

MICROMOUNTERS OF NEW ENGLAND NEWSLETTER

The MMNE was organized on November 8, 1966 for the purpose of promoting the study of minerals that require a microscope

No. 295

March, 2009

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Current Meeting

Saturday, Mar. 21 2009
Trinity Lutheran Church
Chelmsford, MA
Doors open at 9 am

Next Meeting

Saturday, Apr 15, 2009
Trinity Lutheran Church
Chelmsford, MA

Map and driving
directions are on last
page

For information regarding
MEETING CANCELLATION
due to inclement weather,
Joseph Mulvey
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Next Meeting: Saturday, March 21, 2009. Trinity Lutheran Church Chelmsford, MA.

Last chance for un-interrupted membership for 2009. Please send your dues and any changes in address, phone or e-mail to the treasurer: Anna Wilken, 79 Meadow Lane, Campton, NH 03223. Dues for individual members are \$ 12 and \$ 15 for family membership. We will create a new login for 2009 for member area access starting on April 1, so renew before you miss the cutoff date! Attendees to the March meeting will be able to voice their opinion on what the password should be (however, you must be a member and use a computer to voice that opinion).

March Mineral Competition

The March meeting will feature a three way competition of Anatase, Rutile and Brookite. Bring your favorite specimens!

Information courtesy of http://wikis.lib.ncsu.edu/index.php/Anatase_and_Brookite reminds us of the following. TiO_2 forms in the three different structures, each containing its own similar, but different structural and optical properties. The most abundant and most extensively studied is the rutile phase (click link for more information). The other two polymorphs are anatase and brookite. TiO_2 contains interesting physical properties. Its intense whiteness (anatase) has made it a valuable substitute for toxic lead compounds in paints as a coloring agent. The mineral is manufactured chemically from its principle ore, ilmenite (FeTiO_3).

Table 1.	Rutile TiO_2	Anatase TiO_2	Brookite TiO_2
Form.Wt.	79.890	79.890	79.890
Z	2	4	8
CrystalSystem	Tet	Tet	Orth
PointGroup	4/mmm	4/mmm	mmm
SpaceGroup	$P4_2/mnm$	$I4_1/amd$	$Pbca$
UnitCell			
a(Å)	4.5845	3.7842	9.184
b(Å)			5.447
c(Å)	2.9533	9.5146	5.145
Vol	62.07	136.25	257.38

continued on page 2. Photos on pages 4 & 5

The **Newsletter** is the official publication of the Micromounters of New England (MMNE). The last by-laws revision was April 19, 2003. The MMNE is a member of the Eastern Federation of Mineralogical and Lapidary Societies (EFMLS) (<http://www.amfed.org/efmls>) and the American Federation of Mineralogical Societies (AFMS) (<http://www.amfed.org>). Material from the *Newsletter* may be copied in other rock and mineral publications if credit is given to the author and the *Newsletter* and permission has been obtained from the author. If there are questions regarding copying contact the editor. The club address is c/o the Secretary. Meetings are held monthly, September through May, except for December, and usually on an informal basis in July. Meeting sites may change and will be posted in the *Newsletter* as far in advance as possible. Visitors are welcome to attend all meetings. Bring a microscope and light source if you have one.

DUES are \$12/year for a single person and \$15/year for a family membership, levied on a calendar basis. The family membership includes two adults and all children under 18 living at the same address. One copy of the *Newsletter* will be sent on a family membership.

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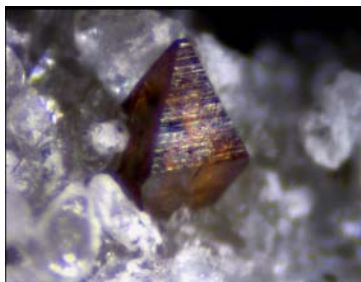
MMNE Website: <http://www.micromountersofnewengland.org>

