



MNCA Website dcmicrominerals.org
The Mineral Mite



Vol. 49 – No. 8

Washington D.C. – A Journal for Micromineralogists

October 2016

October 26 Time: 7:30 p.m. – 10 p.m.

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

**Program: Dixie Mine
of Rockbridge
County, Virginia**

Michael Pabst will talk 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 Cacoenite, and green balls of Kidwellite. There are also black crystals of Rockbridgeite. The type locality for Rockbridgeite is nearby. Enjoy this virtual expedition, which features an absence of bears, mosquitoes, snakes, and park rangers



President's Message:

By: Dave MacLean

I am thinking and praying for Fred Schaefermeyer and Muriel Frink who have traveled together since their spouses died. They have cared for each other. I remember when Fred said "I have girlfriend" either before or after he went to Colorado. I remember when Fred was editor of the NVMC Mineral Newsletter. He said he could edit and assemble, but needed people to write the articles. What good advice that we all can and should tell our stories in the newsletters.



We still need volunteers to help demonstrate micro mineralogy at the NVMC show Saturday, November 19 – 20 the Hub at GMU. Please step forward. It turns out that I cannot be the Army recruiter in the WWII poster pointing his finger at you saying "We need YOU". Enlist today.

I will see you on Wednesday, October 26.

.Photo of the Month



Cavansite, $\text{Ca}(\text{VO})\text{Si}_4\text{O}_{10}\cdot 4\text{H}_2\text{O}$, labelled "Poona, India", presumably from Wagholi Quarries, Pune district, Maharashtra, India. FOV 14 mm. Michael Pabst bought this charming "bow" of Cavansite from David Lipscomb of the Virginia Rock Shop (www.varockshop.com), at the recent annual show of the Shenandoah Valley Gem and Mineral Society (www.shenandoahvalleyrockclub.org). Next year in September will be the 50th anniversary of the Show.

Article by Michael Pabst on page 3.

Micromineralogists of the National Capital Area, Inc.

Previous Meeting Minutes: 9/28/16

By: Bob Cooke, Secretary

President Dave MacLean called the meeting to order at 7:58 PM. No past Presidents were present. Seven members were present. Ken Reynolds attended as a guest. The June minutes were approved as published in the September Mineral Mite.



Michael Pabst presented the Treasurer's report.

Old Business: Bob Cooke reported the loupes which the club ordered through Amazon have arrived. He will bring them to the October meeting.

Kathy Hrechka had no new information about Nano-science Instruments (the Alexandria company marketing the Phenom brand of affordable Scanning Electron Microscopes), but she will follow-up and report back next month.

New Business: Kathy Hrechka reported that the 44th Atlantic Micromounters' Conference is scheduled for March 31 and April 1, 2017 at the Marriott SpringHill Suites in Alexandria, VA. She asked members to evaluate the adjacent Holiday Inn facilities as an alternative location in 2018.

Dave MacLean circulated a sign-up sheet for manning the MNCA table at the NVMC Mineral Show November 19 - 20, at George Mason University.

The MNCA membership authorized Dave MacLean and Michael Pabst to purchase going-out-of-business stock from Doug Rambo at the conclusion of the Baltimore Mineral Society's Paul Desautels Micromount Symposium (Oct14-16). Members discussed dates for a possible trip to James Madison University; Dave MacLean agreed to contact Lance Kearns and propose a trip in late January or early February. Get well cards were circulated for Fred Schaefermeyer and George Reimherr who are in poor health. The November meeting was rescheduled from the 23rd to the 30th to avoid a conflict with the Thanksgiving holiday.

