

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. 236

March 2002

OFFICERS 2001-2002

President

Jim Cahoon
(978) 897-8221
jcahoon@
geochronlabs.com

Vice-President

Jim Warner
(508) 752-8328
buckybaggera@
yahoo.com

Treasurer

Anita Hubley
(203) 644-9600
hubley264@cox.net

Secretary - Recording

Chris Hubley
chubley@snet.net

Secretary - Corresponding

Patricia Barker
(603) 536-2401
barker@conriver.net

Next Meeting

Saturday, March 23
Westford, MA
Public Library
Doors open at 10AM

*Map and directions
are on the back page*

Dues are \$10/person
or \$15/family for the
calendar year, payable
by Dec. 31 for the
new year.

Mail payment to the
Membership
Chairperson
Brian Porter
355 Walsh Ave.,
Newington, CT 06111

MEMBERSHIP NEWS

Your updated membership list is enclosed. Only members who are paid up for fiscal year 2002 are included on the list. Those of you who have received a *Newsletter* but are not on the membership list **are not paid up and will not receive any further Newsletters**. Please send any additions, subtractions or corrections to Brian Porter, Membership Chairperson.

An absentee ballot is enclosed for paid up members. The annual business meeting is in April. If you cannot attend the April meeting and wish to cast a ballot, return the ballot to the Corresponding Secretary: Chris Hubley, 95 Naubuc Ave., East Hartford, CT 06118. Absentee ballots must be signed.

FROM THE EDITOR

Beginning with the next issue I am going to try and run a new column on "Micromounting Tips and Techniques." Ideally this will consist of contributions from members reporting on their tips and techniques - including labeling, mounting, cleaning, testing, etc. They may consist of a couple of lines or a couple of pages. I will be able to add some articles from other newsletters as well, but I do want input from the membership so please write about something that works for you. The first article will be from Bill Henderson on a technique for optimal use of the microscope light.

We do not have a policy for notification of members in the case of meeting cancellation. This should be brought up for discussion.

BY-LAWS COMMITTEE

An ad hoc by-laws committee consisting of Jim Cahoon, Bob Janules, Pat Barker and Mike Swanson has been set up to review and update the by-laws which have not been revised since 1966.

MEETING NEWS

The next meeting will be structured around the mineralogy of the Palermo Mine(s) in North Groton, NH. Most of the membership have either collected at Palermo or acquired specimens from there over the years. If members would bring in good specimens for show and tell, unknowns for cooperative attempts at identification, and material either for trade or give-away, it might make for a very interesting session. If anyone has slides, either of the site or the species found there, please contact Pat Barker so that arrangements can be made for a slide projector.

If anyone has a current Palermo species list, it would be nice to be able to distribute it at the meeting.

At the February meeting a Program Committee was established. John Stewart, Norm Biggart and Pat Barker are the committee members. John and Norm will arrange for meeting sites as they have doing. Pat will set up speakers, workshops, thematic programs, and other programs for the monthly meetings. If you have suggestions for formats or wish to give a talk at a monthly meeting, please contact Pat. We all some area of expertise, be it a particular locality, mineral species, micromounting technique, identification technique, or perhaps even a piece of micromounting history. The rest of the membership would like to hear what you have to say!

At the February meeting it was agreed that specimen material could be donated to the club and sold at the monthly meetings with all proceeds going to the club. (Gene Bearss donated some nice material to start the process off!) The possibility of members selling specimens or micromount related items at meetings with a percentage of the proceeds going to the club will be further discussed at the March meeting.

The *Newsletter* is the official publication of the Micromounters of New England (MMNE). The last by-laws revision was 1966. The MMNE is a member of the Eastern Federation of Mineralogical and Lapidary Societies (EFMLS) (cf <<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* unless the author has reserved all rights in which case written permission must be obtained from the author. If there are questions regarding copying contact the editor. The club address is c/o the Corresponding Secretary. Meetings are held monthly, September through May, except for December, and usually on an informal basis in July and August. Sites rotate 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.

