

MICROMOUNTERS OF NEW ENGLAND



The MMNE was organized on November 5, 1966 for the purpose of promoting the study of minerals that require a microscope.

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Dues are \$4.00 per year and are due on January 1st, payable to the Treasurer.

Contributions of news items for the Bulletin are welcome and should be sent to the Editor.

This bulletin may be quoted if credit is given. --- Club Address is c/o Editor.

→ NEXT MONTH

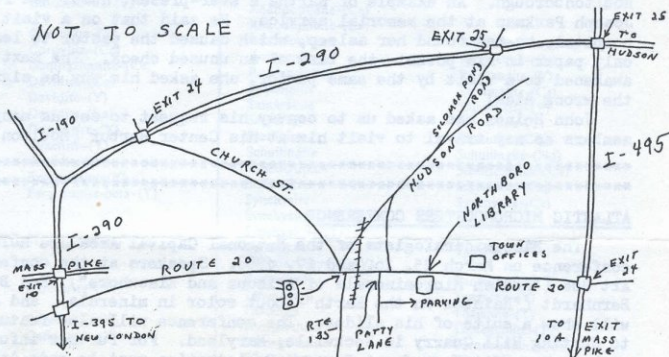
The next meeting of the MMNE will take place on Saturday, March 12, 1988 at the Auburn Public Library.

FEBRUARY 1988

NEWSLETTER #121

The next regular meeting of the Micromounters of New England will take place on Saturday, February 6, 1988, at the Northborough Public Library. As this is a new location for our members' meeting, directions as well as a map have been printed below. Janet & Steve Cares hope to arrive early enough to place signs on the back door. If you happen to arrive earlier than they, you will have to go around to the other entrance.

Dues are due. It cannot be said often enough. Please remember to check your mailing label to see if you have paid (I have received an updated list just prior to this publication). I am placing a red "D" (for dues) on those labels which do not appear with an 88 listing. *For those of you who are uncertain as to whether you paid your dues (and if you belong to several mineral clubs, it can get confusing)-- check your label. An "88" will appear on all labels where dues have been recorded as being paid.



The Northboro Public Library is a new meeting place with excellent facilities. The map shown has been modified to show all approaches, so that compass directions and distances are distorted. The following directions will help:
FROM MASS PIKE WEST: Take exit 10 to I-290 thru Worcester, then exit 24 (Church Street) to Northboro*
FROM I-495 SOUTH: Take exit 24 (route 20) west to Northboro*
FROM I-495 NORTH: Take exit 25 (I-290) to exit 25 (Solomon Pond Road) to Northboro*
*At Northboro follow map to Patty Lane off route 20 between Library and railroad tracks, turn down, then left to Library parking lot. Enter meeting room through rear door at parking lot level.

IN MEMORIAM It is with deep regret that we announce the death of Martha Reiner, who passed away on January 7th of this year, after a long illness. Martha, together with her husband John, formed a generous and gracious couple who often hosted our club at their home, and were always glad to see any of our members even at chance meetings at mineral shows. She will be greatly missed. Our sincere condolences are extended to John Reiner.

The following was submitted by member Norm Biggart

Martha I. Reiner - A Memory

The Micromounters of New England had been hosted by the Reiners since 1970. Even before that date, their home in Center Harbor, graced with Martha's smile, welcomed and greeted mineral collectors and micromounters for many years. Virtual pioneers in New Hampshire island living, they were one of only four families living on Long Island on Lake Winnepesaukee, when they established their home over 30 years ago. Today it is a virtual suburb. Martha's home, her kitchen, was open and welcomed for use by friends and collectors. On June 30, 1984, the Reiners celebrated their fiftieth wedding anniversary, which received special recognition at the annual mid-summer gathering of the Micromounters. Only in 1986, shortly after our annual meeting at the Reiner's home, did they find it necessary to move and take a smaller home closer to Center Harbor. Martha's friendship, her joy of living, her interest in people, her humor, and her educational interests never flagged throughout her long lifetime. Her interest in travel took her to Alaska just last year.

