

MNCA Website dcmicrominerals.org
The Mineral Mite



Vol. 52 – No. 10 **Washington D.C. – A Journal for Micromineralogists** **December 2019**

December 16 Time: 6:30 p.m. – 10 p.m.

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

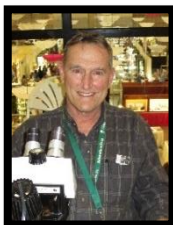
Holiday Party MNCA/NVMC

by David Fryauff, Vice president

Celebrate the holidays by joining our Northern Virginia Mineral Club friends on December 16. MNCA will provide beverages. NVMC will provide turkey and ham. Please help add to the menu by bringing a side dish.

Simply open the URL below for the app to sign #1 up if you are coming, and #2 what you are bringing. If you would like to participate in the gift exchange, consider a gift valued between \$5 and \$20. Elections of 2020 MNCA officers will also be held.

<https://www.signupge-nius.com/go/20F094AADAF2AA46-northern1>



President's Message:

by Dave MacLean

First, I wish everyone a blessed Christmas and a happy and a prosperous New Year. Let us all remember and act on the needs of persons in need: the hungry, homeless, of kind words, the physically and mentally sick, the addicted, prisoners, the lonely, persons at risk of violence, threats, intimidation, arbitrary detention and worse.



Those of us who demonstrated micromounting at the recent NVMC show, showed both adults and children the wonders of minerals under a microscope, or ten power loupes. We were very busy on both days with persons wanting to see what the "small things" look like. The micros on the turntable (thank you Joe Muerter for assembling it) were a fascination for children. While volunteering at the kids table, I also noted the amount of vugs and cracks containing mineral crystals of interest for kids. Thank you to all who served at the micromineral demonstration table.

Bon Voyage and thank you to our new honorary member Erich Grundel, who is moving soon to upstate New York.

Photo of the Month



Pyrophanite, Big Rock Quarry, Granite Mountain, Little Rock, Arkansas Photo by Robert Rothenberg

Mark your calendars:

Atlantic Micromounters' Conference
April 3-5, 2020 (weekend before Easter)
Holiday Inn, Alexandria, VA
Tour Victor Yount's mineral collection
on Sunday April 5 **Details p 9**

Micromineralogists of the National Capital Area, Inc.

Previous Meeting Minutes: 11/20/19

by Bob Cooke, Secretary

President Dave MacLean called the meeting to order at 8 PM on November. Twelve members were present: Bob Cooke, Dave Fryauff, Jeff Guerber, Dennis Hedrick, Dave Hennessey, Kathy Hrechka, John Kress, Dave MacLean, Karen Pabst, Michael Pabst, Barry Remer and Tom Tucker.



Michael Pabst presented the Treasurer's Report and announced that 2020 dues are now payable (\$15 individual / \$20 family).

Dave MacLean reviewed the schedule for manning the MNCA demonstration table at the upcoming NVMC/GMU Mineral Show. Dave Fryauff confirmed he will bring the club microscope and turntable of sample minerals. Bob Cooke will bring loupes for sale.

Kathy Hrechka said that planning for the Atlantic Micromounters Conference on April 3-5, 2020 is well set. Four presentations are scheduled:

*Friday 7 PM, Michael Pabst, "Exotic Lands, Exotic Foods, Exotic Minerals"

*Saturday 10 AM, Scott Duresky, "Conclusions from the Research of the Historic Rutherford Mine Pegmatite #2, Amelia Courthouse, Virginia"

*Saturday 4 PM, Steve Stuart, "Findings from the Winston Collection"

*Saturday 7 PM, Michael Seeds, "Collecting Radioactive Minerals"

Sunday, April 5, Victor Yount has invited AMC participants to view his mineral collection. AMC details are posted on the MNCA website.

Members unanimously agreed to award Honorary Membership to Erich Grundel in recognition of his many years of service to the club. Tom Tucker volunteered to make a plaque with polished basalt from Sugar Grove, WV.

Members agreed for Michael Pabst to select and photograph 20 micromounts from the George Reimherr collection. These micromounts will be auctioned at the AMC with proceeds being equally

split between MNCA and the AMC accounts. Remaining micromounts will be returned to the club for continued viewing at monthly meetings. No consensus was reached for how the remaining 475 micromounts of the collection might eventually be distributed / sold to members.

