

MNCA Website www.dcmicrominerals.org



The Mineral Mite

Vol. 53 – No. 4

Washington D.C. – A Journal for Micromineralogists

April 2020

Earth Day April 22, 2020 - 50th Anniversary www.earthday.org

Meeting Canceled April 22 Time: 7:30 p.m. – 10 p.m.

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

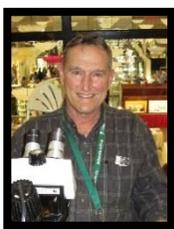
No Program – No Meeting

by David Fryauff, Vice president

The April meeting for MNCA has been **canceled** because of the rapid spread of the coronavirus. Experts report that the only effective defense against the virus is “social distance”.

We will resume MNCA meetings as soon as we can.

The next MNCA meeting is scheduled for May 27th. Whether that meeting will need to be canceled will depend on the nature center reopening. Watch for email from MNCA officers with further information about future meetings.



President's Message:

by Dave MacLean

I imagine that you and almost all other rockhounds are detained at home and off the roads. Perhaps you ordered out from almost all your favorite places. So, we are restricted to getting together online or by phone. I urge you to comply with the orders and recommendations to avoid personal contacts.



I hope that you and your family are safe, comfortable, and healthy. There is evidence that our hunkering down is reducing the rate of spread of coronavirus. Let us keep it up.

All that downtime is a gift to do all the things we never had time to do. We can examine our collections and prepare labels for the unlabeled. We can identify minerals for trade, sell, or give away to colleges, schools, and at club meetings. We can offer minerals to local kids, as door prizes, turn them into "garden rocks" or return to nature. Writing articles for newsletters is also appreciated. Finally looking at each specimen can bring back memories of its collection and other stories. This idle time is not lost. Make this time at home a pleasure.

During this time at home, remember and act on the needs of the less fortunate; the unemployed, the sick and those at risk of illness and subsequent disability, medical workers, the hungry and others in trouble.

Spessartine from Wushan Spessartine Mine, Tongbei, Yunxiao County, Zhangzhou, Fujian, China. FOV 5 mm. Photo by Michael Pabst, using macro + Raynox lenses, stacking 23 images.

Photo of the Month



Previous Meeting Minutes: 3/25/20

by Bob Cooke, Secretary

There were no minutes to record as the March meeting was canceled, while the nature center was closed due to the coronavirus pandemic.



Previous Program Reviewed 3/25/20

by Bob Cooke, Secretary
No meeting to review.

Atlantic Micromounters' Conference

By Kathy Hrechka, Conference chair

2020 was canceled due to the coronavirus, including the tour of Victor Yount's mineral collection. I am proposing that we continue with the current speakers for next spring. We had a great line-up and look forward to hearing from them next year. I mailed Victor 3 Dvd copies of MOROC. He was grateful.

2021 speakers include:

Michael Pabst, Penn Laird, Virginia
Scott Duresky, Charlottesville, Virginia
Steve Stuart Bethlehem, Pennsylvania
Mike Seeds, Lancaster, Pennsylvania.

Victor Yount's mineral collection tour on Sunday

The following links may occupy your time.
Adapted from EFMLS News, January 2020

American Lands Access Association:
www.amlands.org

American Geosciences Institute:
www.americangeosciences.org

Gemological Institute of America: www.gia.edu

Mineralogical Society of America:
www.minsocam.org

Smithsonian Magazine Smartnews:
www.smithsonianmag.com/smartnews

U.S. Geological Survey www.usgs.gov



GeoWord of the Day and its definition:

cejkaite A pale yellow to beige triclinic mineral:
 $\text{Na}_4\text{UO}_2(\text{CO}_3)_3$.

diamond simulant Any material which is not diamond or synthetic diamond, but which simulates a faceted diamond's appearance and is used in its place. Common diamond simulants include cubic zirconia (CZ), gadolinium gallium garnet (GGG), synthetic spinel, and yttrium aluminum garnet (YAG). Also called diamond substitute.

ferro-anthophyllite (fer-ro-an-tho'-phyll-ite) A green, grayish-green to dark brown orthorhombic mineral of the *amphibole* group, representing the Fe^{2+} analogue of anthophyllite: $\text{Fe}^{2+}_7\text{Si}_8\text{O}_{22}(\text{OH})_2$.

metahaiweeite (met-a-hai'-wee-ite) A pale yellow to greenish-yellow secondary mineral:
 $\text{Ca}(\text{UO}_2)_2[\text{Si}_6\text{O}_{15}] \cdot n \text{H}_2\text{O}$, where *n* is less than 5.
It is a lower hydrate of haiweeite.

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

Scrambles: Unscramble the following:

Testy Ham _____

Attain Zen _____

Ole Fruit _____

Voice Tell _____

Tic Theist _____

Finally, what do all of these have in common?
Answers are on page 9.

