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. 246 May, 2003

OFFICERS
2002-2003

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

Vice-President
Bob Janules
(603) 424-9269
janules@worldnet.att.net

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

Secretary
Patricia Barker
(603) 536-2401
barker@eagle1st.com

Directors
Gene Bearss
(207) 324-3610

Bob Wilkin
(860) 355-4010
microxl@att.net

Membership
Brian Porter
(860) 666-4505

Editor
Mike Swanson
(413) 773-3867
msmicros@crocker,com

Next Meeting
Saturday, May 17, 2003
Marlborough, MA
Moose Lodge
9:00AM - 4:00PM

Map and directions are on the back page

For information regarding **MEETING CANCELLATION** due to inclement weather, contact President Jim Cahoon at (978) 897-8221 or cahooncj@aol.com

MMNE MEETING, APRIL 19, 2003

The annual business meeting was convened at 11:15 AM by President Jim Cahoon with twelve members present. Old business consisted of reviewing plans for the upcoming May Symposium and tying up loose ends. New business included the election of officers for fiscal year 2003-2004 and revision of the bylaws. The proposed slate of officers was elected unanimously with no nominations from the floor. Eight absentee ballots were cast for the slate as presented. The bylaws were passed as presented in past issues of the *Newsletter*. A motion was then made and seconded to suspend the rules according to Robert's Rules of Order. Discussions were held regarding the following: 1) consolidation of the positions of Recording and Corresponding Secretary into a single position, 2) removing the positions of Editor and Membership Chairperson from the Executive Committee and making them appointed positions, and 3) adding two directors to the Executive Committee. After the discussions he rules were suspended by unanimous vote. Individually, the positions of recording Secretary and Corresponding Secretary were consolidated into a single office of the Secretary, the positions of Editor and Membership Chairperson were removed from the Executive Committee and made into appointed positions (appointed by the President with Executive Committee approval), and positions of two Directors were created, all by unanimous votes. President Cahoon asked the current Membership Chairperson, Brian Porter and Editor, Mike Swanson, to continue in those capacities, and both agreed. The business portion of the meeting concluded at 12:10 PM.

The new MMNE officers;

President - Jim Cahoon
Vice President - Bob Janules
Secretary - Pat Barker
Treasurer - Anita Hubley
Director, one year term - Bob Wilken
Director, two year term - Gene Bearss

FROM THE EDITOR

I have been hearing a number of complaints about the maps for the various meeting locations. Most of the them are very old, hand made maps which have been religiously reused over the years. The driving directions are often out of date or inadequate for someone who has never been there (especially Chelmsford). MapQuest or similar web based maps are often hard to reproduce and may be confusing. It would be a great help if MMNE members living in the various towns where we hold meetings would make new maps which include **WRITTEN DIRECTIONS** from nearby main travel routes. Particularly needed are maps and directions for **CHELMSFORD, AUBURN AND BURLINGTON, MA**. Updates for **SHREWSBURY, WESTFORD, AND NORTHBORO** would also be appreciated. Let me know if you plan to do one so we do not get any overlap.

Included in the last *Newsletter* was a short article about the roscherite group of minerals. In this issue is a new nomenclature for the labuntsovite-nenadkevichite group courtesy of Laszlo Horvath and the CMMA Micro News. If these articles are of interest to you, then please consider doing a write-up on one of your favorite minerals or mineral groups to share with other members. Another useful topic would be a species list from one of your favorite collecting sites. There are plenty of good resources available, particularly on the internet - mindat.com and webmineral.com to name two. Your fellow members will appreciate your time and efforts.

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 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.
DUES are $10/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.