The December MNCA meeting will be held in conjunction with the joint MNCA / NVMC Holiday Party on December 16t at Long Branch Nature Center. Annual election of officers will be conducted at that meeting. (All current officers have agreed to continue in their duties.)

Meeting adjourned at 8:45 PM.

Previous Program Reviewed: 11/20/19

Members studied the micros of George Reimherr. MNCA has acquired 500 micromounts from the estate of George Reimherr. George's micromounts will be available at monthly meetings for members to purchase in 2020.

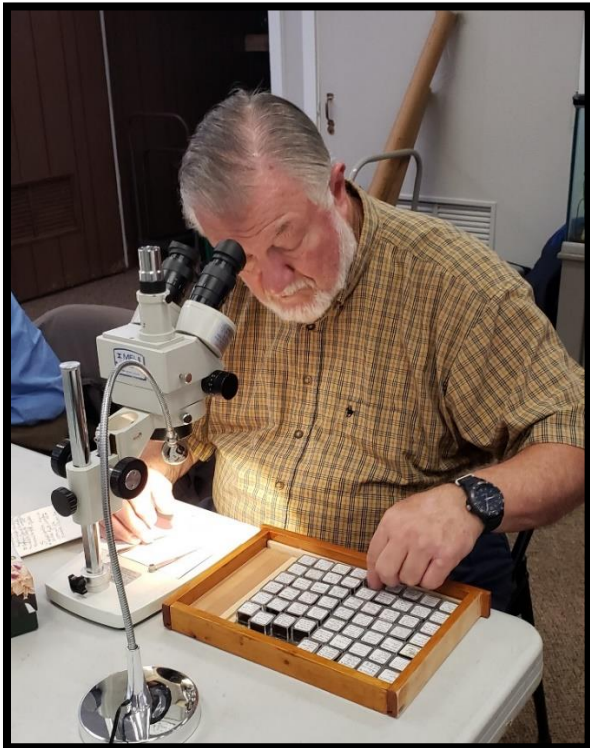


L-R Dave Fryauff, David MacLean, Dave Hennessey

Micromineralogists of the National Capital Area, Inc.



Jeff Guerber



John Kress



Tom Tucker & Dave Fryauff

**Elections of MNCA 2020 Club Officers
on December 16, 2019**

Remember to attend the MNCA/NVMC
Holiday party to elect our club officers for
the next year.

Vote for:

President: Dave MacLean

Vice President: David Fryauff

Secretary: Bob Cooke

Treasurer: Michael Pabst



Roweite and Olshanskyite

by Michael Pabst PhD, Treasurer

In this article we come upon a manganese borate mineral Roweite, associated with a calcium borate mineral Olshanskyite. Roweite is $\text{Ca}_2\text{Mn}^{2+}_2\text{B}_4\text{O}_7(\text{OH})_6$, and Olshanskyite is $\text{Ca}_2[\text{B}_3\text{O}_3(\text{OH})_6](\text{OH})\cdot 3\text{H}_2\text{O}$. These two minerals have recently been discovered in unprecedented splendor in Inner Mongolia. Thanks to Excalibur Minerals in Charlottesville, I was able to obtain a specimen with small well-formed and transparent crystals of both minerals. In larger more expensive specimens, the Roweite crystals are nearly opaque like this excellent specimen photographed by Fabre Minerals: www.mindat.org/photo-872608.html. The first photo here below is of my entire specimen. (Because of the sharpness of photos taken with the macro lens, I recommend viewing the photo at 200% on a big monitor. Even the closeup photos below are better seen at 200%.)



of 24 images taken with Olympus 60 mm macro lens. Photo by Michael Pabst.

Here are three closeup photos from the same specimen taken through the stereomicroscope.



Closeup of specimen showing brown **Roweite** and colorless **Olshanskyite**. FOV 8 mm. Stack of 12 images taken with stereomicroscope. Photo by Michael Pabst.



Roweite (brown) and **Olshanskyite** (colorless), Shijiangshan mine, Linxi, Linxi County, Ulanhad League, Inner Mongolia, China. FOV 23 mm. Stack



Micromineralogists of the National Capital Area, Inc.

