

MNCA Website dcmicrominerals.org
The Mineral Mite



Vol. 51 – No. 8

Washington D.C. – A Journal for Micromineralogists

October 2018

October 24 Time: 7:30 p.m. – 10 p.m.

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

Program: Penn-MD Quarry

By David Fryauff, Vice President

At the September meeting of MNCA, Dave Fryauff will present a program on the Penn-MD Quarry, near Peach Bottom, PA. The quarry lies just north of the boundary of Maryland and Pennsylvania, north of Havre de Grace, at the mouth of the Susquehanna River, at the top of the Chesapeake Bay. Unlike most of the limestone/traprock quarries in the National Capital Area, this is a serpentine quarry, with some interesting minerals, like Mcguinnessite and Chromite. There are several similar quarries nearby, including the better-known Cedar Hill Quarry. Here is the Mindat locality: www.mindat.org/loc-167699.html. The full name on Mindat is: Haines & Kibblehouse Penn-Maryland Materials Quarry, Fulton Township, State Line Chromite District, Lancaster County, Pennsylvania, USA.



Photo of the Month



President's Message:

By: Dave MacLean

I appreciate all of us who signed up to demonstrate micromineralogy at the NVMC show Sat-Sun 17-18 November 2018. We still need demonstrators Sunday afternoon 18 November.



September's presentation on the collecting trip to Namibia showed us so many side benefits of mineral hunting; the wildlife, the scenes in different places, and "destination" collecting.

Merelaniite inclusions in Tanzanite

Augusto Castillo, Tyler Smith, and John A. Jaszczak Gems & Gemology, Summer 2018, Vol.54, No.2 <https://www.gia.edu/gems-gemology/summer-2018-microworld-merelaniite-inclusions-in-tanzanite#.W7dPSMGIPKg.mailto>

“Mineral of the year 2016” Merelaniite and Associated Minerals of the Merelani Tanzanite Deposit was presented by Dr. Michael Wise, Department of Mineral Science, Smithsonian Institution at our 50th club's anniversary; Atlantic Micromounter Conference on April 1, 2017. “MY FIRST MICRO” declared Dr. Wise.

The new mineral merelaniite was found associated with the Tanzanite (variety of zoisite) deposit in the Merelani hills, Laletami Mountains in northeast Tanzania. Jessica and Robert Simonoff bought blue prehnite from the Merelani Hills in Tanzania at a Tucson Show, which sparked research for this new mineral.

Previous Meeting Minutes: 9/26/18

By: Bob Cooke, Secretary



President Dave MacLean called the meeting to order at 7:50 PM, September 26, 2018. Eight members were present: Robert Clemenzi, Bob Cooke, Dennis Hedrick, Dave Fryauff, Dave Hennessey, Dave MacLean, and Karen & Michael Pabst.

Minutes of the June 2018 meeting were approved as published in the Mineral Mite.

Michael Pabst gave a Treasurer's report. Due to conflicts with Thanksgiving and the NVMC Mineral Show, the date for the MNCA meeting in November has been moved from the 28th to the 14th. The joint NVMC/MNCA Holiday party will be held on December 17th. The NVMC co-chairs are Holly Perlick and Marie Johnston. Kathy Hrechka is the MNCA lead. If you would like to participate in the gift exchange, please remember to bring a gift valued between \$5 and \$20. Details will be posted.

Dave MacLean led a discussion about MNCA hosting a micromount demonstration at the NVMC Mineral Show in November. A volunteer sign-up sheet was circulated. Three members were prepared to volunteer but had significant time constraints. Further discussion was deferred to the October meeting.

All four elected officers (Dave MacLean, Dave Fryauff, Michael Pabst & Bob Cooke) agreed to continue in their current positions for 2019. A Nominating Committee was deemed not to be necessary.

Dave Fryauff announced he is working with George Loud to clarify legal issues concerning the protections afforded by EFMLS liability insurance. Conclusions will be reported in a future meeting. The meeting adjourned at 8:12 PM

Previous Program Reviewed: 9/26/18

Casper Voogt gave a presentation on his trip to Namibia last April, which was organized by Mindat. He presented pictures and commentary of his recent trip to Namibia in search of exotic animals and even more exotic minerals. His anecdotes gave interesting insights into the quirks of renting cars in Namibia, buying minerals both from commercial businesses and directly from miners. He also photographed the countryside, local people as well as animals on safari.