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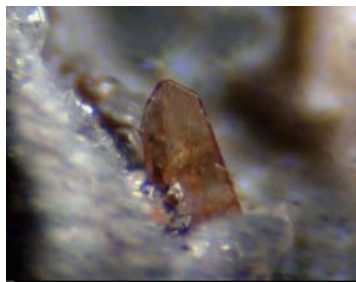
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Anatase, Brookite, Rutile – continued from page 1

Name:	<u>Anatase</u>	<u>Brookite</u>	<u>Rutile</u>
Formula:	TiO ₂	TiO ₂	TiO ₂
System:	Tetragonal	Orthorhombic	Tetragonal
Color:	Brown, yellowish	Brown, yellowish brown,	Blood red, bluish
Luster:	Adamantine, Metallic	Adamantine, Sub-Metallic	Adamantine, Metallic
Hardness:	5½ - 6	5½ - 6	6 - 6½ N
Name:	From the Greek for "extension," in allusion to the length of the pyramidal faces being longer in relation to their bases than in many tetragonal minerals.	For Henry James Brooke (1771-1857), English crystallographer and mineralogist.	From the Latin, rutilus - "reddish."



Anatase ©2009 Tom Mortimer



Brookite ©2009 Tom Mortimer



Rutile ©2009 Peter Cristofono

MMNE SECRETARIAL REPORT FOR 02/21/09

President Joe Mulvey brought the February MMNE meeting to order with thirteen members in attendance. He announced the winners of the February wulfenite micro competition: 1st Dana Jewell for his Loudville, MA wulfenite specimen; 2nd Pat Barker for a Yuma, AZ specimen and 3rd Inga Jewell for what Joe referred to as a “locality” specimen.

Joe said that mini-symposium presenter Lazslo Horvath had invited members who wished to have dinner with him and his wife on the evening following the May Meeting.

Three new members were recorded by the treasurer during the meeting: John Chipman from Chelmsford, MA; Cliff Trebilcock from Auburne, Maine and Suzane Wall of Lawrence, MA.

The president said that there had been no additional comments regarding the updated club bylaws. He said that they would be typed up and ready for the May Meeting at which time they would be put to a vote.

Joe brought it to members’ attention that the upcoming March meeting is the time to start the nomination process for next year’s club officers.

Donations for the May meeting sales and auction tables continue to come in but more are welcome. Door prize material is still needed.

The president asked members to let him know of any dealers that might be willing to donate material. Joe said that he had printed many club brochures and that members were encouraged to bring them to other club meetings.

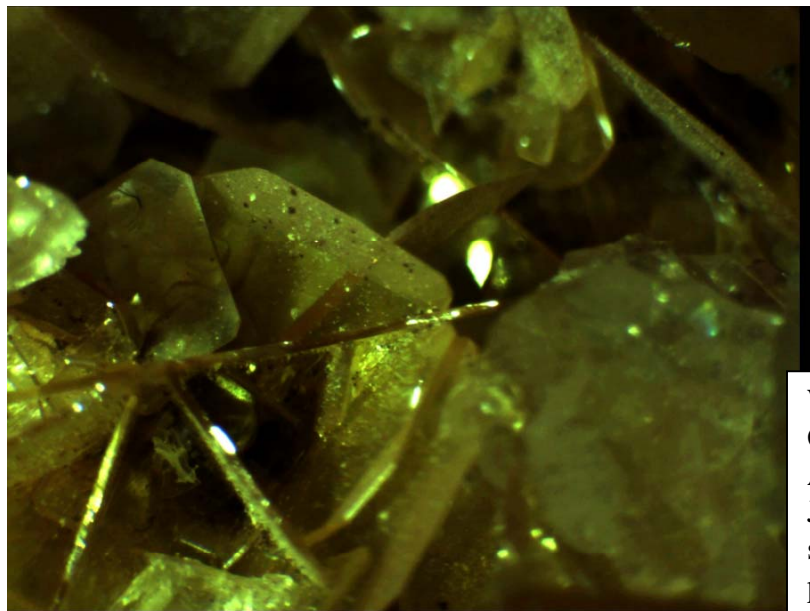
The Palermo Mine would be open on the first Sunday of March for anyone interested in observing the ice stalactite and stalagmite accumulations in the mine.