Officers for 2001/2002

President: Jim Cahoon, 31 Parker St., Maynard, MA 01754
 Vice President: Jim Warner, 23 June Street, Auburn, MA 01501
 Treasurer: Anita Hubley, 90 Valley View Drive, S. Windsor, CT 06074-2829
 Recording Secretary: Chris Hubley, 95 Naubuc St., Hartford, CT 06118
 Corresponding Secretary: Pat Barker, PO Box 810, Campton, NH 03223-0810

(978) 897-8221 jcahoon@geochronlabs.com
 (508) 752-8328 buckybagger@yahoo.com
 (203) 644-9600 hubley264@cox.net
 chubley@snet.net
 (603) 536-2401 barker@conriver.com

Membership Chairperson: Brian Porter, 355 Walsh Ave., Newington, CT 06111
 Editor: Mike Swanson, 29 Chestnut Hill, Greenfield, MA 01301-3003;

(860) 666-4505 bporter@ziplink.net
 (413) 773-3867 msmicros@crocker.com.

CALENDAR OF UPCOMING EVENTS

The North Shore Rock & Mineral Club Micromounters meet the
 2nd Wednesday of every month at the home of John and
 Margaret Stewart, 244 Mill Street, Burlington, MA.
 Call (781) 272-0854 for more information.

March 2002

- 9 - Saturday. 26th Micromount Show. 10AM to 3PM.
 Rock & Mineral Club of Lower Bucks County, PA
 Contact Richard Tillett, Croydon, PA (215) 785-2642
 23 - Saturday - MMNE meeting at Westford, MA
 Public Library. Doors open at 10AM

April 2002

- 5-7 30th Annual Atlantic Micromounters Conference.
 Tyson's Westpark Hotel, McLean, VA. Contact
 Steve Weinberger, PO Box 301, Glyndon, MD 21071
 18-21 29th Rochester Mineralogical Symposium
 Contact: Dr. Helen Chamberlain, PO Box 85
 Manlius, NY 13104-0085
 20 - Saturday - MMNE meeting at Shrewsbury, MA Public
 Library.
 27-28 EFMLS Convention and Show, Franklin, NJ

May 2002

- 3-5 CIMA Annual Conference, Brock University,
 St. Catharines, Ontario
 4-5 39th Annual New England Gem & Mineral Show
 North Shore Rock & Mineral Club, Topsfield Fairgrounds,
 Rte 1N, Topsfield, MA
 10-12 Maine Mineralogical Symposium
 Senator Inn, Augusta, ME
 Contact: Woodrow Thompson (207) 287-7178
 e-mail: woodrow.b.thompson@state.me.us
 18 Saturday - MMNE Annual Meeting, Moose Lodge,
 Marlborough, MA

June 2002

- 21-23 Northern California Mineralogic Assoc.
 Contact: Sugar White, 2 Summit Ave.
 Redlands, CA 92373-6848 (909) 798-3635
 e-mail: rbwhite@gte.net

WEB SITES AND OTHER REFERENCES OF MINERALOGICAL INTEREST

Want to find a picture of a mineral on the net? Type in
<http://www.google.com/images> - then the mineral name.

Full text articles from the 1998-2000 volumes of the
 American Mineralogist can be freely downloaded as pdf
 files. Volumes from 2001 and 2002 can only be down
 loaded by MSA members. Go to <http://www.minsocam.org/MSA/AmMin/TOC/TOCpage.html> and check out the
 individual issues. Articles on new mineral names are free
 in all volumes - for instance http://www.minsocam.org/MSA/AmMin/TOC/Abstracts/2002_Abstracts/Jan02_Abstracts/Jambor_p181_02.pdf. (From Dr. Uwe
 Kolitsch, Institut für Mineralogie und Kristallographie,
 Geozentrum, Universität Wien, Althanstr. 14, A-1090
 Wien, Austria via micromounts@yahooogroups.com.

A new internet group geared towards the photography
 of micromounts and the sharing of these efforts has been
 started at <http://groups.yahoo.com/group/microphoto/>.

A good source for replacement bulbs of all types—no
 minimum order, prices are good, and a large selection.
 Gray Supply Company. "Topbulb" catalog No. F01.
www.topbulb.com. 800topbulb (1-800-867-2852).