Photos courtesy of NVMC newsletter 9/18

Micromineralogists of the National Capital Area, Inc.
Geology club
Meetings 4th Wed monthly: no July/Aug
7:30 pm - 10pm
Long Branch Nature Center
625 S. Carlin Springs Road
Arlington, VA 22206
* Spring Symposium
www.dcmicrominerals.org



Rhodochrosite – Buck Hill and Hotazel

By Michael Pabst PhD, Treasurer

In previous articles we saw amazing rhombohedral Rhodochrosite from the Sweet Home Mine in Alma, Colorado, and the Emperor of China from Wutong mine in China. Rhodochrosite from Sweet Home is the best, period. But Rhodochrosite occurs in many other localities and in many other habits. Let's look at a nearby locality:



Here is a Rhodochrosite from Buck Hill, near Parnassas in Augusta County, Virginia, that I collected myself. Tom Tucker was kind enough to take me there, and to point out which boulders to hammer on. We have enjoyed the lectures of Robert Rothenberg describing this locality and the nearby locality of Stoutameyer Branch. These are syenite

localities, with big tough boulders, containing small vugs full of tiny crystals of many different minerals. There must be a dozen minerals in this little vug on this little chip of rock shown in the photo. I think that I can recognize Natrolite (looks like colorless quartz here, except that it is tetragonal), and Fluorite (purple), and Arfvedsonite (black), along with the Rhodochrosite. A competent mineralogist could recognize many others. This crystal and this environment is about as far as one could get from the raspberry rhombohedrons of the Sweet Home Mine, but it demonstrates the ubiquity of Rhodochrosite. Even I could find some Rhodochrosite, just banging on a neighborhood rock!

Rhodochrosite from Buck Hill, Parnassas, Augusta County, Virginia. Photo by Michael Pabst. FOV 3 mm. (Taken with my Olympus OM-D E-M5 Mark II camera with 60 mm macro lens, stacking 20 photos.)



Rhodochrosite continued

OK, you might not be too impressed by the Rhodochrosite I found in the neighborhood, so let's move on.

My second favorite locality for Rhodochrosite is Hotazel, and other localities in the Kalahari Manganese Field of South Africa. These localities provide Rhodochrosite in deep red transparent scalenohedrons. The photo below shows my little treasure. For another splendid example from Hotazel, visit Mindat, and see this fine photo from the great photographer Yaiba Sakaguchi:

www.mindat.org/photo-326869.html.

The next link also shows an historic Hotazel Rhodochrosite: www.mindat.org/photo-727952.html, photo by Bruce Cairncross.

Finally, here is another link to a beautiful scalenohedron Rhodochrosite from the nearby N'Chwaning Mines (click on the first photo on the page, image 1510981940):

www.mineralatlas.eu/lexikon/index.php/MineralData?mineral=Rhodochrosit.



Rhodochrosite from Hotazel Mine, Hotazel, Kalahari manganese field, Northern Cape Province, South Africa. FOV 23 mm. Specimen and photo by Michael Pabst. Stack of 20 images taken with Olympus 60 mm macro lens and Olympus OM-D E-M5 Mark II camera, processed by CombineZP.

Because we have such a beautiful example, let's describe a scalenohedron. A scalenohedron is a solid form that has faces featuring a scalene triangle (a triangle with three unequal sides). Like all forms and specimens of Rhodochrosite, this scalenohedron form is in the Trigonal System: $\bar{3} m$ - Hexagonal Scalenohedral.

