



MNCA Website [dcmicrominerals.org](http://dcmicrominerals.org)



# The Mineral Mite

**Vol. 49 – No. 9**      **Washington D.C. – A Journal for Micromineralogists**      **November 2016**

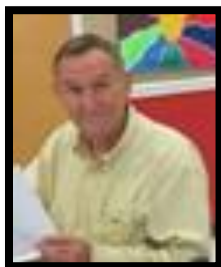
**November 30 Time: 7:30 p.m. – 10 p.m.**

**Long Branch Nature Center, 625 S. Carlin Springs Rd. Arlington, VA 22206**

**Program: "Dangerous Beauty,  
Minerals of the Hindu Kush" the  
Opening Afghanistan and Pakistan for  
Mineral Specimens**

Presenter - David Fryauff, Vice President

David will share a short DVD presentation featuring Herb Oboda from the 2012 Dallas Mineral Collecting Symposium.



The rest of the meeting will be a workshop dedicated to the finding and preparation of micromounts from rock collected at various productive locations: Wasson's Bluff, Nova Scotia, Poudrette Quarry, Mont Saint-Hilaire, Quebec, Foote & LCA Mines, Cleveland Co., NC, Great Southern Mine, AZ, Potter Cramer Mine, Maricopa Co., AZ, Hunting Hill Quarry, Rockville, MD, and some other interesting and surprising places.

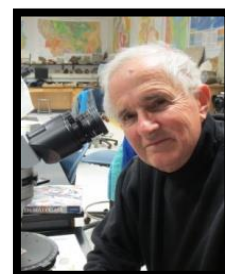
Those of you with rock splitters, please bring your device to the meeting, along with safety glasses/goggles. If you have good surplus rock from a well-defined location for microminerals, please bring it in for investigation.



**President's Message:**

By: Dave MacLean

We meet again on Monday 30 November the FIFTH Wednesday of the month. Our next opportunity to show our craft will be the NVMC show 10AM-6PM Saturday 19 November and 10AM-4PM Sunday 20 November. Many thanks to the persons who signed up to show the wonders of minerals thru a microscope. Please bring some giveaway minerals and baggies to contain them for our microscope lookers. I continue to be amazed at the interesting slide programs which appear at our meetings. Thank you, presenters.



**Photo of the Month**



**McKelveyite:** photomicrography card  
by Robert Rothenberg

## Micromineralogists of the National Capital Area, Inc.

### Previous Meeting Minutes: 10/26/16

By: Bob Cooke, Secretary

President Dave MacLean convened the meeting at 7:55 PM on Oct 26, 2016. Twelve members were present. There were no past presidents or guests.

Michael Pabst gave the Treasurer's report and then -- before his voice gave out -- presented the evening's program on the Dixie Mine which is located near Vesuvius, Rockbridge County, Virginia.

#### Old Business:

Minutes of the September meeting were approved as printed in the newsletter.

Michael Pabst reported that, at the conclusion of the Baltimore Symposium, he purchased the remainder of Doug Rambo's business stock for MNCA use at a cost of \$150.

Dave Fryauff summarized his observations from the EFMLS Annual Meeting in Rochester, New York on October 21.

Kathy Hrechka informed the group of her follow-up discussions with Nanoscience Instruments (the Alexandria company marketing the Phenom brand of affordable Scanning Electron Microscopes). The company is anxious to feature micromount minerals, to be furnished by MNCA members, in its literature/website. Kathy agreed to work with company representatives to arrange a date for MNCA members to visit the Nanoscience facilities.

#### New Business:

Dave MacLean circulated a greeting card to Muriel Frink for signature by club members.

#### Field Trips:

Dave Fryauff updated us on the schedule of mineral field trips being offered by GLMSMC.  
\*Oct 29, 9 AM meet at the parking lot of National Limestone Quarry in Mt Pleasant Mills, PA. Later in the day attendees will go to Middleburg Quarry.

\*Nov 11, 9 AM meet at the Bluegrass Materials Churchville Quarry in Bel Air, MD.



Dave MacLean presented certificates awarded to MNCA members at the EFMLS Annual Meeting for newsletter articles they wrote.