Minutes continued

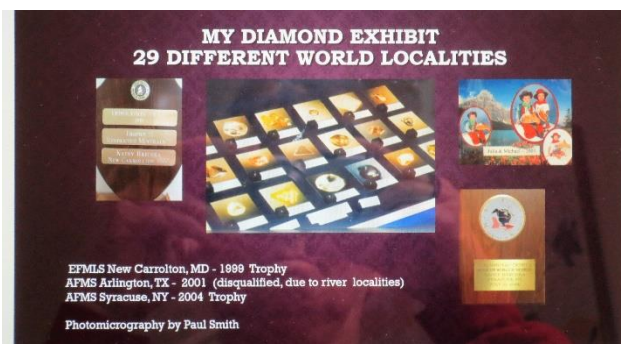
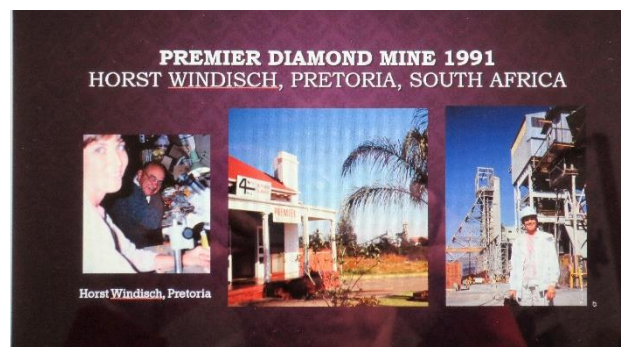
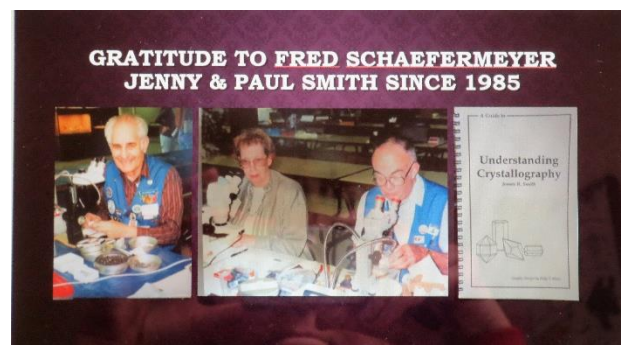
The December joint Holiday Party with NVMC was scheduled for Monday December 19th at the Long Branch Nature Center in Arlington.

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. The meeting adjourned at 8:28.

Previous Program Reviewed 9/28/16

By: Bob Cooke, Secretary

"The Journey of Diamonds" was presented by Kathy Hrechka. It was a documentary of her thirty years' worth of collecting diamond micromounts.



Hemihedrite and Iranite

By Michael J. Pabst, Treasurer

Hemihedrite and Iranite are two similar chromium silicates that are both members of the Iranite Group. They form a series, depending upon whether Zn^{2+} or Cu^{2+} is dominant in the chemical composition:

Hemihedrite: $ZnPb_{10}(CrO_4)_6(SiO_4)_2(OH)_2$

Iranite: $CuPb_{10}(CrO_4)_6(SiO_4)_2(OH)_2$

Hemihedrite and Iranite are triclinic, and they are isomorphous, which means that they have the same crystal structure. Also, substitution of F^- for OH^- can occur. [This information is newer than the information on Mindat. The reference is: Yang H, Sano JL, Eichler C, Downs RT, Costin G. Iranite, $CuPb_{10}(CrO_4)_6(SiO_4)_2(OH)_2$, isomorphous with hemihedrite, *Acta Crystallographica* C63, 122-124. (available on ruff.info.)]

Both minerals have an orange color due to the chromate anion $(CrO_4)^{2-}$. In general, Cu^{2+} gives Iranite a darker orange-brown color than Hemihedrite, which is bright orange. Iranite is named for Iran where it was first discovered. Hemihedrite is named for its hemihedral morphology, which means that it has only half of the crystal faces permitted by the triclinic system. (Another example, in the cubic system, is a tetrahedron which is a hemihedral form of an octahedron.)

Before showing pictures of my humble specimen of Hemihedrite, here are links to Mindat that show my favorite specimens of these two chromates: For Hemihedrite, www.mindat.org/photo-407954.html and for Iranite: www.mindat.org/photo-400994.html. Please click on these links to see some really nice photos of really nice specimens. Both of these outstanding photos were taken by Marko Burkhardt. The Mindat Hemihedrite is from the same locality as my specimen: Rat Tail Claim, Wickenburg area, Belmont Mountains, Maricopa County, AZ. The Mindat Iranite comes from Iran, appropriately. Alas, I have not yet been able to find a good Iranite for my collection. The problem, of course, is that once I see these beautiful examples on Mindat, I cannot find specimens good enough to match them – not even close!