Officers for 2002-2003

President: Jim Cahoon, 31 Parker St., Maynard, MA 01754	(978) 897-8221	jcahoon@geochronlabs.com
Vice President: Bob Janules, 17 Woodard Rd., Merrimack, NH 03054	(603) 424-9269	janules@worldnet.att.net
Treasurer: Anita Hubley, 90 Valley View Drive, S. Windsor, CT 06074-2829	(203) 644-9600	hubley264@cox.net
Secretary: Pat Barker, PO Box 810, Campton, NH 03223-0810	(603) 536-2401	barker@eagle1st.com
Directors: Gene Bearss (2003-5), 33 North Avenue, Sanford, ME 04073-2943	(207) 324-3610	
Bob Wilken (2003-4), 32 Red Cedar Drive, New Milford, CT (06776)	(860) 355-4010	microxl@att.com
Membership Chairperson: Brian Porter, 355 Walsh Ave., Newington, CT 06111	(860) 666-4505	port0202@cox.net
Editor: Mike Swanson: 24 South County Rd., Leyden, MA 01301-9429	(413) 773-3867	msmicros@crocker.com
Editor: Mike Swanson, 24 South County Rd., Leyden, MA 01301-9429	(413) 773-3867	msmicros@crocker.com

CALENDAR OF UPCOMING EVENTS: SHOWS

May 2003

3-4 - North Shore Rock and Mineral Club's 40th Annual New England Gem & Mineral Show. Topsfield Fairgrounds, Rte 1 North, Topsfield, MA. Information: www.nahant.com/nsrmc/welcome.html

9 - 11 Maine Mineral Symposium. Information: Woodrow Thompson, Maine Geologic Survey, 22 State House Station, Augusta, ME 04333-0022. Information: (207) 287-7178, www.woodrow.b.thompson@state.me.us. or www.maine.gov/doc/nrimc/mgs/mincolect/sympnews.htm

17 - MMNE Northeast Reunion Meeting. Marlboro, MA Moose Lodge. 9AM - 4PM. Speaker: Jason Smith, Minerals of the Foote Mine, Kings Mountain, NC. Info: Mike Swanson (413) 773-3867 or msmicros@crocker.com.

June 2003

7 - Spring Mineralfest. Pennsylvania Earth Sciences Assoc., Inc. Macungie Memorial Park, Macungie, PA

14 - Rock Swap & Sale sponsored by the Connecticut Antique Machinery Assoc. & Danbury Mineralogical Society. Conn. Antique Machinery Assoc., 1 mile N of Kent on Rte 7.

14-15 - Gem-Mineral-Fossil-Jewelry Show. Fulton Co. Mineral Club. Fulton-Montgomery C C, Rte 67, Johnstown, NY

28-29 - Gilsum 39th Annual Rock Swap and Mineral Show. Gilsum, NH. Information (603) 357-9636.

July 2003

26-27 - Champlain Valley 24th Annual Gem, Mineral & Fossil Show. Tuttle Middle School, Dorset Street near Kennedy Drive., South Burlington, VT. Information: www.burlingtongemandmineralclub.org.

August 2003

8-10 East Coast Show, Springfield, MA. Information: http://members.aol.com/mz0955/mzecgmfs.html

September 2003

6-7 - Danbury Mineralogical Society Gem, Mineral & Jewelry Show. Danbury High School Cafeteria, Clapboard Ridge School Cafeteria, Danbury, CT. Information: Jack Polowski (860) 354-0296

December 2003

6-7- Bristol Gem & Mineral Club 31st Annual Show, Beals Senior Center, 240 Stafford Avenue, Bristol CT.

MICROMINERAL RELATED CONFERENCES AND SYMPOSIUMS

May 2003

2-4 - CMMA Annual Micromount Conference. Brock Univ. Information: mskebo@cogeco.ca

17 - MMNE Annual Northeast Reunion Meeting, Marlboro, MA Moose Lodge. 9:00AM to 4:00PM. Information: Mike Swanson at (413) 773-3867 or msmicros@crocker.com.