Reprinted with permission from The Conglomerate
Newsletter of the Baltimore Mineral Society
Vol. 15 April 2020

Spessartine

by Michael Pabst PhD, Treasurer

Spessartine is the manganese-dominant garnet. Spessartine forms a series with Almandine, the iron-dominant garnet. In this article we will look at Spessartine garnets and Almandine-Spessartine garnets. Spessartine is isometric, $m3m$ - hexoctohedral, like all garnets.

Note that *Spessartine* is the name of the manganese garnet, whereas *Spessartite* is a type of igneous rock that does *not* contain Spessartine. Spessartine was named for the Spessart Mountains of Southern Germany.

Here is a table of the common garnets, taken from Mindat:

Mineral	Formula
Almandine	$\text{Fe}^{2+}_3\text{Al}_2(\text{SiO}_4)_3$
Pyrope	$\text{Mg}_3\text{Al}_2(\text{SiO}_4)_3$
Spessartine	$\text{Mn}^{2+}_3\text{Al}_2(\text{SiO}_4)_3$
Andradite	$\text{Ca}_3\text{Fe}^{3+}_2(\text{SiO}_4)_3$
Grossular	$\text{Ca}_3\text{Al}_2(\text{SiO}_4)_3$
Uvarovite	$\text{Ca}_3\text{Cr}_2(\text{SiO}_4)_3$

Beautiful orange Spessartine from China. First, a closeup of one crystal, and then the entire specimen. You can view the spessartine at the top of the next column.

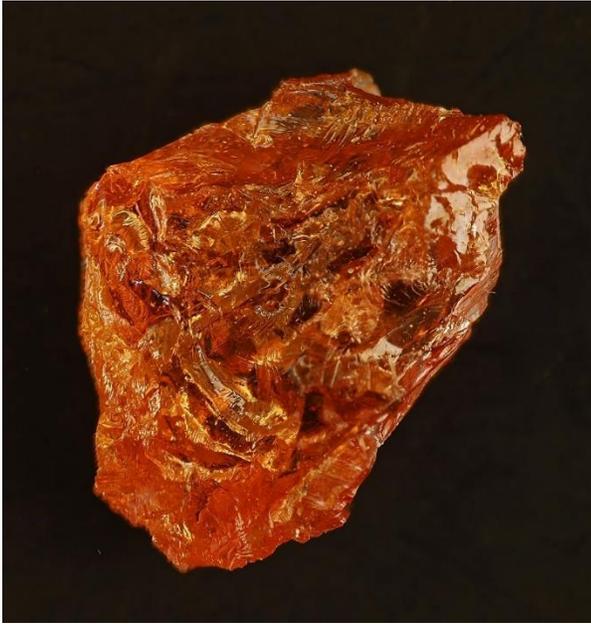


Spessartine from Wushan Spessartine Mine, Tongbei, Yunxiao County, Zhangzhou, Fujian, China. FOV 5 mm. Photo by Michael Pabst, using macro + Raynox lenses, stacking 23 images.



Spessartine with Quartz and Muscovite, from Wushan Spessartine Mine, Tongbei, Yunxiao County, Zhangzhou, Fujian, China, entire specimen. FOV 16 mm. Photo by Michael Pabst, using macro + Raynox lenses, stacking 23 images.

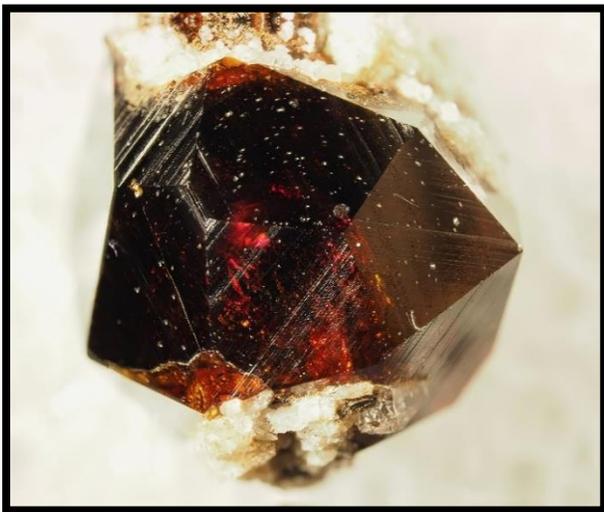
Spessartine continued



Spessartine from Rutherford No. 3 pegmatite, Amelia, Virginia. FOV 8 mm. George Reimherr collection. Photo by Michael Pabst, using macro + Raynox lenses, stacking 11 images.



Spessartine in a Topaz “Nest” from East Grants Ridge, Cibola County, New Mexico. FOV 4 mm. Photo by Michael Pabst, using macro + Raynox lenses, stacking 22 images.