It was with sadness that John Stewart and I went to the memorial service for Martha at the Center Harbor Congregational Church on Monday, January 11, 1988. We met and talked with fellow members Bob and Edna Whitmore, Brownie and Dorothea Thompson and John Demar. Earlier, Palmer Sevrens had visited the funeral home in Moultonborough. An example of Martha's ever-present humor was related by Reverend Joseph Parkman at the memorial service. He said that on a visit to her at the hospital, he had found her asleep, which caused the pastor to leave a note on the only paper in his pocket--the back of an unused check. The next day, when she awakened to a visit by the same pastor, she asked him why he signed his checks on the wrong side!

John Reiner has asked us to convey his request to see as many friends and members as may travel to visit him at his Center Harbor (Moultonborough) home.

ATLANTIC MICROMOUNTERS CONFERENCE

The Micromineralogists of the National Capital Area are holding their 1988 conference on March 25, 26, and 27, 1988. Speakers at the conference will include Art Roe ("Newish Micromineralists of Arizona and Elsewhere"), Ron Bentley, Jules Bernhardt ("Rainbow in the Earth"--about color in minerals), and Lou Perloff, who will show a suite of his slides. The conference will also feature a field trip to Hunting Hill Quarry in Rockville, Maryland. For further information check with either your Editor or Janet Cares. Registration must be made in advance. (by March 15)

MICROMOUNT/THUMBNAIL BOXES AVAILABLE

New hinged plastic boxes with clear top and black bottom are immediately available in the following sizes:

1" X 1" X 3/4" (Black base 1/2", clear lid 3/4") \$50 per thousand

1 1/4" X 1 1/4" X 1" (Black base 5/8", clear lid 3/8") \$75 per thousand

There are 3000-4000 of the smaller boxes, and 1000 of the larger. Either size may be reordered. See Steve or Janet Cares for particulars. Note: amount of available boxes may vary subject to sales prior to publication of this newsletter.

REVISED NOMENCLATURE FOR RARE-EARTH MINERALS
(as of December, 1986)

Nickel, E.H. & J.A. Mandarino, Procedures...
and Guidelines on Mineral Nomenclature",
Canadian Mineralogist 25:353-377, 1987

Original Name	Revised Name
Aeschynite	Aeschynite-(Ce)
Aeschynite-(Nd)	
Agardite	Agardite-(Y)
Agardite-(La)	
Allanite	Allanite-(Ce)
Allanite	Allanite-(La)
Allanite-(Y)	
Ancylite	Ancylite-(Ce)
Ashcroftine	Ashcroftine-(Y)
Bastnäsite	Bastnäsite-(Ce)
Bastnäsite-(La)	
Bastnäsite-(Y)	
Bijvoetite	Bijvoetite-(Y)
Braitschite	Braitschite-(Ce)
Britholite	Britholite-(Ce)
Britholite-(Y)	
Calcioancylite	Calcioancylite-(Ce)
Calkinsite	Calkinsite-(Ce)
Cappelenite	Cappelenite-(Y)
Caysichite	Caysichite-(Y)
Cebaite	Cebaite-(Ce)
Cerianite	Cerianite-(Ce)
Cerriopyrochlore	Cerriopyrochlore-(Ce)
Cerite	Cerite-(Ce)
Cerrotungstite	Ytrotungstite-(Ce)
Chernovite	Chernovite-(Y)
Chevkinite	Chevkinite-(Ce)
Chukhrovite	Chukhrovite-(Y)
Chukhrovite-(Ce)	
Churchite	Churchite-(Y)
Cordylite	Cordylite-(Ce)
Daqingshanite	Daqingshanite-(Ce)
Davidite	Davidite-(Ce)
Davidite	Davidite-(Y)
Davidite	Davidite-(La)
Donnayite	Donnayite-(Y)
Euxenite	Euxenite-(Y)
Ewaldite	Ewaldite-(Y)
Fergusonite	Fergusonite-(Y)
Fergusonite-beta	Fergusonite-beta-(Y)
Fergusonite-beta-(Ce)	
Fergusonite-beta-(Nd)	
Florencite	Florencite-(Ce)
Florencite-(La)	
Florencite-(Nd)	
Fluocerite	Fluocerite-(Ce)
Fluocerite-(La)	
Formanite	Formanite-(Y)
Gadolinite	Gadolinite-(Y)
Gadolinite-(Ce)	
Gagarinite	Gagarinite-(Y)
Gysinite	Gysinite-(Nd)
Hellandite	Hellandite-(Y)
Hingganite	Hingganite-(Y)
Hingganite-(Yb)	
Huanghoite	Huanghoite-(Ce)
Hydroxyl-bastnäsite	Hydroxyl-bastnäsite-(Ce)
Hydroxyl-bastnäsite-(Nd)	
Ilmorite	Ilmorite-(Y)
Ilmaussite	Ilmaussite-(Ce)
Joaquinite	Joaquinite-(Ce)
Kainosite	Kainosite-(Y)
Karnasurtite	Karnasurtite-(Ce)
Keivyite	Keivyite-(Yb)
Kimuraite-(Y)	
Kobeite	Kobeite-(Y)
Kusultite	Kusultite-(Ce)
Lanthanite	Lanthanite-(La)