A source for basic science supplies, including optics,
 magnifiers, some mineral related supplies.
 Edmund Scientific. www.scientificsonline.com
 Customer service: 1-800-728-6999.

Handbook of Mineralogy, Vol. II—Silicates. Free on
 web @ <http://www.minsocam.org/MSA/Handbook/Handbook/lasso>.

BALLOT FOR OFFICERS

OFFICE	NOMINEE	IN FAVOR	WRITE-IN CANDIDATE
President	Jim Cahoon	<input type="checkbox"/>	_____
Vice-President	Bob Janules	<input type="checkbox"/>	_____
Corresponding Secretary	Chris Hubley	<input type="checkbox"/>	_____
Recording Secretary	Pat Barker	<input type="checkbox"/>	_____
Treasurer	Anita Hubley	<input type="checkbox"/>	_____
Membership Chairperson	Brian Porter	<input type="checkbox"/>	_____
Editor of the <i>Newsletter</i>	Mike Swanson	<input type="checkbox"/>	_____
OR - A <i>single</i> vote for the slate as presented		<input type="checkbox"/>	

BALLOT FOR REVISIONS OF THE BY-LAWS

Article 3, Section 1. Add the Membership Chairperson and editor of the *Newsletter* to the executive committee as elected officers.

In favor of revision of Article 3, section 1 ☐
 Opposed to revision of Article 3, section 1 ☐

Item 2. Article 4, Section 1. Eliminate the directors from the executive committee.

In favor of deletion of Article 4, section 1 ☐
 Opposed to deletion of Article 3, section 1 ☐

Signed: _____ Date: _____

Name (Please print) _____

Please mail this ballot to the Corresponding Secretary:

Chris Hubley
 95 Naubuc Avenue
 East Hartford, CT 06118

Ballots must be received by the corresponding secretary on or before Thursday, April 18, 2002 in order to be counted. ***Please see the front of this sheet for details.***

**MICROMOUNTERS OF NEW ENGLAND
ABSENTEE BALLOT FOR 2002-2003 OFFICERS**

This ballot is intended for members of the Micromounters of New England who wish to cast ballots for the officers of the MMNE and for proposed by-laws changes and who are unable to attend the annual business meeting on Saturday, April 20, 2002. Several proposed by-law changes will be voted on at the same time. Ballots must be received by the corresponding secretary on or before Thursday, April 18, 2002 in order to be counted.

The MMNE by-laws state that the nominating committee shall generate a slate of officers which is then presented to the membership in the *Newsletter*. The slate, along with nominations from the floor, shall be presented to the membership at the annual business meeting held each year in April. All members have the right to vote, either in person or via an absentee ballot. 10% of the total membership, but not less than 10 members shall form a quorum for the purpose of elections or the transaction of business.

Currently the membership chairperson and editor of the Newsletter are appointed by the president and are not members of the executive committee. A by-laws change is proposed to add these two offices to the executive committee and eliminate the two directors from the executive committee.

Nominees:	President:	Jim Cahoon
	Vice President:	Bob Janules
	Treasurer:	Anita Hubley
	Corresponding Secretary:	Chris Hubley
	Recording Secretary:	Pat Barker
	Membership Chairperson:	Brian Porter
	Editor:	Mike Swanson

All nominees have agreed to serve if elected.

**ARTICLE 3
Officers and Their Duties**

Section 1. The officers of this Club shall consist of a President, Vice-President, a Recording Secretary, a Corresponding Secretary and a Treasurer, all of whom shall be elected at the annual meeting and shall hold office until their successors are elected.

Change to read: The officers of this club shall consist of a President, Vice-President, Recording Secretary, Corresponding Secretary, Treasurer, Membership Chairperson, and the Editor of the *Newsletter*, all of whom shall be elected at the annual business meeting and shall hold office for a term of one year until the next annual meeting or until their successors are elected.

**ARTICLE 4
Executive Board**

Section 1. The Executive Board shall consist of the officers of the Club and two members at large called Directors. One Director shall be elected annually to serve a two-year term, or until a successor is elected.