June 2003

20-22 -Northern California Micromount Symposium, Pollock Pines, Information: geocities.com/yedlinite/Meeting.htm

September 2003

12-14 - Paul Desautels Micromount Symposium. Baltimore, MD. Information: Cpierson@mhaonline.org

NOMENCLATURE OF THE LABUNTSOVITE GROUP, AND THE OCCURRENCE OF LABUNTSOVITE GROUP MINERALS AT MONT SAINT-HILAIRE AND SAINT-AMABLE.

László Horváth

NEW NOMENCLATURE:

The recently published and IMA accepted nomenclature for the labuntsovite group (Chukanov *et al.* 2002), listed seventeen members for the group, redefined on the basis of chemical composition and structural data. Since the publication of the new nomenclature in early 2002, six new (IMA approved) members were added to the growing population of this very interesting group of silicates (I. Pekov personal communications), and others will no doubt follow. In the following, some basic information and references are given on currently known members of the group which are divided into nine structural subgroups. The descriptions of the five newest members are in press, hence these are identified only by their IMA numbers.

NENADKEVICHITE SUBGROUP: orthorhombic

Nenadkevichite $Na_{8-x}Nb_4(Si_4O_{12})_2(O,OH)_4\ 8H_2O$
Type locality: Mount Karnasurt, Lovozero massif, Kola Peninsula, Russia
Reference: Kuzmenko & Kazakova (1955); data from MSH: Perrault *et al.* (1973)
Remarks: This is the original nenadkevichite and the name remains unchanged.
Korobitsynite $Na_{8-x}(Ti,Nb)_2[Si_4O_{12}](O,OH)_2\ 3\text{-}4H_2O$
Type locality: Mounts Alluaiv & Karnasurt, Lovozero massif, Kola Peninsula, Russia
Reference: Pekov *et al.* (1999)

VUORIYARVITE SUBGROUP: monoclinic

Vuoriyarvite-K $(K,Na)_2(Nb,Ti)_2(Si_4O_{12})(O,OH)_2\ 4H_2O$
Type locality: Vuoriyarvi complex, Kola Peninsula, Russia
Reference: Subbotin *et al.* (1998)
Remarks: Published as vuoriyarvite, now designated vuoriyarvite-K.
Tsepinite-Na $(NaH_3O,K,Sr,Ba)_2(Ti,Nb)_2[Si_4O_{12}](OH,O)\ 3H_2O$
Type locality: Khibinpakhchorr, Khibiny massif, Kola Peninsula, Russia
Reference: Shlyukova *et al.* (2002)
Unpublished IMA 2002-005
Unpublished IMA 2002-020

KUZMENKOITE SUBGROUP: monoclinic

Kuzmenkoite-Mn $K_2(Mn,Fe)(Ti,Nb)_4(Si_4O_{12})_2(OH)_4\ 5H_2O$
Type locality: Mount Selsurt, Lovozero massif, Kola Peninsula, Russia
Reference: Chukanov *et al.* (1999)
Remarks: Published as Kuzmenkoite, now designated as kuzmenkoite-Mn.
Kuzmenkoite-Zn $K_2Zn(Ti,Nb)_4(Si_4O_{12})_2(OH)_4\ 6\text{-}8H_2O$
Type locality: Lephke-Nelm, Lovozero massif, Kola Peninsula, Russia
Reference: Chukanov *et al.* (2002)

Karupmøllerite-Ca $(Na,Ca,K)_2Ca(Nb,Ti)_4(Si_4O_{12})_2(O,OH)_4\ 7H_2O$
Type locality: Mellemelv, Ilímaussaq complex, South Greenland

Reference: Pekov *et al.* (2002a)
Gjerdingenite-Fe $K_2[(H_2O)_2(Fe,Mn)][(Nb,Ti)_4(Si_4O_{12})_2(OH,O)_4]\ 4H_2O$
Type locality: Gjerdingselva, Lunner, Oppland, Norway
Reference: Raade *et al.* (2002)

Continued on page 4

Continued from page 3 (Labuntsovite)