Original Name	Revised Name
Lanthanite-(Ce)	
Lanthanite-(Nd)	
Laplandite	Laplandite-(Ce)
Lepsonninite	Lepsonninite-(Gd)
Lokkate	Lokkate-(Y)
Loparite	Loparite-(Ce)
Loransite	Loransite-(Y)
Mckelveyite	Mckelveyite-(Y)
Melanocerite	Melanocerite-(Ce)
Minasgeraisite	Minasgeraisite-(Y)
Monazite	Monazite-(Ce)
Monazite-(La)	
Monazite-(Nd)	
Monteregianite	Monteregianite-(Y)
Moydite	Moydite-(Y)
Neodymium churchite	Churchite-(Nd)
Niobaeschynite-(Ce)	
Nordite	Nordite-(La)
Nordite-(Ce)	
Okanaganite	Okanaganite-(Y)
Orthojoaquinite	Orthojoaquinite-(Ce)
Parisite	Parisite-(Ce)
Perrierite	Perrierite-(Ce)
Petersite	Petersite-(Y)
Polycrase	Polycrase-(Y)
Retzian	Retzian-(Ce)
Retzian-(La)	
Retzian-(Nd)	
Rhabdophane-(Ce)	
Rhabdophane-(La)	
Rhabdophane	Rhabdophane-(Nd)
Rontgenite	Rontgenite-(Ce)
Rowlandite	Rowlandite-(Y)
Sahamite	Sahamite-(Ce)
Samarskite	Samarskite-(Y)
Saryarkite	Saryarkite-(Y)
Sazhinite	Sazhinite-(Ce)
Schuilingite	Schuilingite-(Nd)
Steenstrupine	Steenstrupine-(Ce)
Stillwellite	Stillwellite-(Ce)
Synchysite	Synchysite-(Ce)
Synchysite-(Nd)	
Synchysite-(Y)	
Tadzhikite	Tadzhikite-(Ce)
Tantaloeschynite-(Y)	
Tanteuxenite	Tanteuxenite-(Y)
Tengerite	Tengerite-(Y)
Thalenite	Thalenite-(Y)
Tombarthite	Tombarthite-(Y)
Törnebohmitite	Törnebohmitite-(Ce)
Törnebohmitite	Törnebohmitite-(La)
Tritomite	Tritomite-(Ce)
Tritomite-(Y)	
Tundrite	Tundrite-(Ce)
Tundrite-(Nd)	
Tveitite	Tveitite-(Y)
Vitusite	Vitusite-(Ce)
Vyuntspakhkrite	Vyuntspakhkrite-(Y)
Wakefieldite	Wakefieldite-(Y), (Ce)
Xenotime	Xenotime-(Y)
Yttrialite	Yttrialite-(Y)
Yttrobetafite	Yttrobetafite-(Y)
Yttrocolumbite	Yttrocolumbite-(Y)
Yttrocrasite	Yttrocrasite-(Y)
Yttropyrochlore	Yttropyrochlore-(Y)
Yttrotantalite	Yttrotantalite-(Y)
Yttrotungstite	Yttrotungstite-(Y)
Zhonghuacerite	Zhonghuacerite-(Ce)

OBSERVATIONS ON THE REVISED MINERAL
NOMENCLATURE OF FLEISCHER'S GLOSSARY
(5TH EDITION) AND SOME EFFECTS ON
MINERAL COLLECTIONS

By Hugh Heron in "Micro News and
Views", October 1987

INTRODUCTION

Apart from the 340 or so new mineral names approved by the International Mineralogical Association Committee on New Minerals and Mineral Names, since the 1983 GLOSSARY OF MINERAL SPECIES appeared, a major feature of the new 5th edition of the GLOSSARY (1987) has been the universal adoption of the Levinson system for the naming of minerals containing rare-earth elements (REE) and yttrium. This system provides for the use of a suffix to indicate the major rare-earth element present. Thus xenotime, an yttrium phosphate, is now known as xenotime-(Y). This system is especially valuable where several analogues are known or suspected, as seen in the discussion of agardite, below. This suffix system has also been extended to include several species that do not contain REE.