Delete this section so as not to increase the size of the executive committee.

Please see the back of this sheet for the actual ballot.

**MICROMOUNTERS OF NEW ENGLAND
21st ANNUAL NORTHEAST MEETING
Saturday, May 18, 2002
Moose Lodge
67 Fitchburg Street, Marlborough, MA**

Schedule:	9:00 - 12:00	Registration, informal session
	12:00 - 1:00	Lunch
	1:00 - 2:00	Speaker
	2:00	Door Prize drawings
	2:00 - 4:00	Informal session

PROGRAM

Gene Bearss will speak on Micromounting in the Maine Granite Pegmatites

Bring your microscope, light, extension cord and specimens for discussion, identification, swapping or give-away.

Give-away material will be available but please bring some of your own to spice up the selections.

There will be a sales table. Please consider bringing some choice micromount material to donate to the sales table to help defray the cost of the meeting.

A registration fee of \$20 for members and \$25 for non-members includes light refreshments, lunch and a souvenir program.

Note: No private sales of mineral specimens may be conducted in the Moose Lodge.

The following lodging sites are available nearby. Make your own reservations.

Hampton Inn, Framingham, MA 1-800-426-7866
Rte 20, 1 mile east of I-495

Super 8 Motel, Marlborough, MA 1-800-848-8808
On the road into Solomon Pond Mall from I-295

Red Roof Inn, Southboro, MA 1-800-843-7663
I-495 & Rte 9

Holiday Inn, Marlborough, MA 1-800-465-4329
I-495 & Rte 20

A map to the meeting site is on the reverse of this page.

REGISTRATION FORM

REGISTRATION FEE: Members \$20, Non-members \$25
MAKE CHECKS PAYABLE TO: MICROMOUNTERS OF NEW ENGLAND
RETURN TO: Margaret Stewart
244 Mill Street, Burlington, MA 01803-1838

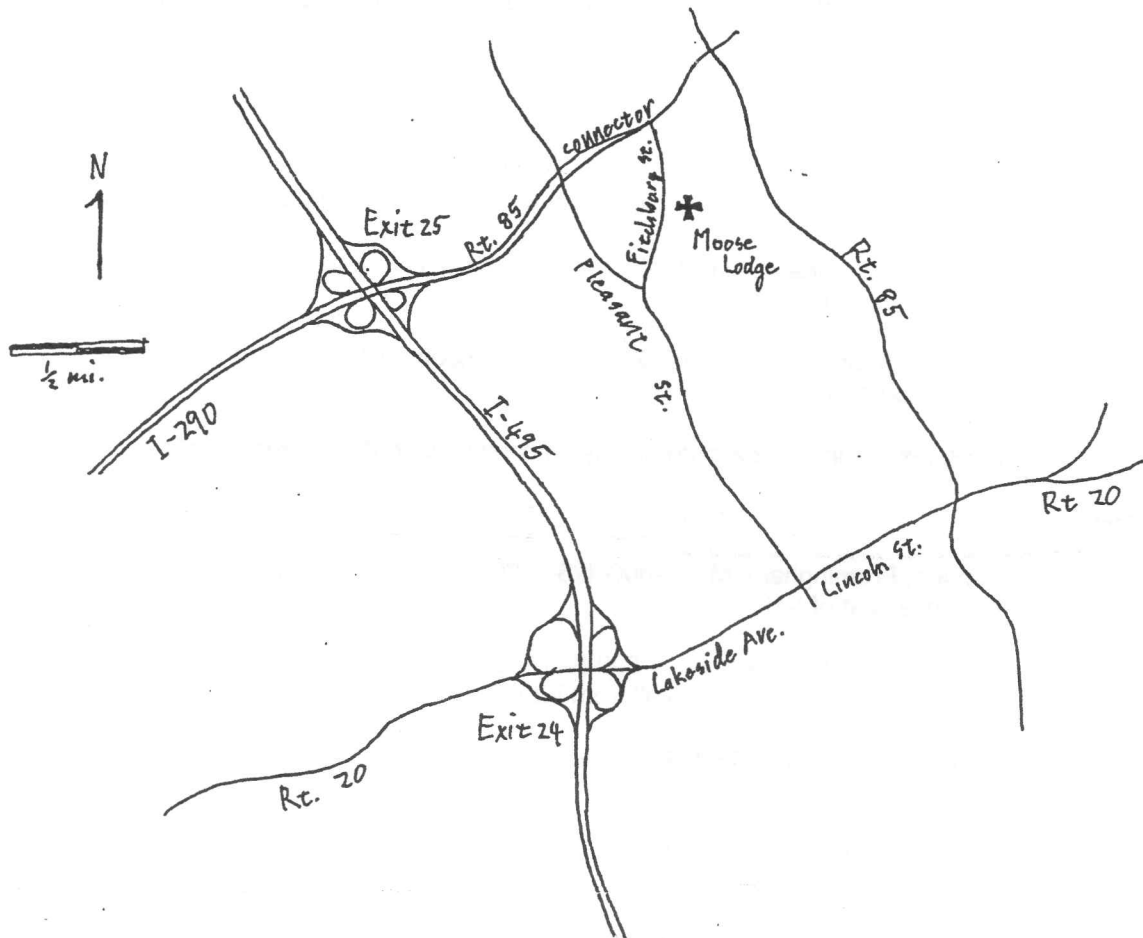
NAME(S): _____ @ \$20 each _____
@ \$25 each _____