Last month my article was about Phoenicochroite. My specimen of Phoenicochroite, $Pb_2(CrO_4)O$ (red), came from the Rat Tail Claim, Maricopa County, AZ, as does my specimen of Hemihedrite, $ZnPb_{10}(CrO_4)_6(SiO_4)_2(OH)_2$ (orange), this month. My first photo shows an overview of the entire specimen, which is about an inch across; and the second photo shows a close-up of a group of Hemihedrite crystals. (This close-up photo came out rather nice, considering the high magnification and the complicated triclinic faces.)

Here is my specimen of Hemihedrite:



Hemihedrite, Rat Tail Claim, Wickenburg area, Belmont Mountains, Maricopa Co., AZ
Entire specimen, FOV 27 mm. (Single photo taken with 50 mm macro lens.) Photo by Michael Pabst.



Hemihedrite, Rat Tail Claim, Wickenburg area, Belmont Mountains, Maricopa Co., AZ FOV 1.5 mm. (Five photos through stereomicroscope, stacked with CombineZP.) Photo by Michael Pabst.

Micromounters Anonymous

By Dave Hennessey

Hello, my name is Dave and I'm a Micromounter. (Hello, Dave) I admit, I am powerless to resist micromounts. I am not clean now, having used (my scope) earlier today. In fact I am a habitual daily user.

One time I tried to go cold turkey and did not indulge the micromounting hobby for 3 months in a row. It was a horrible time. I was grumpy and hard to get along with, couldn't sleep, kicked the dog, and lost all my friends and my job. My wife finally brought micromounts and my scope to me and told me to please begin using them again. I was just too hard to get along with, without my daily micromount fix. She preferred me hopped up on micromounts.

So here I am today before you, a severely micromount -addicted soul beyond redemption. Now please recite with me the Micromounters Prayer.

God grant me the serenity to accept that some specimens are just too dang big to ever fit into the little box,
The courage to trim and mount successfully those that I can,
And the wisdom to know the difference.



GeoWord of the Day and its definition

gmelinite-K A colorless to brownish hexagonal zeolite mineral:
 $K_8(Si_{16}Al_8)O_{48} \cdot 23H_2O$.

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.

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

Kathy Hrechka, MNCA Conference Chair

Details will be posted on our club website:
Tab Events - Conference
www.dcmicrominerals.org

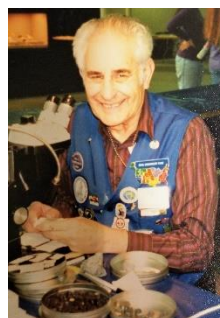
Fred Schaefermeyer Age 97: Update

By Kathy Hrechka, Editor

I am grateful to Fred Schaefermeyer, as he has been my geology mentor for the past thirty years. We began our geology journey collecting garnets and McGuinnessite at the Rockville Quarry in 1985. At 97 years old, I am sad to share with you that his health has suddenly deteriorated. He is currently enduring an advanced stage of leukemia. While Muriel has been his companion and caretaker for so many years, Fred now resides at Gardens on Quail, an assisted living facility in Arvada, CO.

I am encouraging club members who know Fred to send a card today. Fred died on Sunday, Oct. 9 at 4:20 EST.

Muriel Frink
5930 W. 34th Ave.
Wheat Ridge, CO
80212



Micromineralogists of the National Capital Area, Inc.

Dr. Henry Barwood

By Tom Tucker

Professor Dr. Henry (Bumpi) Barwood was a moving force in maintaining access to several of the Arkansas specimen localities, of which he collected copious amounts - in buckets if possible. These not infrequent trips were open to many folk who Bumpi knew, and Bumpi even smoothed the way with mine managers for various friends to access the active quarries, and collect by themselves. The rewards were many from these prolific mineral producing sites.

In recent years Bumpi had organized a Southeast Micro Mineral Collectors gathering at his university labs at Troy University, in Alabama. These were designed for micro mounters, and attendance usually ran around 10 active participants. George Loud has participated a couple of times. Apparently great quantities of interesting freebie material was exchanged. They had speakers on technical subjects when they were available, such as Bob Rothenberg discussing the minerals of Stoutameyer Branch.