Joe said that he had received some feedback from Doug Rambo regarding what had been thought to be a “lost” piece of club equipment. Apparently it was equipment that was not suitable for the club and it had been auctioned at a club symposium meeting.

There was brief discussion regarding “last issue” stickers to be applied to newsletters in order to inform members of non-payment of dues. It was decided that they should be applied to the April newsletter.

Once again there was discussion about the issue of how the club can attract new members and more attendees for the May Meeting Mini-Symposium. New member John Chipman was clear saying a “one-on-one” approach was necessary. He also said that the way to attract young members was to use the technology “hook”. Joe Mulvey wondered if a MMNE joint meeting with the North Shore Mineral Club might yield some results. He would further explore this possibility. Others felt that a club micro table should be included also at the North Shore and Capital Clubs’ gem and mineral shows.

Respectfully submitted
Bob Wilken, MMNE Secretary

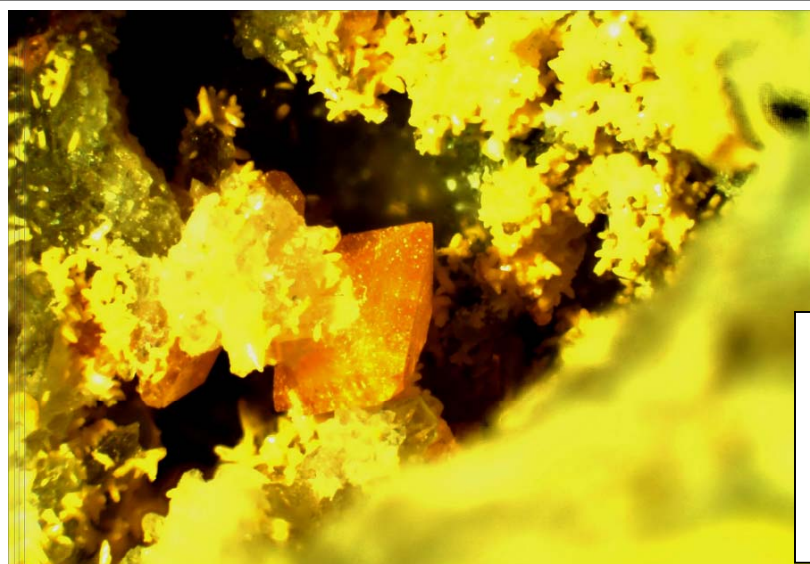


February Wulfenite Competition

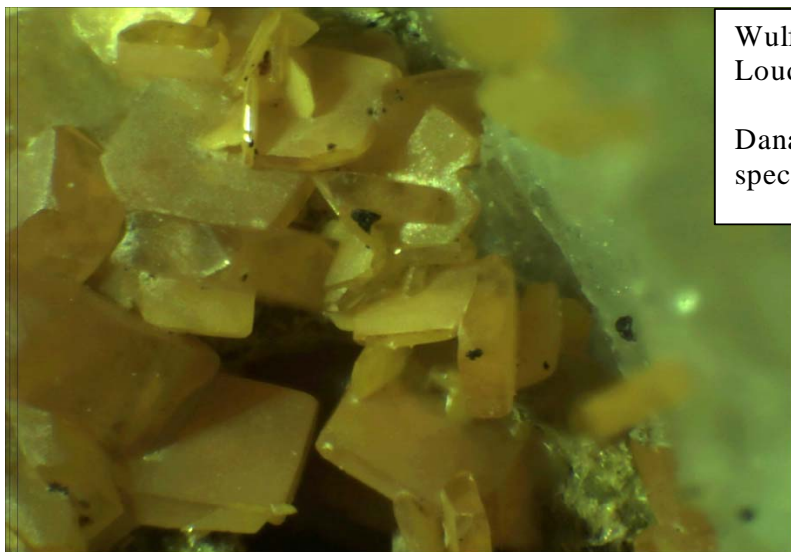
Wulfenite
Gleeson,
Arizona
Joe Mulvey
specimen &
photo