SUFFIX NOMENCLATURE FOR REE MINERALS

As indicated above, the purpose of the Levinson system is to indicate the principal REE present in the mineral whilst at the same time clearly showing the close relationships between the different but closely related minerals. Monazite is a case in point. Originally, the mineral formerly referred to as monazite was found to contain cerium as the dominant REE and, following the Levinson system, the mineral is now clearly referred to as monazite-(Ce). Two other minerals of identical structure but differing only in REE content have been described and named monazite-(La) and monazite-(Nd), being lanthanum and neodymium-rich analogues of monazite-(Ce), respectively. This system, apart from indicating closely related species, simplifies the nomenclature in that it renders the seeking of new mineral names of species already described unnecessary--one needs only to modify an already familiar and accepted name by means of a suffix.

SUFFIX NOMENCLATURE FOR NON-REE MINERALS.

Until now, the general policy appears to have been to avoid the use of suffix-type nomenclature for non-REE species and, instead, to make use of prefixes to differentiate between species that are closely related chemically. Thus one refers to ferro-anthophyllite and not anthophyllite -(Fe⁺²). Some non-REE minerals have, however, been characterized using the suffix system. For example, in 1973 the nomenclature of the pumpellyite group was revised by Passaglia and Gottardi using this system. Until the 5th edition of the GLOSSARY however, Fleischer refrained from using this system in toto and referred to the five members of the group as pumpellyite, ferropumpellyite, shuiskite, pumpellyite-(Mn) and julgoldite. In the interests of conformity and in an attempt to show clearly the relationships between the different species in the group, the IMA-approved system has now been adopted (see Table 1). Similar considerations also apply to jahnsite and whiteite, discussed further below.

Table 1: Old and new nomenclature
for minerals of the Pumpellyite
group.

Julgoldite.....	Julgoldite-(Fe ⁺²)
Pumpellyite.....	Pumpellyite-(Mg)
Ferropumpellyite.....	Pumpellyite-(Fe ⁺²)
Pumpellyite-(Mn).....	Pumpellyite-(Mn)
Shuiskite.....	Shuiskite

SOME MINERALS IN COLLECTIONS AFFECTED BY
THE NOMENCLATURE CHANGES.

1. REE-BEARING SPECIES.

A large number of REE-bearing species will have to be appended to the mineral name. Thus xenotime becomes xenotime-(Y), petersite becomes petersite-(Y), and three species from the microlitic cavities in Washington Pass (see Heron, 1983) viz. allanite, okanoganite and gagarinite become allanite-(Ce), okanoganite-(Y), and

gagarinite-(Y) respectively. Other species may require some reading or testing before they can be sorted out. Bastnäsite is a case in point. All the specimens formerly referred to as bastnäsite (note change of spelling from bastnaesite), including the specimens from Washington Pass, are bastnäsite-(Ce). This also applies to the attractive micro specimens from the Red Cloud Fluorite Mine in New Mexico, U.S.A. (see DeMark, 1980). Two other analogues of bastnäsite are known, viz. bastnäsite-(La) and bastnäsite-(Y). The massive bastnäsite from the britholite locality in the Pilanesberg, Bophuthantswana, has not been tested but, bearing in mind that the britholite at the site is britholite-(Ce), it is not unreasonable to expect that it will be bastnäsite-(Ce). In passing, it is worth noting that britholite-(Y) is also found in South Africa. It occurs on the farm Blokspruit 157JQ to the northwest of Rustenburg. One of the most interesting mineral groups affected by the adoption of the Levinson system is the mixite group. Table 2 lists all the species known to date.

Table 2: Minerals of the mixite group.

