn, Alexandria, VA**

Micromineralogists of the National Capital Area, Inc.

Friends of Mineralogy – PA Chapter **SYMPOSIUM ON PENNSYLVANIA MINING** **AND MINERALOGY - NOVEMBER 2-3**

Symposium Nov 2, 2019 Field Trip Nov 3
Franklin and Marshall College, Lancaster, PA

Mineral collectors in attendance on Saturday will check in at the Hackman Physical Sciences Building at Franklin & Marshall College, Lancaster, PA. Activities, including several talks by experts on minerals, geology and mining in Pennsylvania and beyond, are planned for that building and the adjacent Life Sciences and Philosophy Building. On Sunday, a field trip for those registered for the symposium will provide an opportunity for mineral collecting at H&K Group's Penn/MD Materials Q in Lancaster County.

Programs include:

Bill Stephens, PG: Amethyst Occurrences in Southeastern PA Classic Locales, Recent Discoveries
Ron Sloto, PG: Minerals of the Penn/MD Materials Quarry, Fulton Township, Lancaster Co., PA
Peter Heaney, PhD: Making the Case for Celestine as the Pennsylvania State Mineral
Karenne Snow: Minerals and their Type Localities

Mineral dealers, silent auction, giveaways, refreshments, and plenty of opportunities for fellowship. Lunch is available at restaurants within walking distance

Mineral collecting field trip on Sunday, 9:00 a.m. – noon, is planned for H&K Group's Penn/MD Materials Quarry near Peach Bottom, PA. The trip is open only to symposium registrants with safety gear.

Saturday, Nov. 2: Hackman Physical Sciences Bld., F&M College, Lancaster, PA.

Sunday, Nov. 3: collecting trip, H&K Group's Penn/MD Materials Quarry, Peach Bottom, PA
Registration: \$25/person for non-members, \$15/person for current FM-Pa members; free for students with student ID. Please register in advance. A form is available on the web site.

Professional Geologists: lecture attendance qualifies for Professional Development Hours toward license renewal. Web Site: <http://www.rasloto.com/FM/>
Contact: Joe Marchesani Jmarch06@comcast.net

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

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

Pres: Dave MacLean
Vice Pres: David Fryauff
Secretary: Bob Cooke
Treasurer: Michael Pabst
Editor/Historian: Kathy Hrechka
Website: Julia Hrechka
AMC Conference: Kathy Hrechka

The society is a member of:

* Eastern Federation of Mineralogical and Lapidary Societies
(EFMLS) www.amfed.org/efmls
* American Federation of Mineralogical Societies
(AFMS) www.amfed.org Affiliation

Dues: MNCA Membership Dues for 2019
\$15 (single) or \$20 (family)
Payable to 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 on 5th.
No newsletter July/August

EFMLS Editor's Award
First Place 2016 - Small Bulletins
Inducted into Editor's Hall of Fame – 2018
AFMS Trophy 2019



Member inputs:
* Dave MacLean
* Michael Pabst
* Kathy Hrechka
* Bob Cooke
* David Fryauff
* Thomas Hale
* Herwig Pelckmans

