



CRYSTALS AND CABS

Newsletter of the Capital Mineral Club

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January 2021

Volume 21 Issue 1

Capital Mineral Club News

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The Capital Mineral Club meeting for **January** was cancelled. A **Board of Directors** meeting was scheduled for **January 25th** by Zoom meeting. See **Meeting Minutes page 2** for more information. As noted in the Meeting Minutes there will be a **ZOOM meeting** scheduled for **March** for all members to attend. More information on this as time nears.

Kevin Downey has agreed to be the speaker for this meeting. **No topic** has been announced.

Editors Note:

The **deadline** to get info to me for publication will be the **3rd Saturday** of every month

- My e-mail address:
pfcram@comcast.net
- CMC Website:
www.capitalmineralclub.org
- Website designed and maintained by:
Peter Cram & Steffen Hermanns
- If submitting material to the newsletter the editor requests that it be sent in Microsoft Word format. This will help in getting the newsletter together.

Welcome New Members

See sheet 2.

2021 Club Dues are due, please send your membership dues to:

Steffen Hermanns, 7133 Oak Hill Road, Loudon, NH 03307

Make check payable to Capital Mineral Club. Dues are \$10.00 per member.

Mineral Clubs - Meeting Dates

Saco Valley Gem and Mineral Club: 3rd Tuesday of each month at the Tin Mt. Conservation Center, Albany, NH – 7:00 PM
www.sacovalleygmc.com

Keene: 1st Saturday of each month in the conference room of the Southwest Community Services building at 34 Cypress St. Keene, NH – 6:00 - 8:30 PM www.keenemineralclub.50webs.com

North Shore (MA): 3rd Friday of each month, Hamilton Wenham Community House, 284 Bay Rd, South Hamilton, MA – 7:45 PM
www.northshorerock.org

Boston Mineral Club: 1st Tuesday of each month, Harvard University Geological Lecture Hall, 24 Oxford St., Cambridge, MA – 7:30 PM www.bostonmineralclub.org

Southeastern NH Mineral Club: 2nd Wednesday of each month, St John's Methodist Church, 28 Cataract Ave., Dover, NH – 7:00 PM www.senhmineralclub.org

Presidential Gem & Mineral Society: 2nd Thursday of month at 6:30pm. Jefferson Town Hall, 698 Presidential Hwy, Jefferson, NH 03583



Board of Directors Meeting

On Monday **January 25th**, the board met by a **Zoom meeting** to discuss several matters.

1. The dues for club membership was discussed and due to the lack of meetings due to the Covid-19 pandemic it is recommended to the membership that dues be suspended for one year. All those paid-up members in 2020 will be extended to 2022. Those members who have already paid dues for 2021 will have their membership extended for a year to 2023. **This matter will need a club vote.**
2. There are several officer terms that are expiring: **President, Vice-President, Secretary and one Director.** The **Treasurer** has no term limits so may be elected again. The board asks for members to submit their names if interested to serve in any of these positions. Names may be submitted by **email to any board member.**
3. It was noted during the meeting that the club cabinet containing meeting assets has been moved from the Salvation Army building to the new meeting place at the **Snowshakers** clubhouse in **Loudon.**
4. We are operating without a budget at this time but there has been very few expenses. Our treasurer, Crystal will prepare a budget with help from the prior treasurer for submission to the membership to vote on as soon as possible.
5. After discussion, it was agreed we will work to set up a **March meeting by Zoom** and get a speaker to present a topic.
6. Our plan is to have a **June meeting** at the **Snowshakers clubhouse** and have it outdoors. Events for that meeting will be developed in the following months.
7. Our payment to the **Snowshakers** for rental of the facility will begin in June which will be the first use of the property. Essentially, we will pay \$1,250.00 for 2021.
8. The show was discussed since there may be a good chance of a diminishing of the Covid-19 pandemic by then and we would be allowed to have our show at the Everett Arena. First step will be undertaken to contact the dealers to determine how many are willing to attend and solicit replacements for those who do not. We will also ask the members regarding their willingness to participate in the show.
9. Steffen presented a suggestion that some members are in favor of to purchase a large trailer to create a workshop for equipment that has been donated through the years for mineral preparation and some lapidary equipment. Details will come later from Steffen.
10. We will research an easy way to record members vote on motions by the March meeting.