Agardite-(La)	Agardite-(Y)
Goudyite	Mixite
Petersite-(Y)	

As can be seen, only mixite and goudyite are unaffected by the Levinson system (they do not contain REE). All the ordinary agardites, e.g. those from Bou Skour in Morocco and the aesthetic micro crystal clusters referred to as "chlorotile" from the Black Forest area of West Germany (notably from the Clara Mine, Wolfach) are agardite-(Y). Segeler and Molon (1981), in a paper on the Clara Mine, discussed the identity of chlorotile at some length. The new and very rare species, agardite-(La), appears to be confined to the Red Cloud Fluorite Mine in New Mexico (see DeMark, 1980 for description--the material was found to be La-rich), and to the Damareza Mine at Laurium in Greece (see Fehr and Hochleitner, 1984). Further, it appears that there may be two more agardite species

viz. agardite-(Ce) and agardite-(Nd). The former was mentioned in the paper by Fehr and Hochleitner (1984) but no analysis was given and the name has not been considered by the IMA Commission on New Minerals and Mineral Names (IMAC). The second, agardite-(Nd), was found as pale green fibres, closely resembling aurichalcite, at Wheal Alfred, Phillack, Cornwall, England (see Embrey, 1978). This material has not been published or considered by IMAC as yet.

2. NON-REE-BEARING SPECIES.

Reference has already been made to the pumpellyite group. Generally, most pumpellyite specimens will be pumpellyite-(Mg)--this appears to be the most widespread species and the one most likely to be encountered in collections. This certainly appears to be true of most, if not all, of the specimens from the trap-rocks of New Jersey and Michigan, U.S.A., based upon analyses seen by the author. Specimens from other areas, especially new occurrences, will require an analysis to precisely identify them. The pumpellyite from the basalt amygdalites in the old quarry near Empangeni in Zululand (full locality--Ngqwatayi, Lot 226, Farm No. 13422, Empangeni district) have been examined by Roger Dixon of the S.A. Geological Survey, Pretoria, and, based upon the result obtained on the specimen submitted, it would appear that these Zululand specimens are pumpellyite-(Fe²⁺), i.e. the former "ferropumpellyite". A major problem for collectors will be the members of the whiteite group--the species whiteite and Jahnsite. The nomenclature of this group was examined by Moore and Ito (1978). Table 3 lists the members of this group.

Table 3: Mineralogy of the whiteite group

Old Nomenclature (4th edition, 1963)	New Nomenclature (5th edition, 1987)
Jahnsite.....	Jahnsite-(CaMnMg)
-	Jahnsite-(CaMnFe)
Keckite	Keckite
Whiteite.....	Whiteite-(CaFeMg)
-	Whiteite-(CaMnMg)
Whiteite.....	Whiteite-(MnFeMg)

(OBSERVATIONS OF NOMENCLATURE, CONT.)

The problem here is to determine which species may be present in the collection. In the absence of chemical tests, a knowledge of the localities may be of assistance. The note below is to be considered merely a guide.

Jahnsite-(CaMnMg) = type jahnsite. This seems to be the most commonly encountered species. The Tip Top Mine near Custer in the Custer County, South Dakota is the type locality but it also occurs in many other pegmatitic occurrences including the Palermo pegmatite in North Groton, New Hampshire.

Jahnsite-(CaMnFe). Reported to occur in the Fletcher Mine, New Hampshire.

Whiteite-(CaFeMg) = type whiteite. Two localities were reported by Moore and Ito viz. the Taquaral pegmatites in Minas Gerais, Brazil (type locality) and the Blow River-Big Fish River area in the Richardson Mountains of Canada's Yukon Territory. The specimens generally appear to be of a tan color.

Whiteite-(CaMnMg). A new species--no reference given in the GLOSSARY.

Whiteite-(MnFeMg). Described as a chocolate-brown calcium deficient mineral from Taquaral in Brazil.

3. SWITZERITE: A POST-GLOSSARY NOMENCLATURE CHANGE.

In late 1986, a paper by White, et al appeared in which the switzerite nomenclature was affected. The change was approved by the IMAG. The name "switzerite" is now restricted to the heptahydrate which is unstable and, within a few minutes of being exposed, alters irreversibly to the lower hydrate, metaswitzerite. This nomenclature change means that all specimens labelled as switzerite in collections are actually metaswitzerite.

CONCLUSION.

Changes in nomenclature are avoided as far as possible and are frequently regretted by the mineral collector. Where they do occur, however, they reflect a greater understanding of the species concerned. That so many nomenclature changes have taken place over the

past few years is an indication that a good deal of work is being done in mineralogy. Mineralogy can perhaps be considered one of the most active of the sciences!

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