Wulfenite
Melissa Mine,
Arizona
Pat Barker
specimen



Wulfenite
J.C. Holmes
Mine
Anna
Wilkins,
specimen



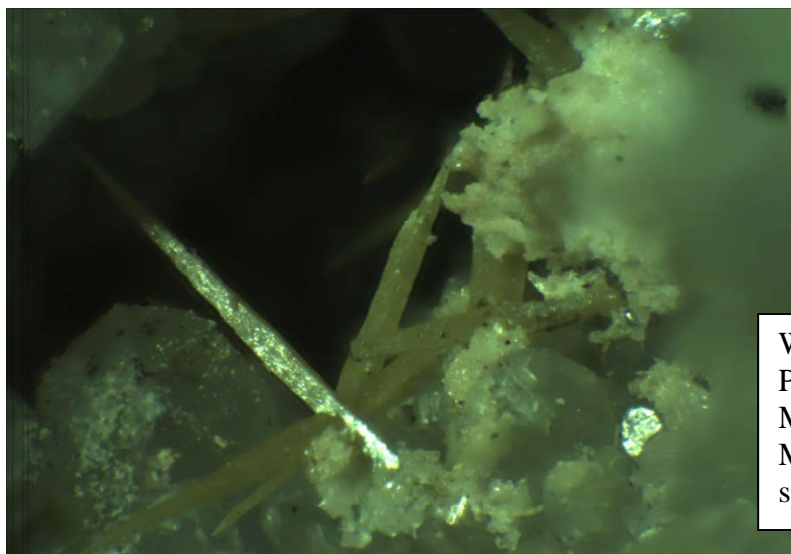
Wulfenite
Loudville, MA

Dana Jewell
specimen



Wulfenite
Loudville, MA

Inga Burggraf
specimen



Wulfenite
Purple Passion
Mine
Michael Swanson
specimen

Notes from club president Joe Mulvey

The February meeting of the Micromounters is usually a low attendance meeting, what with New England being in the depressing depths of winter. Many people have migrated to warmer climates or just refuse to crawl out of their warm dens to share the wonders of micros! Hard to believe, I know, I know.

Happily, our February meeting was well attended even with many of our usual suspects noticeably absent. Most notably, **Gene and Marie Bearss** stayed home so that Gene can help Marie fully recover from her horrible run of medical issues. I know I speak for all the club when I say we wish Marie the very best of health and a speedy, 100% recovery. Our prayers are with you.

We had three new members visit and join us for the February meeting. Please make them feel at home when you meet them. New members are **Suzanne Wall, J.D. Chipman** and all the way from Maine, **Clifford Trebilcock**. From conversations with all three new members I am also happy to say that we have added 3 extremely intelligent mineral enthusiasts to our club. It is a pleasure to have them aboard!

The **Wulfenite** competition was a smashing success, highest honors go to Dana Jewell with a superb specimen from Loudville, MA. See pictures elsewhere in this newsletter.

We also had a surprise contest. I took 15 mineral photos from **Tom Mortimer's** fantastic **mindatnh.org** website, numbered them 1 – 15 and challenged the club to name the species with only the fact that they were NH specimens to assist their visual analysis. For the sake of modesty and dignity, these were not tallied and shared, but I do think most enjoyed the challenge and the camaraderie afterward as we all saw the correct answers at the same time.

Norm Biggart has been very busy working with the Burlington, MA Cable Access Channel. He has converted 600 episodes of a local religious show from outdated VHS tape to DVDs. That's quite an undertaking! I am sure that all involved with this project appreciate Norm's diligence, care and attention. Of course, we in the Micromounters have been aware of Norm's talents for many years! You can see some of his project at <http://mysite.verizon.net/bernieheath>

We had two more donations at the February meeting toward the May Symposium. **Pat Barker** has offered up a stunning collection of feathery silver crystals from Batophilas, Mexico. These are real beauties! Again, Pat has supplied the symposium with some very beautiful items. This will be a door prize. I should have taken a picture of it while I had the club camera! **Inge Burggraf** has donated some beautiful specimens, most notably, a purple diopside from Eden Mills. This specimen will be sought after so may end up on the auction table.