\***Kathy Hrechka:** Trophy award as editor of The Mineral Mite newsletter

\***Scott Braley:** Trophy Award for *Crystal Grove Diamond Mine & Ace of Diamonds Mine in Herkimer, New York*

\***Kathy Hrechka:** 2<sup>nd</sup> Place Award for *Snow Storm Thor's Snow Crystals*

\***Dave Hennessey:** 5<sup>th</sup> Place Award for *Liroconite – A Fortunate Find*

\***Kathy Hrechka:** 6<sup>th</sup> Place Award for *Natural History Museum in London: "In Search of the Aurora Pyramid of Hope" Colored Diamond Collection*

\***Dave Fryauff:** Honorable Mention for *My Travelogue of Hard and Fast Rockhounding in North Carolina*

\***Dave Fryauff:** Honorable Mention for *Tip Top Mine, Chester County, Black Hills, South Dakota*

\***Dave MacLean:** Honorable Mention for *Baltimore Mineral Symposium 2015 – Lou D'Alonzo and Dr. Donald Howard ... October 11, 2015*

Dave MacLean circulated a sign-up sheet for manning the MNCA demonstration table at the NMNC's 25<sup>th</sup> Annual Gem, Mineral and Fossil Show at George Mason University on November 19/20.

All members enthusiastically spoke about the January 28 trip to visit the Geology facilities of James Madison University. Dr. Kearns will have minerals specimens and books for sale; he will also analyze unidentified minerals brought by attendees. Gathering time at JMU is 9 AM. The meeting adjourned at 9 PM.



**Previous Program Reviewed 10/26/16**

By: Bob Cooke, Secretary

Michael Pabst spoke about the Dixie Mine, located near the town of Vesuvius in Rockbridge County, Virginia. The Dixie Mine is an abandoned iron and manganese mine now located in the George Washington National Forest. In the overgrown dumps around the mine, some phosphate minerals of unusual habit have been found, including casket-shaped Natrodufrenite and fuzzy green balls of Dufrenite. There are lilac sprays of Strengite, yellow balls of Cacozenite, and green balls of Kidwellite. There are also black crystals of Rockbridgeite. The type locality for Rockbridgeite is nearby.



Natrodufrenite Photo by Michael Pabst

**Secretary's Note:**

The December joint Holiday Party with NVMC is scheduled for Monday December 19<sup>th</sup> at the Long Branch Nature Center in Arlington.

**2017 MNCA Officers Nominations:**

Karen Pabst agreed to serve on the Nominating Committee for 2017 officers. She reported nominations of Dave MacLean for President, Michael Pabst for Treasurer, and Bob Cooke for Secretary. She will contact Dave Fryauff to determine his availability for Vice-president.

**MNCA Field Trip to James Madison U  
Dr. Kearns - Saturday January 28, 2017**

By Michael Pabst

Dr. Lance Kearns has scheduled our Field Trip to James Madison University for January 28, 2017 according to our wishes. Note: He will be retiring this spring.



**MINERAL MUSEUM**

**James Madison Univ. - Harrisonburg, Virginia**

The room is slightly over 600 square feet in size, hosting sixteen display cases plus a special Ultraviolet display room. Security for the specimens is provided by a multilevel state-of-art security system. Generous gifts from individuals and mineralogical societies around the region allowed for a complete purchase of the mineral display cases. The Grand Opening took place October, 2007.



## Fornacite and Vauquelinite

By Michael J. Pabst, Treasurer

Our next step in looking at chromium minerals is to examine two chromium minerals that also contain copper. Fornacite and Vauquelinite are two chromium minerals that form a series, with Fornacite being a lead copper chromate-arsenate and Vauquelinite a lead copper chromate-phosphate:



Fornacite:  $\text{Pb}_2\text{Cu}(\text{CrO}_4)(\text{AsO}_4)(\text{OH})$

Vauquelinite:  $\text{Pb}_2\text{Cu}(\text{CrO}_4)(\text{PO}_4)(\text{OH})$

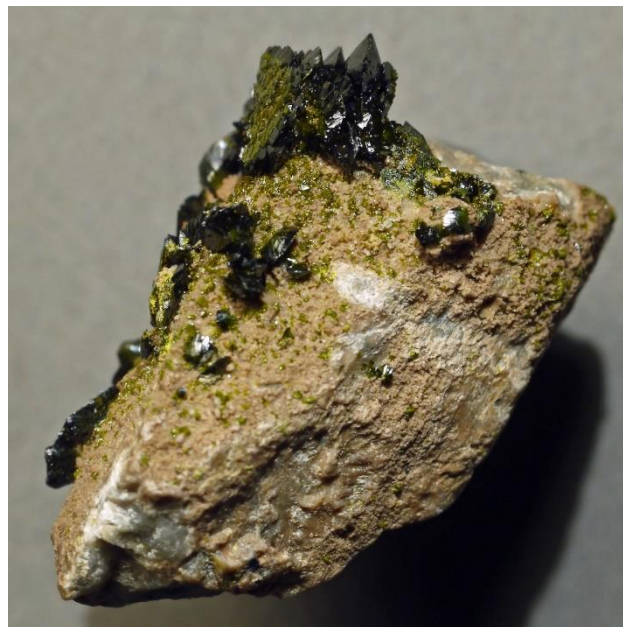
Vauquelinite was named for Louis Vauquelin (1763-1829) who discovered the element chromium. Fornacite was named after Lucien Fourneau (1867-1930), an officer and governor in the French colonies of Africa including the Central African Republic, the Republic of Congo, and Cameroon (all on or near the Equator).

Because the minerals form a series, a quantitative analysis is needed to distinguish between them, to determine whether As is greater than P (Fornacite), or if P is greater than As (Vauquelinite). Both minerals are monoclinic prismatic  $2/m$  with  $\beta = 110.00^\circ$ , approximately. According to Mindat, Fornacite and Vauquelinite are *isostructural* with each other and with Molybdoformacite,

$\text{Pb}_2\text{Cu}(\text{MoO}_4, \text{CrO}_4)(\text{AsO}_4, \text{PO}_4)(\text{OH})$ . (Molybdoformacite is so beautiful that it will receive its own article in the future.) Here is the Mindat data on the  $\beta$ -angles for the three monoclinic minerals: Molybdoformacite  $\beta = 109.17^\circ$ , Fornacite  $\beta = 110.00^\circ$ , and Vauquelinite  $\beta = 94.55^\circ$ . Mindat says that Fornacite and Vauquelinite are *isostructural*. But, how much can  $\beta$  vary, if the minerals are truly *isostructural*?

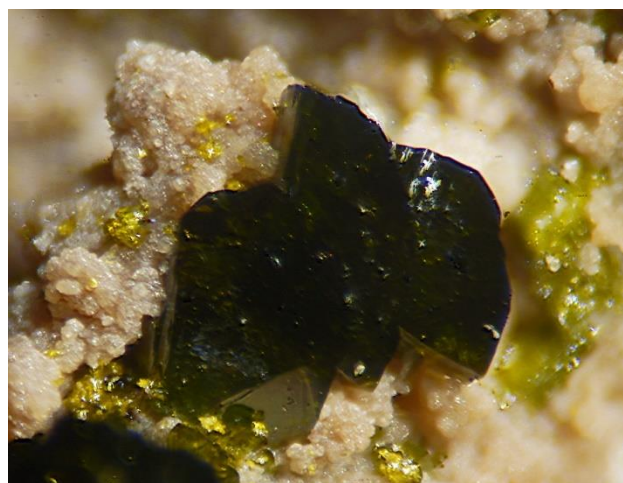
I have two specimens of Fornacite from Mammoth-St. Anthony Mine, Tiger, AZ, both of which are labeled “calciovolborthite”, which is an obsolete synonym of Tangeite,  $\text{CaCu}(\text{VO}_4)(\text{OH})$ . However, Tangeite is not on the Mindat mineral list for Tiger.

My specimens closely resemble a specimen of Fornacite from the Tiger mine, pictured in *Mineralogical Record* **11**:162, Figure 12. The deep olive-green color looks like it derives from orange (chromate) and blue (copper). The first photo shows an overview of the entire specimen, and the next photo zooms-in on a group of crystals that, in my mind, resemble a hawk.



Fornacite, Mammoth-St. Anthony Mine, Tiger, Pinal County, AZ. Entire Specimen, FOV 16 mm.