Bumpi had worked with the Indiana Geological Survey, where I think he once wrote about the mineral in geodes, and he worked with the Arkansas Geological Survey, where he undoubtedly had great fun with all the Little Rock area syenites, and Magnet Cove, and Baroid Company's huge open pit barite mine.

Bumpi was interested in phosphate minerals - perhaps he had studied them in college. He knew the Indian Mountain, Alabama region well, and shared copious amounts of material from those mines, pits, and excavations.

In recent months Bumpi had perfected the art of photographing micro-minerals, and was circulating his latest creations among a long list of friends on the web. His photos are superb!

Dr. Barwood had earned his PhD degree in Geology at Virginia Tech, so he had an interest in our minerals too, especially the phosphates. He authored an article in Rocks and Minerals on minerals from the phosphate diggings near Vesuvius - Dixie, Kelly Bank, etc.

A few years ago he asked me if I would help him run down some Virginia phosphate localities for which he had leads, but had never gotten to while he was in the State. Several years later I asked him about those Virginia leads, but he recently said he'd not been able to find the files he needed.

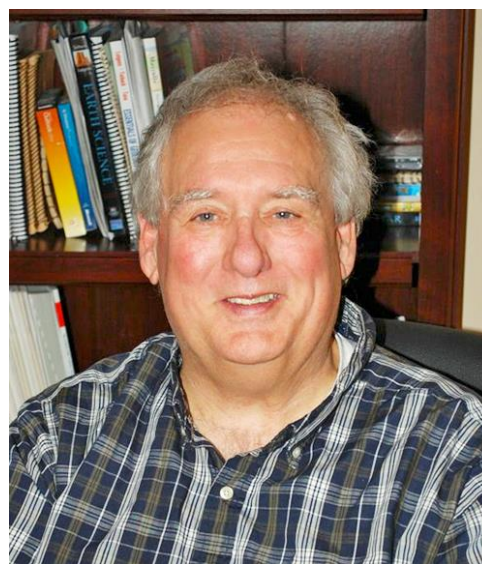
Bumpi was the featured speaker at our AMC at the University of Maryland, in about 1998. I think I recall his demonstrating the use of backscatter electrons in conducting SEM analysis of unknowns.

Henry is already missed - his very frequent sending of beautiful new photos of various mineral species, mostly from Arkansas, or phosphates from Alabama, has come to an abrupt end. They are missed too.

Dr. Barwood was available to help solve unknown mineral species. He had recently sent one of our specimens from Stoutameyer Branch to a university in California in hope they could identify the unknowns. We have an identification, and hope to be able to confirm their results soon through another lab.

A further notice of Bumpi's death can be found at: Troy, Alabama paper on September 19, 2016: <http://tropnews.com/9711>.

He was a good friend for all of us.



Photograph of Dr. Henry Barwood
(CONTRIBUTED/ Hudson Institute of Mineralogy)

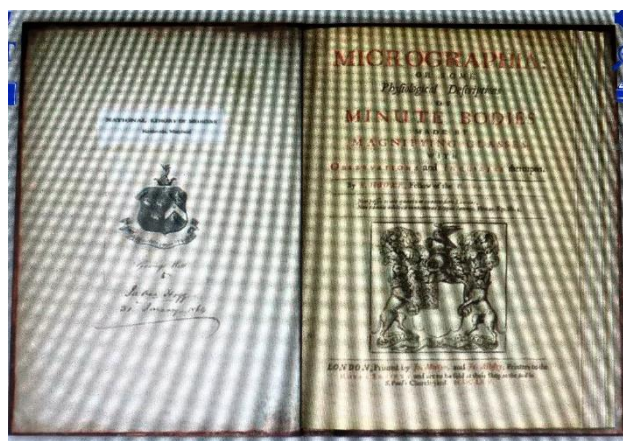
Micrographia by Hooke, Fellow of the Royal Society in the 17th Century

By Erich Grundel

Here is a link to the most famous book in the history of microscopy; Micrographia. It has what is the first picture of a micro mineral. I think members will like the “turning pages” feature. All you have to do to open the book is put the cursor on it and click. After that just click on the page. There is an unfold icon to the right that opens folded illustrations. The flea illustration is the most famous.