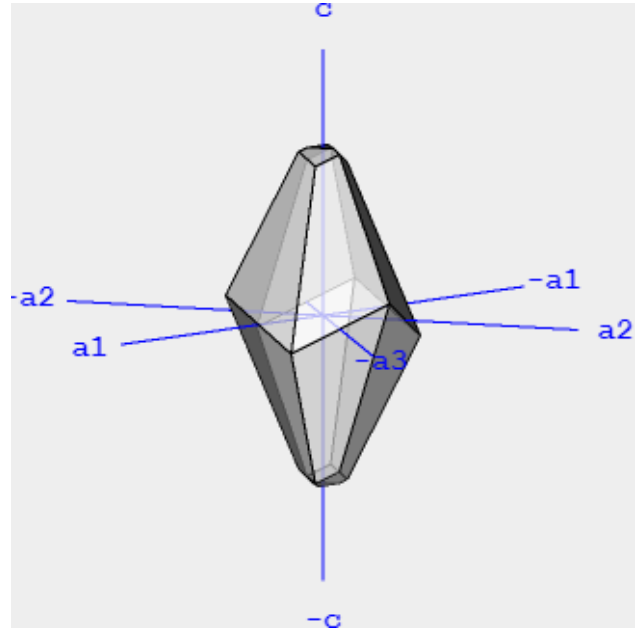


Diagram of a scalenohedron of Rhodochrosite. Here the predominate form is {214} with small terminations of {001} and {104} at the top and bottom. From Mineralein Atlas, Ulrich Baumgärtl, Kristall Nr. R066aa. Link:

www.mineralatlas.eu/lexikon/index.php/MineralData?mineral=Rhodochrosit.

With Rhodochrosite we have seen rhombohedrons (Sweet Home), "chips" (Emperor of China), and scalenohedrons (Hotazel). There are more forms of Rhodochrosite. Some forms look prismatic. We will look at some in the next article.

Leidy Takes a Look at "The Jewels of the Sea"

By Eric Brosius

Adapted from Rock Chatter Vol. 52, No. 8. Rock and Mineral Club of Lower Bucks county, PA, Inc.



The September meeting of the Leidy Microscopical Society featured a compound microscope supplied by Secretary John Ferrante to allow members and guests the ability to observe diatoms aka "The Jewels of the Sea."

Diatoms are microalgae that is found in the oceans, waterways and soils throughout the world. They generate approximately 20% of the world's oxygen per year and take in over 6.7 billion metric tons of silicon each year from their ecosystems. The diatom uses silicon to surround its cell wall called a frustule. The frustule of the diatom is what the Society had the privilege to observe.

John Ferrante supplied slides of diatoms and radiolarian prepared by Tony DiDonato, Jr. and Dr. Carl Rilling. Karenne Snow also provided slides of diatoms prepared by Dr. Rilling. One of the slides observed had over 100 diatoms geometrically arranged in an area of approximately 3mm square.

Editor's Note: The Leidy Microscopical Society's "Micromount Symposium" will be held on March 8 and 9, 2019. The new location will be the Advent Lutheran Church, 45 Worthington Mill Road, Richboro, PA 18954.



The September 20, 2018 Leidy Microscopical Society Meeting; members and guests present: Dick Braun, Mike Rosso, Karenne Snow, Christel Hoffmann, John Ferrante, Dick Tillett, Peter Fireman, Herb Kropnick, Eric Brosius (not in picture).

Club Geology Auction Invite 10/12/18 The Chesapeake Gem & Mineral Society Auction

Date: Friday, October 12th, 2018
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.

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.

Need a map? You can find one on our web site.

chesapeakegemandmineral.org

Club Geology Auction Invite 10/28/18 The Gem, Lapidary and Mineral Society of Washington, DC

Join us for our annual GLMSDC Auction and Sale, where you'll find collectible gems, mineral, and jewelry, as well as beads and jewelry findings, lapidary rough, books, and hobby-related tools.

Sunday, October 28, 2018

Bethesda Woman's Club, 5500 Sonoma Road, Bethesda, Maryland

Sale starts at Noon, Auction from 2 to 5 p.m.

Don't miss this event!



Micromineralogists of the National Capital Area, Inc.

“Earth Rocks” at Cub Scout Campout

By Kathy Hrechka, Editor

The Boy Scouts of America hosted a camping weekend at Camp Snyder in Haymarket, Virginia on September 28-30. 1,600 scouts were registered for the event, sponsored the Chainbridge BSA council. Conrad Smith, Eagle Scout who is currently majoring in mining and geology led the “Earth’s Rock” Webelo’s badge on Saturday. The following teaching units were designed by Kathy Hrechka.