ADDRESS: _____

**PLEASE RETURN BY MAY 1, 2002 AS SPACE IS LIMITED
48 HOUR NOTICE IS REQUIRED FOR REFUND**

Moose Lodge, Marlborough, MA

The map shown has been modified to show all approaches, so that compass directions and distances are distorted.



Last Name	First Name	Address	City	State	Postal Code	Home Phone	Email Address
Anderson	John & Susan	17 Ginley Road	Walpole	MA	02081	(508) 668-2008	jranders@erols.com
Anderson	George	62 Diane Drive	Vernon	CT	06066-6237	(860) 646-4474	gander323@aol.com
Barker	Robert	PO Box 810	Campion	NH	03223-0810	(603) 536-2401	barker@comriver.com
Barker	Patricia	PO Box 810	Campion	NH	03223-0810	(603) 536-2401	barker@comriver.com
Beass	Gene	33 North Avenue	Sanford	ME	04073-2943	(207) 324-3610	
Belancourt	Philip	410 Chester Avenue	Moorestown	NJ	08057-2502	(609) 234-8284	pbelancourt@worldnet.att.n
Biggart	Norman B.	4 Baron Park Lane, Apt. #1	Burlington	MA	01803-5431	(781) 272-1537	normyking@juno.com
Boggs	Robert	10434 22 Avenue SW	Seattle	WA	98146-1333	(206) 242-7485	
Brackley	Robert	2099 Sanford Road	Wells	ME	04090-6439	(207) 646-7374	
Caroon	Jim	31 Parker St.	Maynard	MA	01754	(978) 897-8221	jcahoon@geochronlabs.co
Cantor	Harve	11 Carr Lane	Sicklerville	NJ	08081	() - 0	
Cares	Steve & Janet	18 Singletary Lane	Sudbury	MA	01776-2402	(978) 443-9180	
Champlain	Richard	15 Burr Rd.	Old Lyme	CT	06371	(203) 434-5092	
Chamman	Alfred	571 Forest Road	West Suffield	CT	06093		
Dodge	Marilyn	534 Salem Street	Wakefield	MA	01880-1238	(781) 224-7326	assoc9069@aol.col
Ebner, Jr.	John	PO Box 1169	Wall	NJ	07719-1169	(732) 681-3451	jcebnerr@cs.com
Elvin	Alfred	52 Second Hill Road	New Milford	CT	06776	(860) 355-3837	al-lauren-lucie@worldnet.att.
Fielding	Herbert	48 Butters Row	Wilmington	MA	01887-3341	(978) 657-7463	hfielding@netzero.net
Fogg	Vera	1040 Gorham Pond Road	Dunbarton	NH	03045-4508	(603) 774-6450	
Goldberg	Murray & Shirley	2 Tropicana Court	Toms River	NJ	08757-6445	(732) 505-6860	murgold@juno.com
Hakesley	Edward	511 E 13th Street	Mountain Home	AK	72653		edscamp@aol.com
Henderson, Jr.	William A.	47 Robin Ridge Dr.	Madison	CT	06443-2044	(203) 245-0489	willhenderson@cshore.com
Herard	Harold	2 Betty Street	Auburn	MA	01501	(508) 755-5947	
Hitchings	Les & Marge	10 Church Street	Saugus	MA	01906-2474	(781) 233-4968	
Hollmann	Ken	PO Box 134	Center Rutland	VT	05736-0134	(802) 747-1443	kenhollmann@ae.ge.com
Hubley	John and Anita	90 Valley View Drive	South Windsor	CT	06074-2829	(203) 644-9600	hubley264@cox.com
Hubley	Christopher	95 Naubuc Ave	East Hartford	CT	06118	(860) 985-3076	chubley@snet.com
Jackson	Gordon & Pamela	PO Box 600	Canterbury	NH	03224-0600	(603) 783-4493	gsj8544@aol.com
Janules	Bob	17 Woodward Rd.	Merrinack	NH	03054	(603) 424-9269	janules@worldnet.att.net
Jewell	Inga & Dana	100 Lynn Falls Parkway	Melrose	MA	02176-2610	(781) 665-2756	
Kieron	Michael W.	38 Merritt Rd.	Riverside	RI	02915-3805	(401) 434-0281	mkieron@cox.net
Landers	Joan	PO Box 58	Vernon-Rockville	CT	06066-0058	(860) 872-4795	jlanders@yahoo.com
Lane	Walter & Carolyn	673 Gore Road	Alfred	ME	04002-3019	(207) 324-5934	
Leighton	Phyllis	10 Templeton Road	Phillipston	MA	01331-9794	(978) 249-4261	
Lerer	Edna	68 Pompositicut Street	Stowe	MA	01775-1107	(978) 897-2630	
MacIndewar	Josephine	72 Ryder Avenue	Melrose	MA	02176	(781) 665-9107	
McCulloch	Dr. Hugh	211 Howe Street	Point Pleasant	NJ	08742-4522	() - 0	