Spessartine from Thomas Range, Juab County, Utah. FOV 9 mm. Photo by Michael Pabst, using macro + Raynox lenses, stacking 11 images.



Spessartine and Galena from Broken Hill Proprietary Mine, Broken Hill, Yancowinna County, New South Wales, Australia. FOV 22 mm. Photo by Michael Pabst, using macro + Raynox lenses, stacking 22 images.

continued next page

Spessartine continued



Spessartine from Ruby Mountain, Nathrop, Chaffee County, CO. FOV 6 mm. George Reimherr collection. Photo by Michael Pabst, using macro + Raynox lenses, stacking 21 images.



Almandine-Spessartine (70:30), Harvard Mine, Greenwood, Oxford County, Maine. FOV 3 mm. Collected by George Reimherr in 1965 or 1966. Photo by Michael Pabst, using macro + Raynox lenses, stacking 14 images.



Rosé-colored tiny **Almandine-Spessartine** garnets from the Harvard Mine, Greenwood, Oxford County, Maine. Collected by George Reimherr. FOV 3.5 mm. Photo by Michael Pabst, using macro + Raynox lenses, stacking 22 images.

There are about 8 Harvard Mine Almandine-Spessartine garnets in the George Reimherr collection.

Next month, I will temporarily finish with manganese minerals by showing a rare manganese and silver mineral, Manganocapatite, which has the formula $AgMnAsS_3$.

**Earth Day 50th Anniversary
April 22, 2020**

The theme for Earth Day 2020 is climate action. The enormous challenge — but also the vast opportunities — of action on climate change have distinguished the issue as the most pressing topic for the 50th anniversary.



Visit earthday.org on April 22 as we build an Earth Day unlike any other — We're flooding the digital landscape with livestreamed discussions, a global digital surge, and 24 hours of actions that you can take, right now and from wherever you are.

Earth Day news was suggested by John Kress

Shoobox Adventures 88: Uncommon

by Mike Seeds, Editor of Conglomerate for BMS

How much fluorite do you really need? Got enough calcite? You do not really need more quartz, do you? Really? Somewhere between the common minerals that everyone has and rare minerals that only the richest or luckiest collectors will ever own, there are the uncommon minerals. The ones most people do not have in their collections. The ones you do not see very often at rock shows. But stay alert. You never know when one of those uncommon minerals will pop up out of a shoebox.

Recently a piece of shcherbakovite popped out of my Tucson 2019 shoebox, and although it was a little bit small, I split it and got a couple mounts out of it. If I can, I try to get an extra of anything unusual and mount it for my trade box. The specimen I kept contains nice brown crystals of the mineral. This shcherbakovite comes from the Khibiny Massif on the Kola Peninsula in Russia, and that is an almost mythically rich site for uncommon minerals. A total of 524 valid minerals come from the Khibiny Massif including 121 type locality minerals.



Fig.1. **Shcherbakovite**
(K,Ba)KNa(Ti,Nb)₂(Si₄O₁₂)O₂ is typically dark brown, opaque, and has a vitreous sheen.

How rare is shcherbakovite? It is found in several places around the world and was once reported from Sweetwater County, Wyoming, but that seems to have been an error.

Mindat hosts only 9 photos of shcherbakovite, so we are probably safe to say it is at least uncommon.

Another escaped inmate from my shoebox is mattheddleite (Pb₅(SiO₄)_{1.5}(SO₄)_{1.5}(Cl,OH)). It is not very flashy, but I had a chance to get a piece for a few dollars, and I picked one big enough to split for the trade box. The mineral is generally creamy white to pinkish with an adamantine luster. My specimen is from Whytes Cleuch, Wanockhead, Scotland. I do not know that location, but it sounds like a fascinating place that Scotty should beam me to.



Fig. 2. **Mattheddleite** is white. The blue mineral here is caledonite.

How rare is mattheddleite? It is found in a bunch of places including Arizona and California and Mindat hosts 37 photos of it. Let us be fair; “uncommon” is a more honest adjective than “rare.”

The third mineral out of the box is sabugalite. It’s a uranium mineral (HAU(VO₂)₄(PO₄)₄ · 16H₂O), but the specimen in my micro box is so small it is only about as radioactive as a few dozen bananas. (Bananas contain potassium and the isotope potassium-40 is radioactive with a half-life of 1.3 billion years.) So, the specimen is quite safe if you don’t eat it or carry it in your pocket as a lucky charm. This one is from Arcus su Linnarbo, a source of several radioactive minerals at the southern tip of Sardinia.

continued next page

Shoebox Adventures continued



Fig. 3. **Sabugalite** is composed of yellowish plates in clusters. This specimen fluoresces.