Photo by Michael Pabst

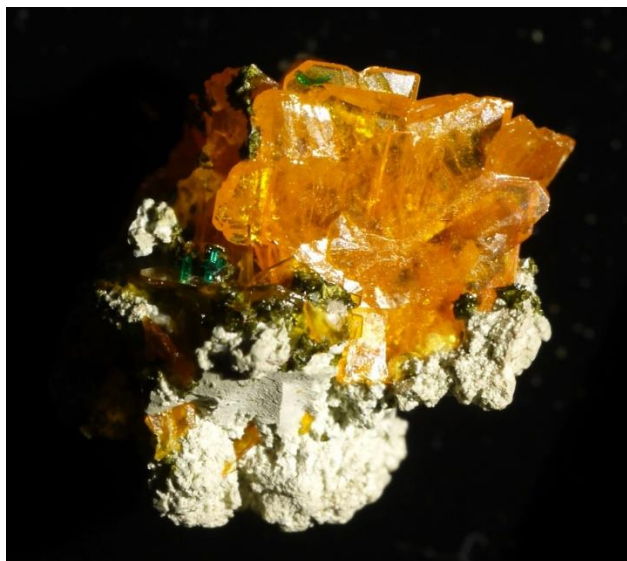


Fornacite, Mammoth-St. Anthony Mine, Pinal County, AZ. Close-up, FOV 2 mm.

Photo by Michael Pabst

## Fornacite and Vauquelinite continued

I also have other specimens correctly labeled as Fornacite and Diopside on Wulfenite from Tiger. In the overview photo, if you look closely, you can see the deep green Diopside (center left) and the olive green Fornacite (center right and all over). The following photos zoom-in progressively, ending with a close-up of one of the center right Fornacite clusters.



Fornacite and Diopside on Wulfenite, Mammoth-St. Anthony Mine, Tiger, Pinal County, AZ. Entire specimen FOV 15 mm, taken with macro lens. *Photo by Michael Pabst*



Fornacite and Diopside on Wulfenite, Mammoth-St. Anthony Mine, Tiger, Pinal County, AZ. Zoom-in 20X on stereomicroscope, FOV 10 mm. *Photo by Michael Pabst*



Fornacite on Wulfenite, Mammoth-St. Anthony Mine, Tiger, Pinal County, AZ. Close-up FOV 4 mm. *Photo by Michael Pabst*



Fornacite on Wulfenite, Mammoth-St. Anthony Mine, Tiger, Pinal County, AZ. Closer-up, FOV 2.5 mm. *Photo by Michael Pabst*

Continued on next page

## Micromineralogists of the National Capital Area, Inc.

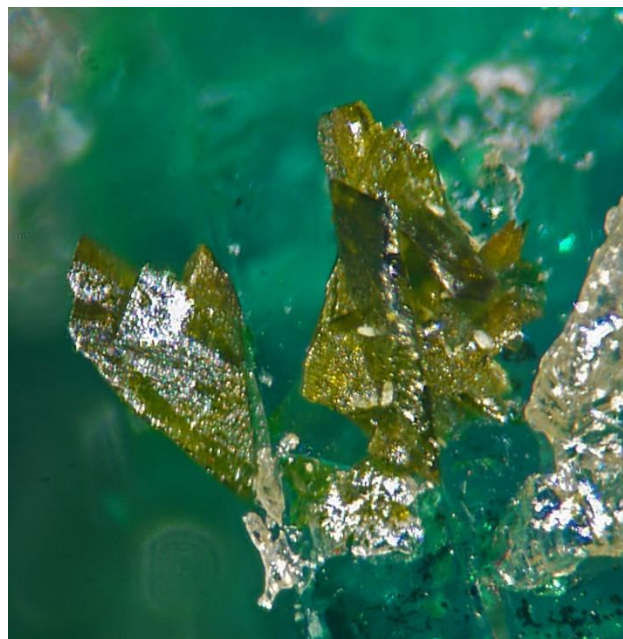
A final specimen of Fornacite comes from Renéville, Kindanba District, Pool Department, Republic of Congo (the Congo whose capital is Brazzaville). It features Fornacite on Diopside and Fornacite on tiny quartz crystals that look like Herkimer diamonds. I bought this specimen long ago for the Diopside, and was pleasantly surprised by the Quartz and Fornacite that appeared under the scope. The first photo shows an overview of most of the entire specimen. Subsequent photos zoom-in.