Close-up of another **Roweite** crystal with **Oshanskyite**. FOV 4 mm. Single shot through stereomicroscope. Photo by Michael Pabst.



Olshanskyite closeup. FOV 1 mm. Stack of 2 images taken with stereomicroscope. Photo by Michael Pabst.

Upon close examination of the specimen, there are small greenish-brown Andradite garnets to be found. Andradite is $\text{Ca}_3\text{Fe}^{3+}_2(\text{SiO}_4)_3$.

The type locality for Roweite is the Franklin Mine, Sussex County, NJ, where only a single sample was found and later described in 1937. Later, some Roweite was found in Siberia and in Japan. Then, in 2017, wonderful Roweite was found in Inner Mongolia, in such abundance that it has even filtered down to me.

Roweite is orthorhombic mmm , with hardness 5. Olshanskyite is triclinic $1\bar{}$, with hardness 4. Andradite, like all garnets, is isometric, with hardness of $6\frac{1}{2}$ -7.

Next in the parade of manganese minerals will be Sugilite, a manganese silicate well known as a lapidary rock, but rarely found in euhedral crystals. I have one teeny tiny beautiful red-purple crystal to show you.

Photo below

Andradite (greenish-brown) on brown **Roweite** with white **Olshanskyite**. FOV 6.5 mm. Stack of 11 images taken with stereomicroscope. Photo by Michael Pabst.



Micromineralogists of the National Capital Area, Inc.

MNCA: Micromineralogists of the National Capital Area, Inc.

By Kathy Hrechka, Editor & Conference Chair

Historically speaking, Dr. Paul Desautels, curator of the Smithsonian's Gem and Mineral collection gave a class on crystallography at a local mineral club in 1966. He advised attendees to form their own micromineral study group while identifying minerals using a microscope. In 1967 the Micromineralogists of the National Capital Area micromineral club was formed in Washington DC. Meetings were originally held in members' homes to study crystal systems, classifications, minerals, etc.

Today they meet in a local nature center in Arlington, VA with microscopes for monthly meetings. They usually have a short educational program, allowing for more time to view and exchange microminerals. Members enjoy finding rare crystals in micromineral form. They basically photograph minerals using a microscope or bellows, because microminerals require ten power or greater for magnification. One club member photographs snowflakes outdoors each time it snows.

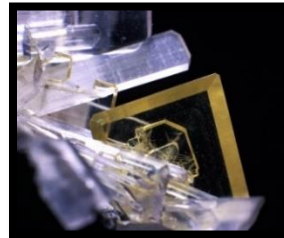
Each spring the club holds its Atlantic Micromounters' Conference for a weekend consisting of a keynote speaker, auctions, micromineral dealers, and geology fellowship. Each year, for community awareness, they demonstrate their hobby at two local mineral shows. Members bring their microscopes and invite guests to view microminerals. They introduce the use of a microscope to many children, while encouraging an interest in geology aligning with STEM. Their monthly newsletter is called The Mineral Mite. Their club website is www.dcmicrominerals.org. It contains a club history as well as many photomicrographs of rare and unusual microminerals. Newsletters are archived, along with a 50th Anniversary feature.



Wavellite
David Fryauff



Snow Crystals
Kathy Hrechka



Wulfenite, hemimorphite
Michael Pabst



Pyrophanite
Robert Rothenberg



Club Meeting - Atlantic Micromounters' Conference



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



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)
Material in this Newsletter may be duplicated for non-commercial purposes provided credit is given this publication and the author.



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 Club Events:

December 2019

**8: The Gem, Lapidary and Mineral Society of Washington, DC - GLMS-DC holiday meeting
Location change TBD**

7:00-10pm – not Chevy Chase Community Center, 5601 Connecticut Ave., NW, Chevy Chase, MD
www.glmsdc.org

9: 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

**14: Mineralogical Society of DC – MSDC meeting
Holiday party 5pm at a member's home**

Not Smithsonian NMNH, Constitution Avenue lobby 7:30 pm to head up to the Cathy Kerby room
www.mineralogicalsocietyofdc.org