Lemmleinite subgroup: monoclinic

Lemmleinite-K $Na_4K_4K_4Ti_8(Si_4O_{12})_4(O,OH)_8\ 8H_2O$
Type locality: Mount Koashva, Khibiny massif, Kola Peninsula, Russia
Reference: Khomyakov *et al.* (1999)
Remarks: Published as lemmleinite later modified by the addition of the -K suffix.
Lemmleinite-Ba $Na_4K_4Ba_{2+x}Ti_8(Si_4O_{12})_4(O,OH)_8\ 8H_2O$
Type locality: Kukisvumchorr, Khibiny massif, Kola Peninsula, Russia
Reference: Chukanov *et al.* (2001)

LABUNTSOVITE SUBGROUP: monoclinic

Labuntsovite-Mn $Na_4K_4Mn_2Ti_8(Si_4O_{12})_4(O,OH)_8\ nH_2O$ (n = 10-12)
Type locality: Mount Kuftn'yun, Lovozero massif, Kola Peninsula, Russia
Reference: Semenov & Burova (1955)
Remarks: This is the original labuntsovite now designated labuntsovite-Mn.
Labuntsovite-Mg $Na_4K_4(Ba,K)_2(Mg,Fe)_{1+x}Ti_8(Si_4O_{12})_4(O,OH)_8\ 10H_2O$
Type locality: Kovdor massif, Kola Peninsula, Russia
Reference: Khomyakov *et al.* (2001)
Labuntsovite-Fe $Na_4K_4(Ba,K)_2(Fe,Mg,Mn)_{1+x}Ti_8(Si_4O_{12})_4(O,OH)_8\ 10H_2O$
Type locality: Kukisvumchorr, Khibiny massif, Kola Peninsula, Russia
Reference: Khomyakov *et al.* (2001)

PARALABUNTSOVITE SUBGROUP: monoclinic

Paralabuntsovite-Mg $Na_8K_8Mg_4Ti_{16}(Si_4O_{12})_4(O,OH)_8\ nH_2O$ (n = 20-24)
Type locality: Trona mine, Sweetwater Co., Wyoming, USA
Reference: Milton *et al.* (1958), Chukanov *et al.* (2002)
Remarks: The original labuntsovite from this locality now designated paralabuntsovite-Mg.

ORGANOVITE SUBGROUP: monoclinic

Organovite-Mn $K_8Mn_4Nb_{16}(Si_4O_{12})_8O_{16}\ nH_2O$ (n = 20-28)
Type locality: Mount Karnasurt, Lovozero massif, Kola Peninsula, Russia
Reference: Chukanov *et al.* (2001)
Organovite-Zn $K_2Zn(Nb,Ti)_4(Si_4O_{12})_2(O,OH)_4\ 6H_2O$
Type locality: Mount Karnasurt, Lovozero massif, Kola Peninsula, Russia
Reference: Pekov *et al.* (2002c)
Parakuzmenkoite-Fe $(K,Ba)_8Fe_4Ti_{16}(Si_4O_{12})_8(O,OH)_{16}\ nH_2O$ (n = 20-28)
Type locality: Mount Kedykverpahk, Lovozero massif, Kola Peninsula, Russia
Reference: Chukanov *et al.* (2001)

GUTKOVAIT SUBGROUP: monoclinic

Gutkovaite-Mn $CaK_2Mn(Ti,Nb)_4(Si_4O_{12})_4\ 5H_2O$
Type locality: Mount Maly Mannepakhk, Khibiny massif, Kola Peninsula, Russia
Reference: Pekov *et al.* (2002b)
Unpublished IMA 2002-003
Unpublished IMA 2002-007

NEW (UNPUBLISHED NAME) SUBGROUP:

Unpublished IMA 2002-006

Continued on page 5

Continued from page 4

THE OCCURRENCE OF LABUNTSOVITE GROUP MINERALS AT MONT SAINT-HILAIRE AND SAINT AMABLE

The obvious question for collectors regarding this group is: in the light of the new nomenclature, how do I know what I have? The short answer to the question is that unless the specimen is fully analyzed (XRD, WDS & IR), it is not possible to be 100% certain what you have. Since it is impractical to analyze all known specimens of labuntsovite and nenadkevichite in everyone's collection, the best we can do is to rely on statistical probability based on the specimens analyzed to date. In reality the situation is not as bad as it sounds.