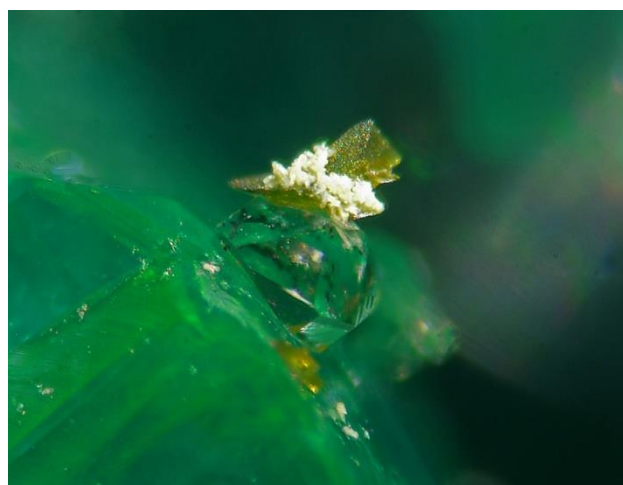
Fornacite on Quartz on Diopside, Renéville, Congo. Overview, FOV 28 mm. *Photo by Michael Pabst.*



Fornacite on Quartz on Diopside, Renéville, Congo. Zoom-in, FOV 6 mm. *Photo by Michael Pabst.*



Fornacite on Diopside, Renéville, Congo. Close-up, FOV 2 mm. *Photo by Michael Pabst*



Fornacite on Quartz on Diopside, Renéville, Congo. White material is unknown. Close-up, FOV 2 mm. *Photo by Michael Pabst.*

We have run out of space and energy for this month, so we will look at photos of Vauquelinite next month.

**Recap: 60<sup>th</sup> Annual Paul Desautels  
Micromount Symposium October 2016  
Baltimore, Maryland**



**Congratulations Bob!  
Hall of Fame 2016**

**Collecting at Stoutameyer Branch, VA  
Presentation by Robert Rothenberg**

By Dave MacLean

The porphyritic nepheline seyenites at Buck Hill near Parnassus, VA and in Stoutameyer Branch NW of Staunton, Augusta County, VA were unworked localities for mineral collecting in 2002. Tom Tucker discovered these localities in 2003 and explored them with Cindy Kearns. Lance Kearns at James Madison University, Harrisonburg, VA did the instrumental tests to identify the microminerals. Other persons who collected at these two localities include Henry (Bumpy) Barwood, Tony Camp, Ralph Roe, and Tony Steed. An article on the minerals found and identified in these sites was submitted to "Rocks and Minerals" magazine.

The nepheline seyenite in Buck Hill area consists of outcrops and boulders of all sizes. The nepheline seyenite in the two mile length of Stoutameyer Branch consists of boulders of various sizes. Explorations to find the source of these nepheline seyenite boulders have not found

the source. 60-80 minerals (all micro) have been identified. Each boulder was found to contain different collection of minerals. Often the vugs in the boulders contained polymeric organic matter which required acetone and an air blast to remove. The nature of the organic matter in the vugs has not been elucidated. Reducing boulders to movable chunks required heavy sledges and strong arms.

In the boulders with xenoliths were found neptunite, graphite, lebnunsevite, narsusite anatase, etc. Robert Rothenberg showed micro photos of minerals such as aegerine green, albite, anatase, arfvedsonite, triclinic astrophyllite, bastnasite (Ce), trigonal calcite, Burbankite group, cataleite, cordylite (Ce), cryptomelane, fluorite blue, purple, milky, yellow with inclusions, several colors, galena, cubanite, clinoclase, heulandite, magnetite, microcline, kukharenkoite (Ce?), quartz some amethyst, komkovite .07mm in this second world locality, pyrite, sphalerite, strontianite common, synchisite (Ce?), troilite, zircon, celadonite group, clay minerals yet to be identified, calcite twisted ribbons, labunsevite group, steacyite group, donnayite group, and unidentified reddish brown plates and spheres.



## Copper Silicates of Arizona at BMS Presentation by Michael Pabst

By Michael Pabst

The talk derived from a recent article by Michael in the *Mineral News* (Vol. 32, No. 8, August, 2016) about the Christmas Mine in Gila County, Arizona. The Christmas mine has 7 different copper silicates. The question arose as to how many other copper silicates could be found elsewhere in Arizona. The answer is that Arizona has at least 17 copper silicates: ajoite, apachite, ashburtonite, chrysocolla, creaseyite, diopside, gilalite, iranite, kinoite, luddenite, macquartite, papagoite, plancheite, shattuckite, stringhamite, whelanite, and wherryite.