NIH National Library of Medicine

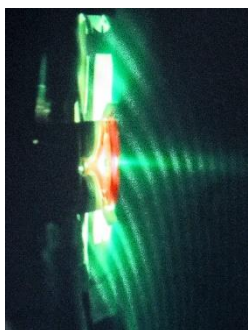
<https://ceb.nlm.nih.gov/proj/ttp/flash/hooke/hooke.html>



Origami Microscope

By Erich Grundel

Manu Prakash and his team have created a microscope made of paper that's just as easy to fold and use. A sparkling demo that shows how this invention could revolutionize healthcare in developing countries ... and turn almost anything into a fun, hands-on science experiment.



https://www.ted.com/talks/manu_prakash_a_50_cent_microscope_that_folds_like_origami?language=en

Minerals in Medicine Exhibition NIH Smithsonian collaborate to highlight health applications of minerals

By Erich Grundel

Dr. Jeffrey Post, Curator of the Geology, Gems and Mineral Hall at the Smithsonian assisted NIH in displaying forty minerals which are an important connection between minerals and health. The display is open to the public in the Clinical Center at NIH



Cinnabar with quartz from Kyrgyzstan. The bright red cinnabar, or mercury sulfide (HgS), has been used in producing glass thermometers and tooth fillings.

Friends of Mineralogy Symposium Lancaster, PA - November 5

By David Glick, FM-Pa Chapter Newsletter Editor
Field trip Nov. 6. Theme: Pennsylvania Mining and Mineralogy. Speakers included;

- *Robert Kulp: Dunite in the Serpentinities of the Pennsylvania-Maryland Chrome Mining District;
- *Ryan Mathur, PhD: Cenozoic mineralization ages for sulfides and calcite in Pennsylvania;
- *Stan Mertzman, PhD: Hawaiian minerals and geology (Pennsylvania students? experience)
- *Bill Stephens, PG: Lapidary Grade Agate and Other Semi-Precious Gemstones from the Penn-MD Serpentine Quarry, Lancaster County, PA.

Details: <http://www.raslot.com/FM/>

Field Trip: Building Stones of the National Mall in Washington, DC

Submitted by Bob Cooke

In addition to the field trips that are sponsored by local mineral clubs for mineral collecting, there are also field trips sponsored by educational organizations for teaching geology. The Annandale campus of the Northern Virginia Community College has trip scheduled for this fall.

GOL 135 - Field Studies in Geology

October 16 Class # [15265](#) Section 055N

Instructor, Kenneth Rasmussen

GOL 135-055N: Building Stones of the National Mall, Washington, DC. One-day walking tour Sat. Oct. 15 (9 AM-6:30 PM); Rain date Sun. Oct. 16. Trip considers over 20 DC National Mall sites, examining the geologic history and architecture of the National Mall, and the rocks used to construct the federal buildings and monuments there. Specific DC meeting place, time, and preparation will be sent via student VCCS email and Blackboard. Photos posted at:

<http://www.nvcc.edu/home/jbuecheler/Photos.html>.

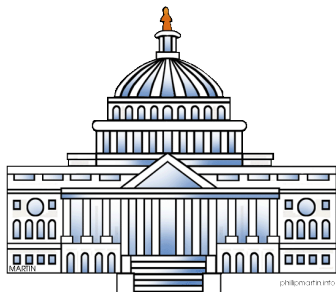
For all questions contact Dr. Rasmussen:

krasmussen@nvcc.edu

The trip is worth one credit hour and incur a tuition fee of \$177. However, Virginia residents over age 60 can audit these classes for free on a space available basis. Details are at

<http://www.nvcc.edu/admissions/apply/seniors.html>

I have taken several field trip classes as well as lecture courses under the senior citizen program and fully recommend them. The registration process can be confusing and seems to change frequently, but the end result in worthwhile. If the web site listed above isn't sufficient, call me at (703) 451-1540 for assistance.



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 Oct. 2007.



Dave Fryauff, Scott Duresky, George Reimherr

Field Trip National Limestone Quarry Mt. Pleasant Mills, PA October 29

By Dave Fraauff

Announcing a field trip on Saturday, October 29th to the National Limestone quarry, Mt. Pleasant Mills, Snyder Co., PA. Meet at the quarry office at 9 am for sign in & safety brief. Site is great for phosphate minerals (wavellite, variscite, cacoxenite, strengite), fossils (gastropods, brachiopods, trilobites), calcite, strontianite, celestite, fluorite. Bring water & bag lunch. We will move en masse at 1 pm to nearby Middleburg quarry for a bit more collecting. Please consult Mindat for descriptions and map locations.

