



MNCA Website dcmicrominerals.org
The Mineral Mite



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Washington D.C. – A Journal for Micromineralogists

April 2015

April 22 Time: 7:30 p.m. – 10 p.m.

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

**Program: "Gold Rush - Crystallized
Gold Specimens from Classic
California Localities"**

By David Fryauff, Vice President

Dave will show the DVD "Gold Rush" presented by Gene Meiran on behalf of Robert Cook, from the 2014 Dallas Mineral Collecting Symposium. Featured gold localities include, Eagle's Nest in Placer County, as well as the Mockingbird and Colorado Quartz Mines in Mariposa County.



President's Message:

By: Dave MacLean

Thanks to our working so well together, we had a stimulating and fun Atlantic Micromounters' Conference. We took the Saturday early morning breakfast delay in stride. We took down Friday night and reset up Saturday morning with no delay in our schedule. Thanks to Jim Kostka and Bob Cooke for leading the way on take downs and setups.



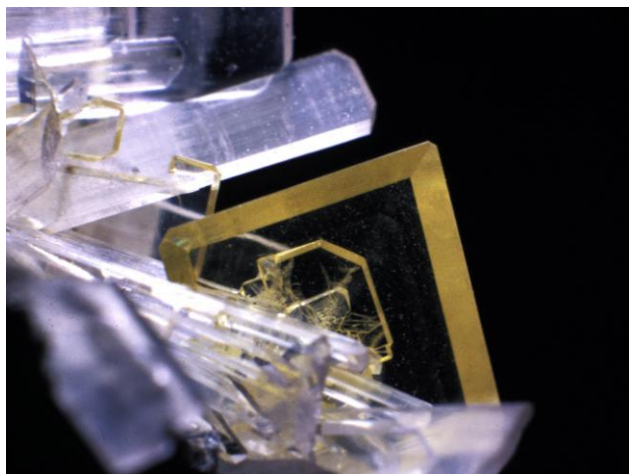
Bob Rothenberg's talks were interesting; White Island with New Zealand's only active volcano, editing micro photo's, stacking, and minerals of the DeMix Varennes quarry, a Cretaceous igneous intrusion into Devonian limestone near St. Amable and Varennes, Quebec. Rob also told us about his know how's of photographing microminerals. Apparently more of us are becoming micromineral photographers.

It was inspiring to honor Cynthia Payne by video interview, and hear about the accomplishments of Barbara Sky, as well as viewing photos of Paul and Jennie Smith, Fred Schaeffermeyer and others during the auction. The freebie table was awesome.

Carolyn Weinberger recognized Julia Hrechka, who designed our new MNCA website. Julia showed the club website to all of us. Thank you for Michael Pabst who made the photos and set them order for the auctions. Karen Pabst along with Sheryl Sims, and Barry Remer made sure that there was always coffee and food set out for the hungry and thirsty. Thank you Kathy Hrechka for organizing and facilitating the conference. When we work together we are awesome.

Photo of the Month

**Winner of our 2015 Atlantic Micromounters'
Conference Photomicrography Contest**



**Wulfenite, Hemimorphite, Mapimi, Mexico
Congratulations! Michael Pabst**

Previous Meeting Minutes: 3/25/15

By: George Reimherr, Secretary

President David MacLean opened the meeting at 7:58 p.m. Eleven members and one guest were present. The minutes for the previous month's meeting were approved, and printed in the Mineral Mite. The treasurer gave his report.



Old business -- The members discussed the final details for the upcoming Atlantic Micromounters Conference. A schedule of events, and a listing of members' duties at the conference, were handed out, along with the names of those who volunteered to perform the tasks. Members were asked to bring a doormat, of equivalent, to the conference to cover the cables on the floor.

The remainder of the Cynthia Payne micromount collection went on sale at the meeting, for one, two, or three dollars each, based on assumed values of the specimens. The remaining specimens will also be for sale at the conference for the same prices, though the prices may be lowered for those specimens still unsold later in the afternoon.

New business -- None.

Miscellaneous -- Erich Grundal brought a thin catalog titled "Fifty-Fifth Annual Exhibition 1932" by the New York Microscopical Society, November 12, 1932. The business meeting ended at 8:34 p.m.

Previous Program Reviewed 3/25/15

By: George Reimherr, Secretary

Zooming-In on Micro-Minerals: Club member Michael Pabst demonstrated, in a 30 minute lecture, how one may take a bland chunk of mineralized rock, then magnify, or zoom-in on a particular spot on that rock, and find beautiful micro crystals.