- * Geologic map study of Virginia
- * 16 identical rock/mineral study boxes containing 17 specimens each & examples of 3 rock types
- * Mohs hardness study box – minerals, flash cards
- * Eagle Scout, Conrad Smith designed “Minerals in my Smart Phone”.
- * Miner Mike Kaas designed geologic building material examples, with corresponding rocks and minerals used in your home.

The scouts enjoyed discovering rocks and minerals in the “Big Dig” sandpit which was salted with various rocks and minerals. Donations were provided by Conrad Smith, Dave Hennessey, Mike Kaas, Kathy Hrechka, Tom Taffee, Jim Kostka, and some from Cynthia Payne’s estate.

“Earth Rocks” volunteers included:

Conrad Smith, Eagle Scout, college student

Jim Kostka, Eagle Scout

Robert Knowles, Eagle Scout, retired geologist, Smithsonian Q?rius volunteer

Laura Dwyer, retired geologist, Smithsonian Q?rius volunteer

“Miner” Mike Kaas, retired mining engineer, Smithsonian Geology, Gems & Minerals volunteer

Tom Taffee, fossil vendor

Linda Smith, Conrad’s mom

Kathy Hrechka, retired flight attendant, Smithsonian Geology, Gems & Minerals volunteer

The event was non-stop, which made for an all-day success. It was our pleasure teaching geology.

Photos courtesy of Mike Kaas and Kathy Hrechka



Conrad Smith & Jim Kostka, Eagle Scouts



Laura Dwyer, geologist - VA map & 3 rock types



Kathy Hrechka - Rock/Mineral study boxes

Continued next page

Micromineralogists of the National Capital Area, Inc.



Robert Knowles, geologist in the “Big Dig”



Tom Taaffe & Jim Kostka in the “Big Dig”



Linda Smith teaching the Moh's Hardness Scale



“Miner Mike” Kaas teaching Minerals in my Home



The “Minerals in My Smartphone” poster was designed by Conrad Smith in conjunction with his geology related Eagle Scout project of 2014.



GeoWord of the Day and its definition:

alumino-katophorite A hypothetical member of the *amphibole* mineral family; probably an unnecessary name for *katophorite* :
 $\text{Na}_2\text{Ca}(\text{Fe}^{2+}_4\text{Al})(\text{Si}^7\text{Al})\text{O}_{22}(\text{OH})_2$.

bobtraillite A vitreous gray, pale green, or brown hexagonal mineral:
 $\text{Na}_{15}\text{Sr}_{12}\text{Zr}_{14}\text{Si}_{42}\text{B}_6\text{O}_{138}(\text{OH})_6 \cdot 12\text{H}_2\text{O}$.

oboyerite (o-boy'-er-ite) A white triclinic mineral:
 $\text{H}_6(\text{Pb,Ca})_6(\text{Te}^{4+}\text{O}_3)_3(\text{Te}^{6+}\text{O}_6)_2 \cdot 2\text{H}_2\text{O}$.



Oboyerite Type Locality: Grand Central Mine, Contention-Grand Central Mine group, Tombstone District, Tombstone Hills, Cochise Co., Arizona, USA Named in 1979 by S.A. Williams in honor of Oliver Michael Boyer (15 November 1842, New Hope, Ohio, USA - 14 September 1918, Medford, Oklahoma, USA), prospector. In 1878 he discovered several rich veins of silver in mines near Tombstone. After killing a man, he was sentenced to death but in 1883 he was released on the condition that he leave Arizona. He then took up a life of farming.

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

Geology Field Trips

Northern Virginia Community College
NOVA's campus in Annandale offers 1-day week-end courses—essentially, field trips—related to our hobby. You can register and get more information at Field Studies in Geology—GOL 135.

Building Stones of the National Mall
October 13, 9 a.m.–6:30 p.m. Visit over 20 National Mall sites, examining the geologic history and architecture and the rocks used to construct the federal buildings and monuments there.