On the freebie table at the Symposium, Michael found one more Arizona copper silicate, cuprorivaite, which is the same substance as the antique pigment “Egyptian blue”. Cuprorivaite is found in slag at the Ajo smelter, Pima county, AZ. This makes for a total of 18 Arizona copper silicates (if slag minerals count as real minerals).

So, on a drowsy Sunday morning, the audience endured 45 photographs of copper silicates from Arizona. It could have been worse: there are at least 39 copper silicates known worldwide. Here is one of the prettier photos:



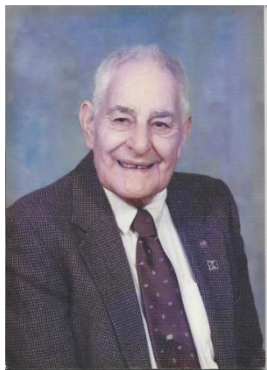
**Kinoite** (copper silicate, blue), Ruizite (manganese silicate, orange) and Apophyllite (colorless) from the Christmas Mine, Banner District, Gila County, AZ. Photo by Michael Pabst. FOV 1.5 mm.





## Fred C. Schaefermeyer: Year 97

Fred C. Schaefermeyer, 97, retired United States Air Force, past President, American Federation of Mineralogical Societies, passed away on October 9, 2016 in Wheat Ridge, CO. Born in Hayden, CO, in January 1919, Mr. Schaefermeyer worked various odd jobs while boarding with families in town and going to public schools. After graduating high school, Fred went to Colorado A&M for one year. He enlisted in 1940 in the Army Air Corps and served in numerous administrative roles culminating at the Pentagon in 1968 when he retired. After attending electronics school, he began working for the 3M Company as a service representative until he retired in 1982.



After his second retirement, Fred began his third “career” as a devout hobbyist in rock collecting and micro-mineralogy. Taking college courses in chemistry and geology, he quickly became involved in numerous local “rock” clubs and later served as president of the Northern Virginia Mineral Club, the Micromineralogists of the National Capitol Area, and the Mineralogical Society of the District of Columbia. He also served as president of the Eastern Federation of Mineralogical Societies and the American Federation of Mineralogical Societies. Throughout this active career, he served as a bulletin editor multiple times, as a competition judge, and as a teacher at Wildacres and many other workshops and conferences. His induction into the Micromounters Hall of Fame in 2000, was, he remarked, “my proudest achievement.” He loved this hobby and all of the people he came to know over the years.

Preceded in death by his wife, Geraldine, he is survived by his daughter Sherry Race (George) and sons, Michael (Candi), Mark (Lynne) and Martin (Debbie), eight grandchildren, six great grandchildren and by his dearest companion for over a decade, Muriel Frink.

A memorial service was held at Arvada Presbyterian Church, Arvada, CO, at 2:00 pm on November 11th,

2016. In lieu of flowers, donations may be made to the “Northern Virginia Mineral Club Fred Schaefermeyer Scholarship Fund” and mailed to Rick Reiber, Treasurer, NVMC, PO Box 9851, Alexandria, VA 22304, or to a charity/scholarship of your choice.

### Born:

January 28, 1919: Hayden, Colorado

### Passed Away:

October 9, 2016: Wheat Ridge, Colorado

### Memorial Service

Friday, November 11 at 2:00 p.m. at Arvada Presbyterian Church, 5592 Independence St, Arvada, CO 80002

<http://www.allstatescremation.com/obituaries/fred-c-schaefermeyer/>



*Fred, Tom Tucker, George Loud- September 2015*

### Fred's Funeral Service – Nov. 11, 2016

By Kathy Hrechka, Editor

I am grateful to Fred Schaefermeyer, as he has been my geology mentor for the past thirty years. I felt compelled to attend his funeral service in Denver, where Fred lived in his early years. His ashes were divided into two boxes. One for burial in Hayden, CO next to his parents and sister. The other box will be buried with Gerry, his wife at the Quanico Cemetary. There will be a Virginia service in the future. I will keep club members posted with that date.



Altar at the Presbyterian church in Arvada, Colorado

### Fred's Farwell: Written by Fred

My life's been full. I've savored much:  
good friends, good times, my loved one's touch,  
God's Blessings untold.