About the presenter: Michael Pabst

Michael and Karen Pabst have collected micro-minerals for nearly 50 years. Because many micro-minerals are hard to see, and most people don't have stereomicroscopes, photomicrography is an important tool to share these small treasures with a wider audience. One of the delights of collecting micro-minerals is the discovery of beautiful crystals that are hiding on an unimpressive rock. To re-create that experience, Michael showed a series of pictures that start from a chunk of rock and then zoom-in on beautiful crystals. He has a special interest in minerals that are aesthetic and that contain rare earth elements and radioactive elements.

Michael Pabst is a retired professor of biochemistry at the University of Colorado in Denver, and at the University of Tennessee in Memphis. His research centered upon improving *innate* resistance to infection, to confront the problem that so many microbes have become antibiotic-resistant.



Michael's velvet lined sewer pipe, bellows.
Photo by Kathy Hrechka

A Visit to Harrisonburg, Virginia

By Michael Pabst

After a visit to the wonders of the James Madison University Mineral Museum, and the chance to see the mineralogy equipment in Dr. Lance Kearn's laboratory in action, and an opportunity to buy beautiful mineral and micromineral specimens for a modest donation, several happy mineralogists paid a visit to Michael and Karen Pabst's house to see their equipment for photomicrography. The visitors (Figure 1) saw a small vise with a micrometer stage and a 40 mm Luminar lens (Figure 4), along with a tube and bellows assembly attached to a mirrorless camera (Figure 3). This is the equipment used for highest magnification of the smallest specimens. Also displayed was equipment for photography through the stereo microscope, and equipment for photography using a conventional macro lens. Because of an impending blizzard, many visitors could not stay long, but they were invited to visit again when next in Harrisonburg.



Figure 1 Visitors, including George Reimherr, Scott Duresky, and Mrs. Cooke, with Michael Pabst, are here shown examining a photo micrograph of a specimen of Stewartite (yellow) and Strengite (purple) from the Foote Lithium Mine in North Carolina, field-of-view 2 mm.



Figure 2 Stewartite (yellow) and Strengite (purple) from the Foote Lithium Mine in North Carolina, field-of-view 2 mm.



Figure 3: Assembly for photomicrography, including (from front to back) the sample stand, micrometer stage, micromount box, 40 mm Luminar lens, velvet-lined tube, bellows, and Panasonic mirrorless camera.

**A Visit to Harrisonburg, Virginia
continued**

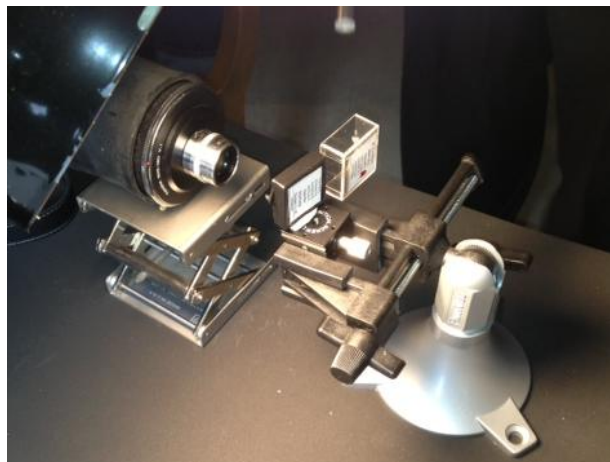


Figure 4: Close-up view of micrometer stage and Luminar lens, with a micromount box in position.

Sensational Version: Being jealous of the riches of the James Madison University Mineral Museum, and depressed by the thought that they would never have the fabulously expensive instruments in Dr. Lance Kearns's laboratory, and miffed that their colleagues had grabbed all the best specimens, several practitioners of the dark art of micromineral photography retreated to the dungeon of the palace of the Anti-Pope to observe the instruments used to capture the soul of beautiful tiny crystals.

The visitors (Figure 1) saw the lens from the Eye of the Roc (Figure 4). (The Roc is a giant eagle with a sharp eye for prey. Fortunately, none of the visitors were lost to the Roc, probably because mineralogists are too gristly.) They also examined the Grip of Death, the Velvet Tube of No Return, and the Casket for Tiny Images (Figure 3).

Some of the visitors were terrified that they might not be able to return to their coffins because of an impending blizzard, so they were not able to fully slake their desires. However, they may return to Harrisonburg when the signs and optics are in alignment.