After the meeting **Kevin Downey** was contacted and he has agreed to be our speaker by Zoom. Topic will be decided based on what Kevin can get ready.

In addition Gordon has additional material to have an auction of specimens at our June meeting.

New Members:

Michele & Stephen Landry, Tilton, NH	William & Pamela Stocker, Sunapee, NH
Brandon Stocker, Goshen, NH	Brian Thomas, Peterborough, NH
Logan Thomas, Hillsborough, NH	Michael & Patricia Liberty, Huber Heights, OH
Matthew Wilmot, Ashland, NH	Elizabeth Christian, Enfield, NH
Nicholas Schneider, Houston, MN	Dilys Morris, Alexandria, NH
Samuel McFall, Hopkinton, MA	

Vanmeersscheite, A new mineral species for the Palermo Mine and for New Hampshire

Don Dallaire & Tom Mortimer

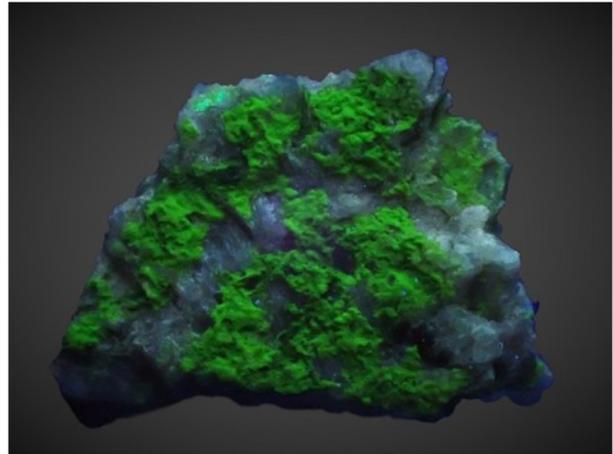
An August, 2020 EDS analysis by Al Falster at the Maine Mineral Museum, Bethel, ME has confirmed a new uranium mineral for the Palermo Mine, N. Groton, New Hampshire. The species is vanmeersscheite, $U^{6+}(UO_2)_3(PO_4)_2(OH)_6 \cdot 4H_2O$.

Don emailed me [tm] in mid-August announcing this find: My "sight id had it as uranophane since it was yellow and radioactive. It appeared to be a crust when I found it but with a better microscope than what I had at the time I saw balls of radiating crystals. I was also suspicious however since it fluoresced a bright green (uranophane has weak fluorescence if any at all). I brought it up to Al Falster on my monthly trip to the museum and he analyzed it. The EDS scan showed uranium and phosphorous and nothing else (no Na, Ca, Zn, Ba, Pb, Al, Sr, Fe, Cu, K, Mn, Mg or Nd). There were only 5 minerals that fit this. Four were quickly eliminated by other physical characteristics. The crystal is pseudo-hexagonal in outline but actually is orthorhombic. He tested the refractive indices and all 3 were greater than 1.7 (didn't have liquids for higher). All this info fits the mineral vanmeersscheite." We should note that dehydrated vanmeersscheite = metavanmeersscheite, $U^{6+}(UO_2)_3(PO_4)_2(OH)_6 \cdot 2H_2O$, cannot be differentiated with the acquired EDS data.

Don stated this was a self-collected specimen from a June, 1983 field trip. He explained that the specimen had split nearly in half when being readied for EDS analysis and that he would gift me half for the NH species display. I was most grateful for the "misfortune" of the specimen split and appreciative to be the recipient of the orphaned chunk. I picked up the offered half on September 8 and immediately attempted some photos to capture the fine crystal structure. The individual crystals are very tiny and one needs to find spots where the individual crystals protrude into the contrasting matrix. The first row of photos below are by Don.