Last Name	First Name	Address	City	State	Postal Code	Home Phone	Email Address
Morrison	Frances & George	182 Pine Street	Pawtucket	RI	02680-3918	(401) 726-2931	
Mortimer	Tom	3 Roberts Road	Amherst	NH	03031	(603) 673-4039	tjmort@aol.com
Norbut	Mary	122A New State Road	Manchester	CT	06040	() - 0	
Pershken	Richard	150 Surry Drive	Bristol	CT	06010-7261	(860) 583-3909	deltapapaw@aol.com
Porter	Brian L.	355 Walsh Ave.	Newington	CT	06111	(860) 666-4505	bporter@zplink.net
Rambo	George & Doug	17 North Avon Drive	Claymont	DE	19703-1501	(302) 798-4163	drambo@wserv.com
Reutlinger	Steve	PO Box 39	Greenfield	NH	03047-0039	(603) 547-3648	sjprime@aol.com
Saums	Marjorie	24 Joseph Street	Manchester	CT	06040	(860) 649-5443	
Sevrens	Betty	PO Box 397	Plymouth	NH	03264-0397	(603) 546-2050	
Sole	Elaine M.	188-02 89th Avenue	Hollis	NY	11423-1906	(718) 776-3823	
Spellman	Richard	122A New State Road	Manchester	CT	06040	(860) 643-6843	respellman@snet.net
Stanescski	Ilene & Ted	25 Woodside Crossing	Enfield	CT	06082	(860) 749-1064	iweins@hotmail.com
Stenberg	Richard	185 Redlands Street	Springfield	MA	01104	(413) 733-9309	
Stewart	Margaret & John	244 Mill Street	Burlington	MA	01803-1838	(781) 272-0854	micromount@juno.com
Swanson	Michael	29 Chestnut Hill	Greenfield	MA	01301-3003	(413) 773-3867	msmicros@crockers.com
Swarts	Johannes	PO Box 846	Bradford	VT	05033-0846	(802) 222-4875	johannes_swarts@gdt1.co
Taparowsky	Bettee	404 Westford Drive	Southport	CT	06490-1479	(203) 254-2508	
Teixeira	Angie	25 Chappell Street	Seekonk	MA	02771-4107	(508) 336-5561	angietex@aol.com
Warner	D. James	23 June St.	Auburn	MA	01501-1744	(508) 752-8328	buckybaggera@yahoo.com
Weber	Marcelle & Charles	1172 West Lake Avenue	Guilford	CT	06437-1342	(203) 457-9810	mhweber35@mac.com
Whitmore	Robert	Route 2	Weare	NH	03281		
Whittemore	Scott	8 Goldfinch Lane	Nashua	NH	03062-2243	(603) 888-1174	cyrtolite@aol.com
Wilken	Anna & Robert	32 Red Cedar Drive	New Milford	CT	06776	(860) 355-4010	microxl@att.net