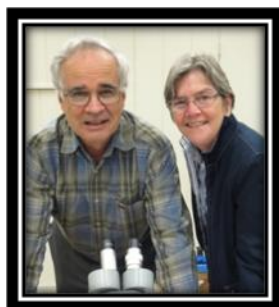


Photo of Mike & Karen Pabst

**Crystallized Black Paint in Micro Box
of Tellurite, Moctezuma Mine, Sonora
Mexico?**

By Tom Tucker

I'm working my way through Cynthia Payne's collection, trying to price specimens for sale at Rochester. I've come across something I've never seen or heard of before, and I'm wondering if anyone else has noticed it. There is a nice micro specimen of



TELLURITE, from the Moctezuma Mine in Sonora, Mexico. The crystals are in a tiny vug in quartz matrix. The specimen was mounted on a relatively large cork, within an older clear plastic micromount box, with a clear top. The interior of the box has been "painted" with a flat black paint. The specimen has broken off of the cork, so there is a large, broken, bare surface of the cork exposed on the bottom of the box.

All five interior sides of the painted box are sprinkled with very tiny, very lustrous, black crystals. I'll try to get a picture, but at 135 X they are a little hard to resolve. Some of them appear to be prismatic, and twinned similar to rutile, but most appear equant. The crystals are only on the painted surfaces of the box.

Just a few crystals are actually on the "outside" of the paint, and can be viewed through the clear sides of the box. There are none on the clear top, on the specimen itself, or on the broken cork surface. I assume the crystals have evolved from the black paint.

Has anyone seen this effect before? Perhaps we can "make" micros just by painting our boxes.

The tellurite is nice, and so are the unknown crystals. Please send me a note if you have an explanation of these crystals.

Tom Tucker (threedogtom@earthlink.net)

**42nd Annual Atlantic Micromounters'
Conference April 10-11, 2015**



Thank you for a successful 2015 Conference!
Robert Rothenberg, Oneonta, New York was our featured speaker. Special recognition went to Barbara Sky, and charter member Cynthia Payne.
Sincerely, Kathy Hrechka, Conference Chair

Photos courtesy of Kathy Hrechka

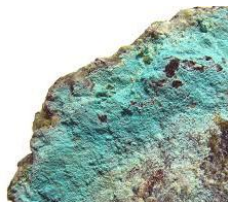
MICROMINERALS -- MAXIMUM APPEAL

By Sheryl E. Sims

After being unable to attend for a couple of years, I was happy to finally participate in the Micromounters' Conference during the weekend of April 11th. It was well-attended, interesting, and a fun way to spend part of my weekend. Knowing less, I'm sure, than everyone else in the room, I was comfortably surrounded by experienced rock hounds who were generous with their time, knowledge and minerals.

First off, Karen Pabst suggested that her husband, Michael, could help me get my microscope adjusted. Mine was too high and I had difficulty seeing through it. Michael not only helped me solve the problem, but showed me how to properly adjust it and get my minerals into focus. Dave McLean offered me a wealth of information on various minerals and locals as did Scott Duresky and his wife, Eleanor. I had been browsing the boxes of freebies up in the front of the room when Scott said, "Sheryl, I want to show you something! Stop by my table in a few minutes!" I did, and Scott spent a lot of time explaining, showing, and giving minerals to me from his personal stash. "Write this down," he said and he began sharing a wealth of information about each specimen. Not wanting me to get overwhelmed, Carolyn Weinberger encouraged me as well, by reminding me that it takes a while to learn the types of things the others knew, and to take it in little-by-little. When I returned to my table, George Reimherr mentioned that he had a specimen for me the next time that he saw me.

Later in the day, he told me that the pieces of McGuinnessite that I had were very rare and that I should take care of them. It seems that they are now only found in two locations -- Rockville Quarry and in California. I would have never known that! Steve Johnson helped me identify some of my minerals and was kind enough to let me buy one of the last couple of micros a particular vendor had from him to add to my collection. I was grateful and thrilled! **Mcguinnessite** ($Mg, Cu)_2(CO_3)(OH)_2$ [wikipedia](#)



Our speaker, Robert Rothenberg, was great and very approachable. I really enjoyed his presentations. In fact, I really enjoy the Atlantic Micromounters' Conference because it is one of my favorites due to the fact that it's relaxed and not overly crowded. You not only learn a lot, but you get to sit down and look at pretty minerals for hours at a time! It's also great to see the camaraderie that takes place, and, I am always in awe of what takes place.

A particularly special part of the conference was a wonderful video that Kathy Hrechka made interviewing and honoring Cynthia Payne. For many of us, if not all, Cynthia is a treasure. To have her be a part of the conference despite being physically unable to do so, was a gift. Then, there's Barbara Sky another treasure and backbone of the federation. Barbara has done it and won it all! I was aware of only a limited amount of her vast accomplishments and got a real kick out of seeing pictures of Cynthia and her many years ago. They share such a wonderful friendship.