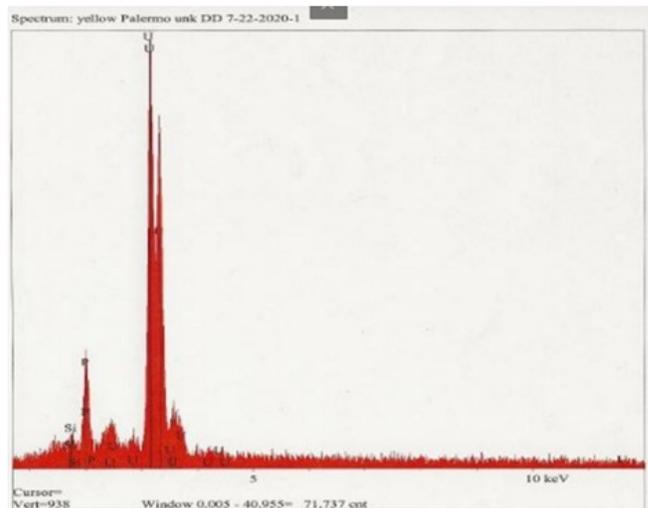
VANMEERSSCHEITE Palermo #1 Mine, Groton, NH
1.6 x 1.4 cm specimen Daylight



VANMEERSSCHEITE Palermo #1 Mine, Groton, NH
1.6 x 1.4 cm specimen SW UV lighting



VANMEERSSCHEITE Palermo #1 Mine, Groton, NH
0.4 mm field of view



VANMEERSSCHEITE EDS analysis plot
Al Falster, Maine Mineral Museum laboratory

Shelburne Lead Mine, Shelburne, N.H.

Status: Open

Manager: Lead Mine State Forest

Terrain: Trail along brook, with water filled shafts in brook

Type of deposit: Ore body is breccia, with silicified zones

Location: Shelburne, N.H.

Vehicle: any

Best season: May through October

Tools: digging tools, Crack hammer, Chisels, screen, safety goggles

Bornite, Chalcopyrite, Galena (argentiferous), .5% silver, pyrite, Pyrolusite, Siderite, Sphalerite, Quartz crystals, manganosiderite, arsenopyrite.

The Shelburne lead mine was mined intermittently, Opened in 1846 by White Mountain lead Co., reopened in 1880. The mine is on the west branch of Leadmine brook, at 960 ft. altitude. There is a silicified zone in the brook bed, 10-15 feet wide that runs 300 ft.

To reach the mine, start at the junction of Route 2 and 16, follow Rt. 2 E., 3.3 miles, left onto North rd., follow out across bridge, bear right, follow until you see sign on left, called Lead Mine Rd. it is a dirt road that you follow out, past a gravel pit, and several camps. When you come to a brook bed, if there is little or no water, you can cross with your vehicle, and continue, when you come to an intersection, stay right, and you will come to a log yard, where recent logging has taken place. Park out of the way of any logging operation, and go down to the brook. The trail is presently marked by orange ribbons, it follows the left side of the brook for a while, then turns uphill. You should reach the mine in approximately .8 miles. There are mine dump materials on the banks of the brook, as well as in the brook itself. There are water filled shafts in the brook, but in years past, heavy rains washed away some of the structures around them. Bricks are scattered in the brook, that were once in place to mark the shafts.

In 1993, Dennis Rossignol worked a large vein of quartz, which opened into pockets, filled with quartz xis. There were larger quartz crystal plates, but also many single xis, and small groups, doubly terminated xis. Some had altered Siderite on them, some had pyrite on them, and inside them. There is an abundance of Sphalerite in the carbonate rocks.



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 Editor
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Keep on Rockin' in the Free World

Email: pfcram@comcast.net

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WE'RE ON THE WEB

WWW.CAPITALMINERALCLUB.ORG

Capital Mineral Club Meetings & Events	Gem & Mineral Shows
March 6, 2021	
Club Meeting: TBD 12:00 noon	
Speaker:	
April 3, 2021	
Club Meeting: 12:00 noon	
Speaker: TBD	
May 1, 2021	
Club Meeting: 12:00 noon	
Speaker: TBD	