Additionally, in the mail I have received a suite of super Maine micros. These are all very nice, labelled and mounted. Thanks to **Ron LePage** way up in Waterville, ME. I sent Ron a nice cross selection of material from our giveaways since he lives over 4 hours from Chelmsford. Ron is also the gentleman who recommended we look at the AmScope camera.

Speaking of the club camera, it is booked through June. If you'd like to get your hands on the scope and camera, contact me, **Joe Mulvey** asap at bassmeister_2000@yahoo.com or by phone at 603-880-4018. Unfortunately, right now the camera is back at the dealers, from whom I expect a replaced or repaired unit shortly.

continued next page

2009 SYMPOSIUM PREPARATIONS - Joe Mulvey

As always, we need donations for the symposium from all of you, our loyal members, as our stocks of both sales and give-away material are running quite low. . Please bring your donations to the March or April meeting for color coding. If each MMNE member would consider donating ten to fifteen specimens for the sales table and a couple of flats or egg cartons of material for giveaways, there would be plenty for everyone. Please remember: **Your registration fee covers only part of our operating expenses – your donations cover the rest.**

We also need items for the silent auction and door prizes which could include hardware, books, posters, other printed material, and mounting supplies (or anything else a micromounter might be interested in).

If you have items for the auction, please tell us what you have at the March or April meetings so tags can be made in advance. If you cannot be at any of these meetings, e-mail Joe Mulvey at bassmeister_2000@yahoo.com or call him at 603-880-4018.

Please bring your donations with you to the meeting, or get them to Hal Herard ahead of time.

Please put prices on your donation whenever appropriate. If you are bringing mounted material for sale, please color code them with price stickers (dots) as follows:

\$1.00 yellow, \$2.00 red, \$3.00 green, \$4.00 silver, \$5.00 gold.
Anything above \$5.00 needs to have an actual price tag.

If you do not have the colored stickers, group them by price category, and they can be marked at the meeting.

The meeting officially convenes at 9:00AM, but anyone who can come in at 8:00AM to help set up the various venues (sales, silent auction, etc.) will be appreciated.

Please sign up promptly for the meeting so that we can get an accurate count for the caterer. Bring a friend or two if you can. There is plenty of space. All reservations include lunch so they must be in the treasurer's hands before May 9th. Walk-ins can pay at the door, but extra meals may not be available.

Please fill out and send in the **Registration Form** on newsletter last page as soon as possible.

REGISTRATION FORM

REGISTRATION FEE: Members \$20, Non-members \$25

Make checks payable to: Micromounters of New England (MMNE)

Return to: Anna Wilken

79 Meadow Lane, Campton, NH 03223

Member Name _____ @ \$20 each _____

Member Name _____ @ \$20 each _____

Non-Member Name _____ @ \$25 each _____

Non-Member Name _____ @ \$25 each _____

Address: _____

E-mail Address: _____

**Please return by May 9th, 2009, the closing date for ordering a meal.
48 hours notice is required for cancellation with refund.**

Palermo Mine Winter Hike

Photos and story by Joe Mulvey

The Palermo “open house” was Sunday, March 1. As always, the meeting time was at 10:00am at the gate to the mine road. The sky was blue, hiding the fact that we were expecting a foot of snow over New England that evening. Temps were in the teens and for some reason it seemed even colder than that! Only about 7 people arrived for the trip. The road was not plowed from the gate to the mine, but happily two visitors had snowmobiles. One was Stefan Hermann. The snowmobiles did a good job of breaking trail for the hikers.