What I experience at the conference reinforced my commitment to share what I know about minerals, our clubs, and to introduce others to our wonderful hobby. I delivered mineral specimens to a few of my favorite little rock hounds and loved seeing the joy that it brought. I close by complimenting the Micromineralogists of the National Capitol Area for having such a successful conference and for being so welcoming to those of us who are neophytes in the hobby. I hope that others will come and experience what I did. I can testify to the fact that my presence at the conference proves that it's never too late to learn!



Photo Sheryl Sims

Micromineralogists of the National Capital Area, Inc.



*Photos of 2015 Atlantic
Micromounters' Conference
courtesy of
Sheryl Sims*

Micromineralogists of the National Capital Area, Inc.



American Federation of
Mineralogical Societies

AFMS)
www.amfed.org

American Federation Mineralogical Societies Show October 23-25, 2015 Austin, Texas

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.

AFMS Club Library by John Washburn

We have 3 DVD presentations by notable scholars for a mere \$20 dollar donation for each to go to the MWF Endowment Fund. The three presentations were given at the 2012 Geo-fair in Cincinnati, Ohio. Not only are the scholar's great speaker's they are also nationally known. **Jeff Scovil** for his photography and a collector of minerals. **Dr. Carl Francis**, Harvard Museum's former mineral curator, and **Dale Gnidovec**, well known Ohio paleontologist. All the titles of these DVD's are as follows: "The Beauty of Carbonates" by Jeff Scovil "Teeth Jaws and Claws" by Dale Gnidovec "Collectable Carbonates" by Dr. Carl Francis.

Send your request to MWF Endowment Fund Treasurer Alan Hukill 15785 Park Lake Road, East Lansing MI 48823. Please make the check payable to 03903074MWF Endowment Fund. Please enclose an additional \$3.00 for postage for each.



.Eastern Federation of
Mineralogical and
Lapidary Societies

(EFMLS)
www.amfed.org/efmls

Communication and Involvement
Are the Keys to Our Success!

Geology Events:

April

23-26: 42nd Rochester Mineralogical Symposium. Radisson Hotel Rochester Airport; 175 Jefferson Road Rochester, New York 14623



22: MNCA Meeting 7:45 pm "Gold Rush - Crystallized Gold Specimens from Classic California Localities"

27: Northern Virginia Mineral Club meeting 8pm

Dr. Mike Wise, Smithsonian geologist
Dinner with speaker at the Olive Garden 6 pm.

May

May 18 – 24: Wildacres 2015 EFMLS Workshops

Bob Jones, Sr. Editor for Rock & Gem Magazine. Check EFMLS website; Tab Wildacres for complete details. Little Switzerland, NC; Cost \$390 plus supplies. Steve Weinberger, Wildacres Committee Chair.



30: 26th Annual Chesapeake Gem & Mineral Show; Chesapeake Gem & Mineral Society; Ruhl Armory, I-695 exit 26 south, Towson, Maryland Sat 10–4; Free admission & parking

August

Aug. 24-30: Wildacres; 2015 EFMLS Workshops

Denise Nelson, jewelry appraiser and designer will be the fall speaker. Check EFMLS website; Tab Wildacres for complete details. Little Switzerland, NC; Cost \$390 plus supplies. Steve Weinberger, Wildacres Committee Chair.



Micromineralogists of the National Capital Area, Inc.

Congratulations MNCA Members! **Eastern Federation** **Bulletin Editors Advisory Awards** **2014**



Mrs. Kathy & Julia Hrechka received awards at the AMC on April 11, presented by Carolyn Weinberger, who was in attendance.

Small Bulletins *Kathy Hrechka, 2nd place

Original Educational Articles -

- *Kathy Hrechka, 10th place (Wankel T-Rex)
- *Kathy Hrechka, Honorable Mention (Blue Diamond)
- *Kathy Hrechka, Honorable Mention (Denver Museum)

Original Non-Technical Educational Articles

- *David Fryauff, 2nd place (Field Trip Write Up)
- *David MacLean, 8th place (Weinberger HOF induction)
- *George Loud, Honorable Mention (Colorado Rambling)

Written Features

- * Peter Chin, 7th place (Geo-Daffinitions)
- * Mike Seeds (My First Micromounts)
- *Sheryl Simms (One Man's Stash)

Web Page Design

- *Julia Hrechka, 2nd place

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.

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Treasurer: Michael Pabst, Michaeljpabst@yahoo.com
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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 2015
\$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 10th of each month.
The Mineral Mite will be emailed on 15th.
No newsletter July/August



AFMS Editor's Award **First Place 2011 - Mini Bulletins**

April **Articles:**

- *Michael Pabst
- *Kathy Hrechka
- *Tom Tucker
- *Sheryl Sims