Standard safety gear -- helmet, steel toes, long pants, protective shatter proof glasses/goggles -- is required. Responsible kids with personal safety gear and parental supervision are welcome.

Please let me know if you are interested in attending so I can get our numbers to Eric. Thank you,
Dave Fryauff (240) 277-7206

The Chesapeake Gem & Mineral Society Auction Friday, October 14

Location: 2414 Westchester Ave.
Oella, Maryland 21043

Time: 7:30 pm (preview 7:00 pm)

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

Refreshments are available.

Directions: From the north: Take I-695 to US 40 west (exit 15B). Turn left on N. Rolling Rd. Turn right at Old Fredrick Rd. (You will pass through 1 roundabout). Turn right on Oella Ave. Turn left on Westchester Ave. Westchester Community Center is on the right.

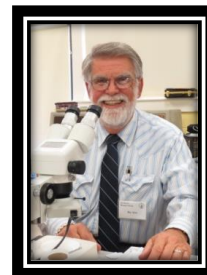
From the south: Take I-695 to Fredrick Rd. (exit 13). Turn left on Fredrick Rd. Follow Fredrick Rd. approx. 2.7 miles. Turn right on Oella Ave. Turn left on Westchester Ave. Westchester Community Center is on the right. Map is on our website. chesapeakegemandmineral.org



Mark your Calendar: 60th Annual Paul Desautels Micromount Symposium October 14-16, 2016

By Mike Seeds, Conference chair

The 60th Desautels Micromount Symposium will take place at The Friends School of Baltimore, 5114 North Charles Street, Baltimore, MD beginning at 7:30 pm Friday evening the 14th and extending until noon Sunday 16th.



Friday 14: 7:30pm Registration, dessert & coffee
8pm Fellowship – informal attendee presentations.

Saturday 15: at 3pm: Micromounters Hall of Fame Induction Ceremony: Robert Rothenberg and Randolph Rothchild. Robert Rothenberg will present “Collecting at Stoutameyer Branch, VA”.

Saturday 15: at 7:30pm: Presentation “A Tribute to Randy Rothchild” by Mike Seeds, Al Pribula, LouD’Almonzo, Steve and Carolyn Weinberger.

Sunday 16: at 10:30am Michael Pabst will present “Copper Silicates of Arizona”

There will be giveaway tables, dealers, a silent auction and a voice auction. Lunch on Saturday will be provided. There will be plenty of mineral talk and mineral trading.

The program and registration materials are available on the Baltimore Mineral Society web site.

Register promptly to reserve your spot at <http://www.baltimoremineralsociety.org/theconglomerate.html>



Photo: Mike Seeds, PA & Jim Hurlbut, Denver, CO



American Federation of
Mineralogical Societies

AFMS)
www.amfed.org



Eastern Federation of
Mineralogical and
Lapidary Societies

(EFMLS)
www.amfed.org/efmls

A Word from Matt Charskey AFMS Past President

Well, my term as President really went quickly. It was an honor to serve the AFMS and the individual regional Federations. At the time of this article, I have had the privilege of visiting five regional Federation conventions—in order, Southeast (Melbourne Beach, FL), Rocky Mountain (Wichita, KS), South Central (Lubbock, TX), Northwest (Albany, OR), and Midwest (South Bend, IN). Only two regional Federation conventions remain – California (Placerville, CA) and Eastern (Rochester, NY). Each convention was unique and it was clear that the host clubs were proud to be members of their regional Federation and the AFMS.