Continued from last issue

Silver (Ag): Dissolve a pinch of powdered mineral in a drop or two of HNO_3 , add a drop of HCl . If Ag is present it will yield a white precipitate of silver chloride (AgCl) which turns dark on exposure to light. The precipitate will not dissolve in hot water (see test for Cr in the previous post) but will dissolve in NH_4OH . (Same test shows Hg, but it won't dissolve in NH_4OH . To confirm, add 2 or 3 drops of potassium chromate – if you get a brick red precipitate it's silver chromate (Ag_2CrO_4) and Ag is confirmed.

Sulfate (SO_4): For water-soluble minerals, dissolve a pinch of powdered mineral in a few drops of distilled water, then add a few drops of barium chloride solution – $\text{BaCl}_2 \cdot 2\text{H}_2\text{O}$. If SO_4 is present it will yield a white precipitate of BaSO_4 .

Sulfate (SO_4): For non water-soluble minerals, first dissolve the powdered mineral in HCl , then evaporate most of the acid by heating until the solution is almost gone. Then add a few drops of distilled water. This gets you to the same place as the start of the test described above, with the SO_4 disassociated from the metallic ion(s) – proceed with that test.

Sulfur (S)/Hydrogen Sulfide (H_2S): Suspected sulfide minerals can be easily tested by crushing to a powder and then adding a drop of HCl to a pinch of the powder. Sniff (gingerly!) – a “rotten egg” odor indicates the presence of hydrogen sulfide gas being released by the reaction. Sometimes this will even work with a crystal or chip that hasn't been powdered. And sometimes the process of grinding the mineral to powder produces the odor – such as with pyrite. So, you may not even have to add the acid!

Tantalum (Ta): Same test as for niobium – see above. (Unfortunately, I don't know of any “home lab chemistry” test that will distinguish between the two...)

Tin (Sn): Dissolve a pinch of powdered mineral in a few drops of HCl , add small shavings of zinc and heat over a flame; if Sn is present it will form a white precipitate on the Zn shavings.

Tin (Sn): Use the tests as for bismuth (see previous post). Sn will produce the same result, but the Sn-hydroxide will re-dissolve in excess NH_4OH – and Sn-sulfide is a lighter brown color.

Uranium (U): Mix a pinch of the powdered mineral in a drop or two sulfuric acid (H_2SO_4), then heat the solution carefully to evaporate the liquid away until the remaining powder is almost dry. Add several drops of distilled water to make a yellow solution. Draw off the solution from the powder. Add tiny shavings of zinc to the

solution. If U is present the solution will turn from yellow to green, and in time a yellow precipitate will form on the remaining zinc. (Note: If large amounts of iron or vanadium are also present, they will interfere with this test.) [WARNING: Do not breath powdered U minerals or the fumes from the solution! Do this test in a well-ventilated area. U can cause radiation burns and cancer if breathed in. Use all due precautions. Exhaust all other possible means of identification – fluorescence, crystallographic, physical, geiger counter, etc. - before trying chemical ones.]