Geology at Long Branch

December 1, 1–4 p.m. (rain date: December 9), led by Joe Marx; members \$26, nonmembers \$36. Arlington's Long Branch Nature Center overlooks a misnamed tributary of Four Mile Run. We will hike a mile or so along Long Branch and Four Mile Run, returning by the same route. A variety of rock units are exposed along the trail, including an undersea landslide frozen in time, long-vanished seaside flats, and the bottommost layer of the coastal plain. To add botanical icing to our geological cake, we will traverse an old-growth upland forest and a quicker changing floodplain forest.



Adapted from the Northern Virginia Mineral Club Newsletter, Mineral News Oct 2018 Vol 58, No. 8

Micromineralogists of the National Capital Area, Inc.



**American Federation of
Mineralogical Societies**

(AFMS)
www.amfed.org

AFMS Purpose: 2018

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"

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Content – Letters Editorial Comments – Submissions
Any communication concerning the content or format of the newsletter should be sent to the Editor: Carolyn Weinberger PO Box 302 Glyndon, MD 21071-0302
<editor@amfed.org> 410-833-7926

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!**

Geology Events:

October

3: Mineralogical Society of DC meeting - MSDC
Smithsonian's Natural History Museum
Meet 7:30pm Constitution Ave entrance for guard escort to Cathy Kerby room for meeting
www.mineralogicalsocietyofdc.org

8: The Gem, Lapidary and Mineral Society of Montgomery County, Maryland - GLMS-MC
7:45 pm - Rockville Senior Center, Rockville, MD
www.glmsmc.com

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

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

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

April 5-6, 2019 Atlantic Micromounters' Conference
Holiday Inn, Alexandria, VA
Speaker, Robert Lauf of Tennessee
Published author of Mineralogy of Uranium and Thorium
www.dcmicrominerals.org

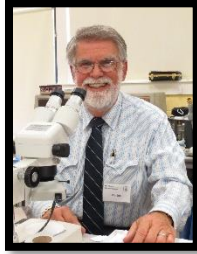


Micromineralogists of the National Capital Area, Inc.

Desautels Micromount Symposium

October 19-21, 2018

By Mike Seeds,
Conference Chair



Please join us at the Friends School on Charles Street in Baltimore. Details are on our website.

<https://www.baltimoremineralsociety.org/desautels-symposium.html>

The program includes:

Round Minerals given by Hall of Fame Inductee Janet Clifford

Aspects of the Morphology of Quartz given by Pete Richards, HOF

Micromounting and Science given by Quintin Wight, Hall of Famer

Friday, October 19

7:30 PM Registration, Dessert and Coffee

8:00 PM Fellowship with other Micromounters and informal programs given by participants

Saturday, October 20

9:00 AM Symposium Opens – Trading, Give-aways, Mineral sales, Silent and Voice Auctions and lots of free time!

10:00 AM Silent Auction

12 Noon Light Lunch (provided)

2:00 PM Voice Auction

3:00 PM Micromounter's Hall of Fame Induction Ceremony: Phillip Foster and Janet Clifford Presentation: Janet Clifford, "Round Minerals"

5:00 PM Dinner (at local restaurants on your own)

7:30 PM Presentation: Pete Richards, "Aspects of Morphology of Quartz"

9:00 PM Workshop Closes for the Day

Sunday, October 21

9:00 AM Symposium Opens – Trading, Give-aways, Mineral Sales and lots of free time!

10:30 AM Presentation: Quintin Wight, "Micromounting and Science"

12 Noon Symposium Closes

Note: Please bring a cloth or plastic table cover to protect the wooden tables.

Registration materials can be downloaded from the BMS website. They were also mailed to you.

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, dbmaclean@maclean-fogg.com

Vice Pres: David Fryauff, fryauffdj@gmail.com

Secretary: Bob Cooke, rdotcooke@gmail.com

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 2018

\$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

EFMLS Editor's Award

First Place 2016 - Small Bulletins

Inducted into Editor's Hall of Fame - 2018



Member inputs:

- * Dave MacLean
- * Michael Pabst
- * Bob Cooke
- * Kathy Hrechka
- * David Fryauff
- * Mike Seeds