Lift up your hearts  
and share all the memories you can hold.

God wanted me now, He set me free.

And now we wish you the

'Sunshine of Tomorrow'

In Christ's Name.

Photo: Muriel Frink, friend of the family since 1940. She cared for Fred for the past ten years, after Gerry passed away. She has many friends through her church, who were very fond of Fred. They all new him for his geology hobby.



Fred Schaefermeyer was the past president of both EFMLS (1990) and AFMS (1995)



passed away after a battle with leukemia. He was 97.

We'll include a tribute to Fred in the next EFMLS News. In the meantime, contributions in his memory may be sent to the AFMS Scholarship Foundation, %Steve Weinberger, PO Box 302; Glyndon, MD.

Editor, Carolyn Weinberger

EFMLS Volume 64, Number 1 November, 2016

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### GeoWord of the Day and its definition

**alnoite** (al'-no-ite) In the *IUGS classification*, a lamprophyre melilite with a groundmass (Woolley et al., 1996). Perovskite, apatite, nepheline, and garnet may be present. Its name (Rosenbusch, 1887) is derived from Alnö, Sweden. Also spelled: allnöite; alnöite.

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

GeoWord of the Day is brought to you by: Rayfract! Check them out at [rayfract.com](http://rayfract.com).

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**Mark your Geo Calendars:  
Atlantic Micromounters Conference  
March 31 – April 1, 2017**

**Speaker: to be determined**

Location: Springhill Suites by Marriott, Alexandria.  
6065 Richmond Hwy, Alexandria, VA 22303

Phone (571) 481-4441

Details will be posted on our club website:

Tab Events - Conference

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

Kathy Hrechka, MNCA Conference Chair

## Micromineralogists of the National Capital Area, Inc.



American Federation of  
Mineralogical Societies

AFMS)  
[www.amfed.org](http://www.amfed.org)



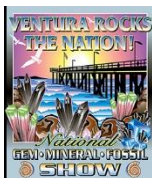
Eastern Federation of  
Mineralogical and  
Lapidary Societies

(EFMLS)  
[www.amfed.org/efmls](http://www.amfed.org/efmls)

### 2017 CFMS-AFMS Gem Show & Convention

hosted by the  
Ventura Gem & Mineral Society  
Ventura Rocks the Nation!

Fri - Sun, June 9-11, 2017  
Ventura County Fairgrounds •  
Ventura, CA



Communication and Involvement  
Are the Keys to Our Success!

### Geology Events: November:

**14: Northern Virginia Mineral Club meeting**  
7:45 - 10 pm at the Long Branch Nature Center,  
625 S. Carlin Springs Rd. Arlington, VA

**19-20: 25<sup>th</sup> Annual Gem, Mineral, and Fossil Show**; sponsored by the Northern Virginia Mineral Club & George Mason University's Department of Atmospheric, Oceanic, and Earth Sciences in the Hub Ball-room, Route 123 & Braddock Rd Saturday 10-6, Sunday 10-4; adults \$6, seniors \$4, teens (13-17) \$3, 12 and under free, Scouts in uniform & students w/ID free.

**30: MNCA Meeting** 7:45 - 10 pm at the Long Branch Nature Center, 625 S. Carlin Springs Rd. Arlington, VA

### Mar 31-Apr 1, 2017 Atlantic Micromounters Conference SpringHill Suites Alexandria, VA

Note: The Eastern Federation of Mineralogical and Lapidary Societies, Inc. is a member of the American Federation of Mineralogical Societies. It was organized in 1950 and joined the AFMS in 1952. It encompasses the North-Eastern region of the United States and has over 150 different clubs and over 10,000 members.

**Fred Schaefermeyer**, past president of both EFMLS (1990) and AFMS (1995) passed away after a battle with leukemia. He was 97.

We'll include a tribute to Fred in the next EFMLS News. In the meantime, contributions in his memory may be sent to the AFMS Scholarship Foundation, %Steve Weinberger, PO Box 302; Glyndon, MD.