**16: Northern VA Mineral Club – NVMC/MNCA
Holiday party**

6:30–10pm Long Branch Nature Center
625 South Carlin Springs Road in Arlington, VA
www.novamineralclub.org

16: Micromineralogists of the National Capital Area – MNCA/NVMC holiday party

6:30–10pm Long Branch Nature Center
625 South Carlin Springs Road in Arlington, VA
www.dcmicrominerals.org

**Atlantic Micromounters' Conference
April 3-5, 2020 - Holiday Inn, Alexandria, VA
Tour Victor Yount's mineral collection Sun 5**



GeoWord of the Day and its definition:

alamosite (al-a-mos'-ite) A colorless, white, cream or light gray monoclinic mineral: $PbSiO_3$. It has a 12-repeat pyroxene-like chain.

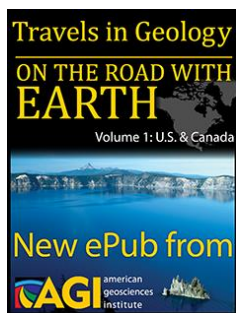
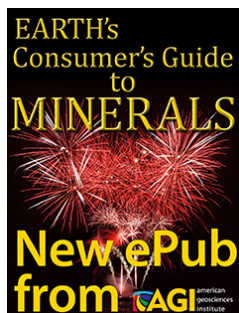
crystal-structure solution the determination of the approximate *fractional coordinates* for the atoms of a *crystal structure* by any of several methods, usually involving diffraction data. Syn: *structure solution*.

fission tracks the paths of *radiation damage* made by nuclear particles in a mineral or glass by the spontaneous fission of uranium-238. They are similar in occurrence and formation to *alpha-particle recoil tracks* but are larger and less numerous. Fission-track density is established by etching and subsequent microscopic examination and counting.

structural crystallography Study of the internal arrangement and spacing of atoms and molecules composing crystalline solids.

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 American Geosciences Institute is a nonprofit federation of about 50 geoscientific and professional organizations that represents geologists, geophysicists, and other earth scientists. The organization was founded in 1948. Headquarters is located on Duke Street in Alexandria, Virginia.



Ice Crystals growing between glass doors in the frozen food section at a local grocery store.
Photos by Kathy Hrechka while grocery shopping



Micromineralogists of the National Capital Area, Inc.

Atlantic Micromounters' Conference April 3-5, 2020

Holiday Inn, 6055 Richmond Hwy Alexandria, VA
Tour Victor Yount's mineral collection Sunday 5

Fri Apr 3 - 7pm Michael Pabst "Exotic Lands, Exotic Foods, Exotic Minerals"

Sat Apr 4 - 10am Scott Duresky "Conclusions from the Research of the Historic Rutherford Mine Pegmatite #2, Amelia Courthouse, Virginia"

Sat Apr 4 - 4pm Steve Stuart "Findings from the Winston Collection"

Sat Apr 4 - 7pm Michael Seeds "Collecting Radioactive Minerals."

Sun Apr 5 - Time TBD Victor Yount has invited our group to view his mineral collection on Sunday in Marshall, VA which is 50 miles west of Holiday Inn.

Brief speaker biographies:

Michael Pabst, Penn Laird, VA Michael Pabst is a retired professor of biochemistry who has collected minerals all his life. He and his wife, Karen, like to travel and check out mineral museums in distant lands.

Scott Duresky, Charlottesville, VA Scott is a self-taught mineralogist who first started collecting on the dumps of the Rutherford Mine pegmatite in the late 1960's. Early on, he received extensive lessons in the field from the late Frank Crayton, a research chemist with Philip Morris in Richmond.

Steve Stuart Bethlehem, PA His childhood interest in chemistry, nature and minerals was rekindled in 1995 when he started to collect fluorescent mineral. In the late 1990s, he bought a stereo microscope, which opened a whole new world for him. Steve posted his first photo to Mindat in 2004, and now has over 2,500 images on Mindat.

Mike Seeds, Lancaster, PA He was a Physics major at the University of Illinois and MS and PhD in Astronomy from Indiana University (1970). Mike has published eight different books for teachers using different approaches to introductory astronomy.

Victor Yount's mineral collection tour on Sunday

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
Phone (703) 228-6535

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

President: Dave MacLean

Vice President: 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 2020

\$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