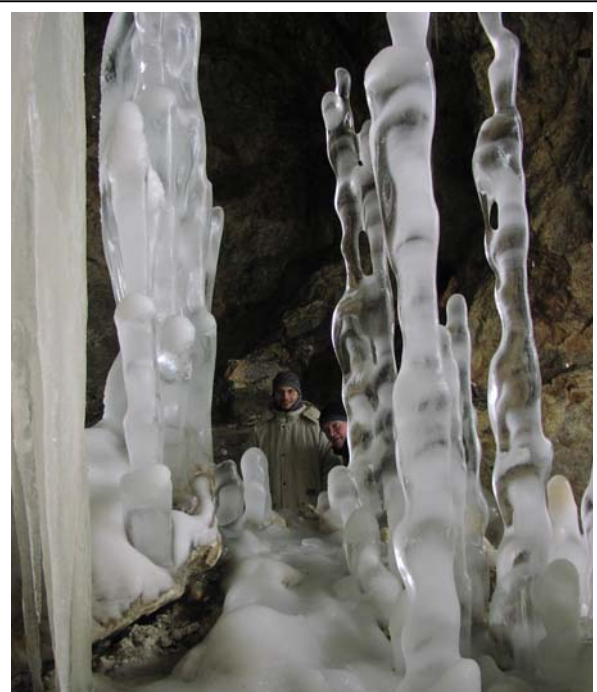
Water levels were as high as I have ever seen them on the winter hike. Ice formations were beautiful as always! We did make it all the way into the “Bat Cave” that small room about 75 yards into Palermo #1 that is about 15 feet long and 8 feet high. The pockets in the ceiling were all lined b small hibernating bats covered in crystal clear ice. They truly looked like jewels!



Frozen bat at Palermo #1



Another chilly bat



Palermo Mine Winter Hike – continued from previous page

There was a lot of loose rubble at the mine entrance that for some reason or another was not frozen to the ground. Just kicking around some rock with my crampons (ice climbing spikes) I noticed a nice ½” quartz crystal that seemed to have smaller quartz crystals attached. Upon further inspection at home under a microscope I found many small partial fluorapatites on this hand sized specimen as well. Additionally, another small piece that looked promising revealed some beautiful phosphophyllites on a bed of fluorapatite. While the winter trip is never a collecting journey, I did manage to find some pretty cool stuff!

If you decide to make the trip next year, remember to pack spare clothes, dress in layers, bring liquids, a small backpack, lunch, snowshoes if you have them, crampons to walk on the ice, warm gloves and hat, good flashlight and a camera. It was so cold that every body’s digital cameras malfunctioned because of the cold. Happily, I took about 60 pictures, but some files were corrupted because of the weather –the camera seemed to seize twice, which I’ve never seen before.

All in all, I truly enjoy the winter hike – it’s like the first sign of spring and the harbinger of high hopes for a great collecting season right around the corner!

See more pictures at <http://www.micromountersofnewengland.org/photos.htm>

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Editor note:

As newsletter editor, I would like to extend a extra “thanks” to Joe Mulvey and Bob Wilken for their continued generous content contribution to our club monthly newsletter. Member stories are the lifeblood of a good club bulletin. Please consider authoring an article for a future issue. I am willing to transcribe even a hand-written note. I would particularly entreat members who borrow the new club AmScope camera to forward a few of their best shots for publication.

Digital Camera and Microscope loan status:

Loans run from 1 meeting to the next.

Feb-Mar Carlos Gristani.

Mar-Apr J.D. Chipman

Apr – May tentative Johannes Swartz

May - ? Anna Wilkens

Image stacking software:

You can download **CombineZ** for free at

<http://www.micromountersofnewengland.org/pdfs/CombineZP.zip>

Or **Helicon Focus**, free for 30 days, \$30 for one year after that at:

<http://www.heliconsoft.com/downloads.html>

DIRECTIONS TO TRINITY LUTHERAN CHURCH, CHELMSFORD MA

170 Old Westford Rd., Chelmsford, MA.

From Rt. 3, take Exit 32, (The "Drum Hill Rotary"). From Rotary, Take Old Westford Rd. towards Westford for about .85 miles to Grandview Rd. Entrance for Trinity Lutheran Church on left. Proceed up rather long driveway to parking area. If things go according to plan, we should be able to use the entrance on the far left side of the church. Our meeting room is just inside this entrance.

Those coming from the south may want to try an alternate route, exiting from Rt. 495 at Exit 33, then taking Rt. 4 north to a left onto Davis Rd.... see map below.