How rare is sabugalite? It is found in a lot of western states and in countries all over the world. Mindat hosts 66 pictures of sabugalite. So, it is not fair to call it a rare mineral, but a lot of collectors probably do not have a specimen. It is one of those uncommon minerals. ‘

Micromounters are probably smiling at all this because they have these minerals or ones equally uncommon in their collections. They know that micromount dealers often have such minerals in their offerings. If you limit yourself to big specimens, you automatically exclude a lot of uncommon to rare minerals because they do not form big crystals. The only way to own them is to find them in the accumulations of the little stuff called micros.

If you go to rock shows, you can buy a lot of common minerals, and they are quite attractive, but they are common. If you have got the money, there are dealers who will sell you astonishingly rare minerals. Those minerals may not be pretty, but no one else has them in their collections, so you can gloat over your unusual treasures. But check out the micromount dealers and stay focused as you scan those little boxes. They might contain some uncommon minerals that us common folk can afford.

Photomicrography by Mike Seeds

Shoebox Adventures 86: Friends Wanted

by Mike Seeds, Lancaster, Pennsylvania

We depend on our friends to be random access data bases. Mineral collecting would be almost impossible if you could not say the words, “What’s the brown stuff?” We carry a confusing crystal to our mineral club meeting and ask our friend about the unusual crystal faces. Mineral collecting is a knowledge-based hobby with lots of technical details about mineral identification and crystal structure that is much too voluminous for most collectors to master. We go to our fiends to ask about the black flecks in the nice crystal we found last week.

Micromounters especially need friends because when we break a rock down to get that special crystal, we have a pile of pieces left. They are beautiful and much too nice to throw away, so we must save them for our friends. Every micromounter has flats, cartons, buckets, and cans full of good stuff ready to share, and if you do not have friends, it will fill your basement, garage, spare rooms, and life to overflowing. You need friends to take your leftover rock, and giveaway tables at micromount meetings are usually full of good stuff looking for homes.



A loaded giveaway table stretching into the distance and friends to share the adventure makes for a satisfying day of discovery. *Photo by Mike Seeds*

Micromineralogists of the National Capital Area, Inc.



American Federation of Mineralogical Societies

(AFMS)
www.amfed.org

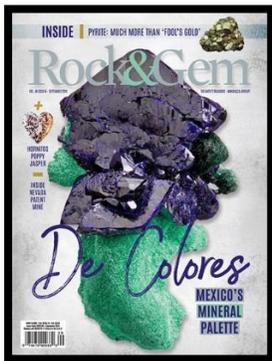
Please read the AFMS bulletin attached in original monthly email to MNCA members.

2020 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 related subjects, and to sponsor and provide ways to coordinate the work and efforts of all interested persons and groups; to sponsor and encourage the formation and international development of Societies and Regional Federations and thereby to strive toward greater international good will and fellowship.

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



The Rock & Gem magazine is recognized as the official magazine of the AFMS.



Eastern Federation of Mineralogical and Lapidary Societies

(EFMLS)
<https://efmls.org>

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

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

Local Geology Club Meetings:

April 2020 All Canceled

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

13: 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

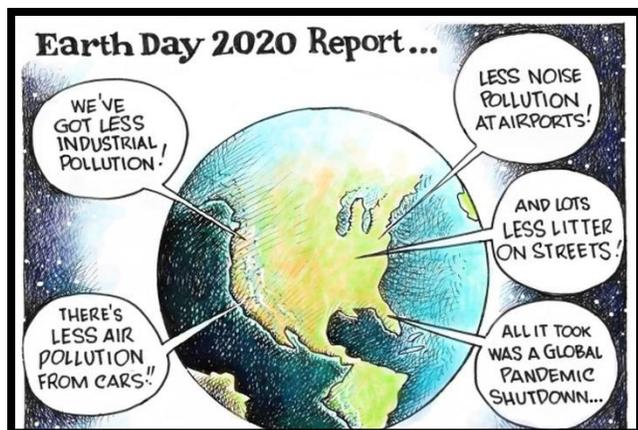
17: The Gem, Lapidary and Mineral Society of Washington, DC - GLMS-DC meeting
7:00-10pm – Chevy Chase Community Center, 5601 Connecticut Ave., NW, Chevy Chase, MD
www.glmsdc.org

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

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

Editor’s Note: Even though our geology meetings are canceled, please visit their websites for continuing education.

Micromineralogists of the National Capital Area, Inc.



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.efmls.org
- * 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

Scrambles: Answers

Testy Ham _____ Amethyst _____

Attain Zen _____ Tanzanite _____

Ole Fruit _____ Fluorite _____

Voice Tell _____ Covellite _____

Tic Theist _____ Stichtite _____

Finally, what do all of these have in common?
 They are purple, sometimes.

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



- Member inputs:**
- * Dave MacLean
 - * Bob Cooke
 - * Michael Pabst
 - * Kathy Hrechka
 - * David Fryauff
 - * Mike Seeds
 - * John Kress