Vanadium (V)/ Vanadate (VO_4): Dissolve a pinch of powdered mineral in a few drops of HCl , add zinc shavings and heat strongly for several minutes. If V is present the solution will turn first yellow, then green, and finally bluish-violet.

Vanadium (V): Another test is to slowly add NH_4OH to the test solution until it is slightly basic (use litmus paper), then add two additional drops of NH_4OH and one drop of fresh Na_2S solution. If V is present the solution will turn a violet-red color. (Note: This test will not work if molybdenum is also present.)

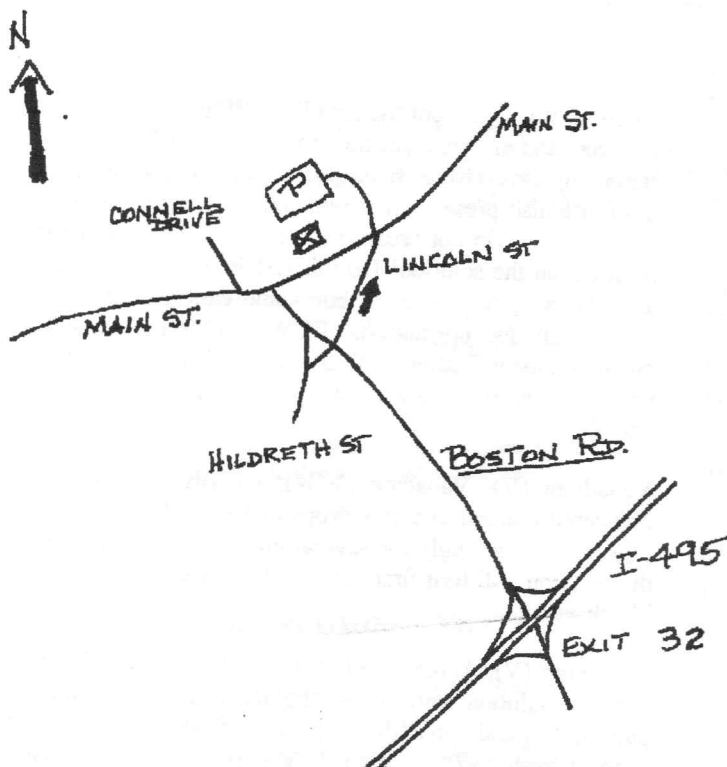
Zinc (Zn): Dissolve a pinch of powdered mineral in a few drops of HCl , add several drops of fresh Na_2S solution. If Zn is present it will form a white precipitate of ZnS .

From **Alan Plante** - June 01, 2001

This concludes Alan Plante's Chemistry series, but there are a number of comments and additions which have come out in various formats since publication of this article in micromounting@groups.yahoo.com. These will be presented in subsequent *Newsletters*.

MMNE Treasurer's Report August 31 - December 31, 2001

Opening Balance	
August 31, 2001	\$5,634.04
Income	279.00
Expenses	1,765.02
Ending balance	
December 31, 2001	\$4,148.02



WESTFORD, MA Public Library

Directions to Westford, MA Public Library

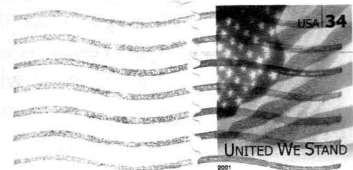
From I-495, coming from north or south, take exit 32 and head north towards Westford on Boston Rd. Go approximately one (1) mile to fork in road and take Lincoln St. to the right. At the intersection of Lincoln and Main Sts. The entrance to the parking lot is directly across the street, and the library is across the street to the right. Enter through rear door and go down several steps to meeting room on the left. Doors open at 10 AM.

MMNE Meeting Schedule

Saturday, April 20
Annual business meeting
Shrewsbury, MA Public Library.

Saturday, May 18
Annual Northeast meeting with speaker
Moose Lodge, Marlborough, MA

Micromounters of New England
Michael W. Swanson, Editor
29 Chestnut Hill
Greenfield, MA 01301-3003



Tom Mortimer 02
3 Roberts Road
Amherst, NH 03031