What impressed me the most was the sheer number of volunteers from each host club and each Federation. Several conventions had special exhibits and the host clubs gave out plenty of information on what activities they do for their adult and junior members and local communities. In many cases, it was obvious to me that the right person was in the right job. Also obvious was that the clubs and regional Federations could always use a few more of those movers and shakers. There are many AFMS individuals that I would like to thank for helping me in my year as President. On the same subject of acknowledging the service of our members to AFMS, I would like to remind everyone of the recipient of the 2016 AFMS Recognition Award. At the Annual Convention in Albany, OR, Past President, Marion Roberts presented the 2016 Recognition Award to Dr. Bob Carlson. I want to wish the incoming crew of officers and committee chairs, especially President, Ron Carman, all the best as they assume their responsibilities and term of office. Thanks again for your support and for helping the AFMS move forward. Hope to see all of you in 2017.

Matt

Full letter is printed in the Oct. AFMS newsletter.

Communication and Involvement
Are the Keys to Our Success!

Geology Events:

October:

14-16: 60th Annual Paul Desautels Micro-mount Symposium. Friends School of Baltimore, 5114 North Charles Street, Baltimore, MD beginning at 7:30 pm Friday evening the 14th and extending until noon on Sunday the 16th. Details may be found on page 8 of *The Mineral Mite*.

14: The Chesapeake Gem & Mineral Society Auction. Details may be found on page 8 in *The Mineral Mite*.

21-23: EFMLS Eastern Federation Meeting Convention. Host club: Rochester Lapidary Society Rochester, NY www.rochesterlapidary.org/show.

24: Northern Virginia Mineral Club meeting
7:45 - 10 pm at the Long Branch Nature Center, Arlington, VA

26: MNCA Meeting 7:45 – 10 pm at the Long Branch Nature Center, Arlington, VA

29: Field Trip National Limestone Quarry Mt. Pleasant Mills, Pennsylvania
Contact Dave Fryauff (240) 277-7206 Details may be found on page 8 in *The Mineral Mite*.

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

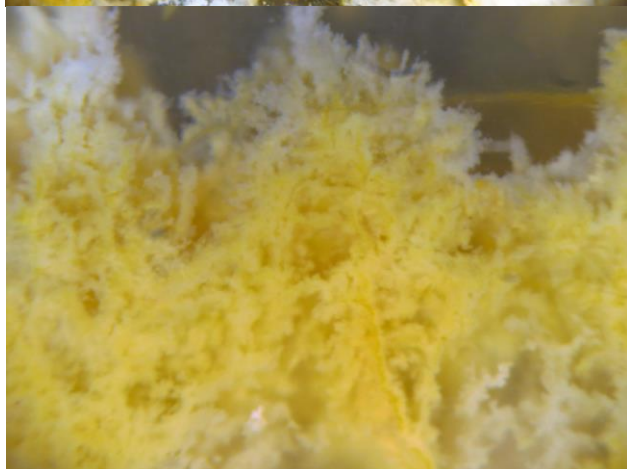
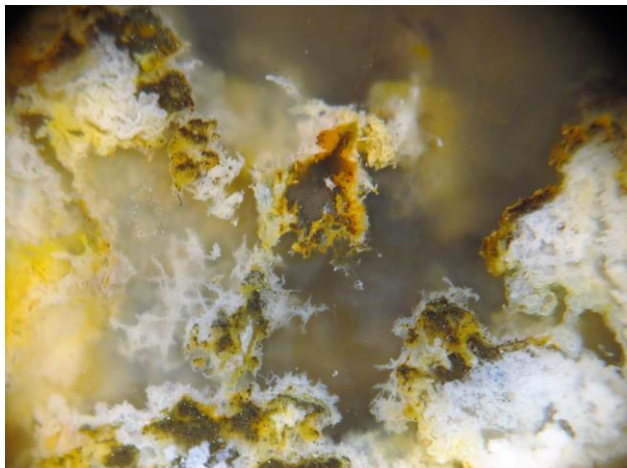


Micromineralogists of the National Capital Area, Inc.

Oregon Agates Under My Microscope

By Kathy Hrechka

As a micromounter, I found a reason to like agates once I viewed them under my microscope. I entered into this new found purpose from the AFMS show which was held in Oregon this past August. Enjoy!



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
* American Federation of Mineralogical Societies
(AFMS) www.amfed.org Affiliation

Dues: MNCA Membership Dues for 2016
\$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 5th 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

October inputs:

*Bob Cooke
*Michael Pabst
*Mike Seeds
*Erich Grundel
*Kathy Hrechka
*Dave McLean
*Dave Hennessey