*EFMLS Volume 64, Number 1 November, 2016*

### A Word from the President

by Ron Carman President

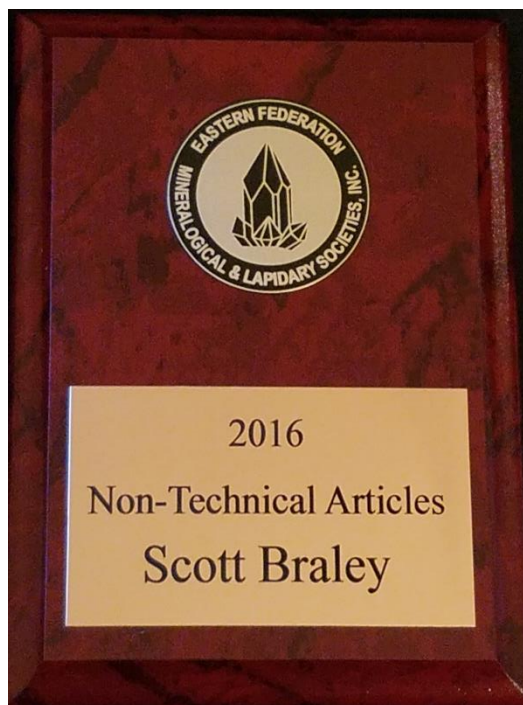
For the second time I am taking this position and again I have some big shoes to fill (no offense intended, Matt!) I'm following some very capable presidents who have done much to help bring all the federations together and I will try to continue with this work. Many of you may know me from various shows around the country. For those who don't, I am a member of three clubs in the South Central Federation and I enjoy collecting minerals (although I appreciate fossils and gemstones too) and visiting shows all over. In the coming year, I hope to attend each regional federation convention and become better acquainted with the folks in all seven federations, starting with the Southeast Federation show in Marietta, Georgia in November.

The coming year will have conventions all around the U.S. so I will have the chance to travel and visit places I haven't been before. One thing Matt encouraged during his presidency and I do also, is for all our members, no matter where you live, to get involved with your clubs and federations. Every club has numerous jobs it needs to fill, and the willing volunteers who fill them are the backbone of the clubs and federations. Also, if you see something that you think needs improving or could be done better, speak up and tell someone about it. And don't be afraid to do something to help improve things if needed. Here's looking forward to a great year and I hope to meet many of you in person. Ron

## Micromineralogists of the National Capital Area, Inc.

### Congratulations Scott Braley!

Scott received the “Trophy” award for his article, *Crystal Grove Diamond Mine & Ace of Diamonds Mine in Herkimer, New York*. He was honored at the Eastern Federation of Mineralogical Society editor’s breakfast in Rochester, New York in October.



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**Kathy Hrechka** was also awarded the EFMLS “Trophy” award as editor of *The Mineral Mite* newsletter at the same breakfast in Rochester.

**Editor’s Note:** I wish to thank each club member who has submitted articles, photos, geology in the news, etc. in 2016.

When I accepted the volunteer position as your newsletter editor, I remember declaring the newsletter as our club’s newsletter, not just mine. Therefore, this award belongs to all our club members. Thank you.

Sincerely, Kathy Hrechka

**Micromineralogists of the National Capital Area Meeting:** The 4th Wed. of each month 7:30 -10 p.m.  
Long Branch Nature Center, (Except Easter & Dec.)  
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, dbmaclean@maclean-fogg.com  
Vice Pres: David Fryauff, fryauffd@yahoo.com  
Secretary: Bob Cooke, rdotcooke@verizon.net  
Treasurer: Michael Pabst, Michaeljpabst@yahoo.com  
Editor/ Historian: Kathy Hrechka, kshrechka@msn.com  
Website: Julia Hrechka, dcmicrominerals@gmail.com  
Conference: Kathy Hrechka, kshrechka@msn.com

#### The society is a member of:

\* Eastern Federation of Mineralogical and Lapidary Societies  
(EFMLS) [www.amfed.org/efmls](http://www.amfed.org/efmls)

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

**Dues:** MNCA Membership Dues for 2017  
\$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 5<sup>th</sup> of each month.**

*The Mineral Mite* will be emailed on 10th.

No newsletter July/August

#### AFMS Editor's Awards

First Place 2011 - Mini Bulletins

Second Place 2013 - Small Bulletins

Fourth Place 2016 – Small Bulletins

#### November inputs:

- \*Bob Cooke
- \*Michael Pabst
- \*Kathy Hrechka
- \*Dave McLean
- \*David Fryauff