Mont Saint-Hilaire: Based on the analyses of a good number of specimens the following members of the labuntsovite group have been confirmed to date:

Labuntsovite-Mn: This is the only analogue of labuntsovite confirmed to date, in specimens collected from the igneous breccia, miarolitic cavities and marble xenoliths (tabular crystals). Based on this, it is reasonable safe to label all previously identified MSH labuntsovites as labuntsovite-Mn.

Nenadkevichite: A good number of specimens, identified earlier as nenadkevichite, collected over many years from various environments and associations were analyzed. Most of them turned out to be near end-member composition nenadkevichite, so the chances are that the overwhelming majority of specimens will not need relabeling.

Korobitsynite: The occurrence is very rare and was described here earlier (Horváth 2001).

Tsepinite-Na: The occurrence is very rare and was described here earlier (Horváth 2001).

Vuoriyarvite-K: The occurrence was described here earlier (Tarassoff 2002).

Other members of this group are likely to turn up sooner or later, but the identifications are problematic because they are complex and time consuming. There is no "quick and dirty" way (like EDS) to properly identify these species. UK19-2 is a likely candidate for a Na-dominant analogue of vuoriyarvite if the structure can be solved (Perrault *et al.* 1969, Tarassoff 2002).

Saint-Amable sill: Based on the analyses of selected specimens the following members of the labuntsovite group have been confirmed to date:

Labuntsovite-Mn: All labuntsovites analyzed to date from the miarolitic cavities are labuntsovite-Mn.

Labuntsovite-Fe: Labuntsovite crystals described from the peculiar xenolith found in 1996 (Horváth *et al.* 1998) are the Fe-dominant member, labuntsovite-Fe.

Nenadkevichite: Analyses of a few previously identified specimens of nenadkevichite, confirmed that they were nenadkevichite.

References:

CHUKANOV, N.V., PEKOV, I.V., GOLOVINA, N.I., ZADOV, A.E., & NEDELKO, V.V. (1999a): Kuzmenkoite, $K_2(Mn,Fe)(Ti,Nb)_4[Si_4O_{12}](OH)_4\ 5H_2O$, a new mineral. *Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva,* **128,** 42-49 (in Russian). Abstract: Mandarino (2001), 137.

CHUKANOV, N.V., PEKOV, I.V. &KHOMYAKOV, A.P. (2002): Recommended nomenclature for labuntsovite-group minerals. *European Journal of Mineralogy,* **14,** 165-173.

CHUKANOV, N.V., PEKOV, I.V., RASTSVETAEVA, R.K., & NEKRASOV, A.N. (1999b): Labuntsovite: Solid solutions and features of the crystal structure. *Canadian Mineralogist*, **37,** 901-910.

CHUKANOV, N.V., PEKOV, I.V., RASTSVETAEVA, R.K., ZADOV, A.E. & NEDELKO, V.V. (2001a): Lemmleinite-Ba, $Na_2K_2Ba_{1+x}Ti_4[Si_4O_{12}]_2(O,OH)_4\ 5H_2O$, a new mineral of labuntsovite group. *Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva,* **130,** 3,36-42(in Russian).

CHUKANOV, N.V., PEKOV, I.V., SEMENOV, E.I., ZADOV, A.E., KRIVOVICHEV, S.V., & BURNS, P.C. (2001b): Parakuzmenkoite-Fe, $(K,Ba)_2Fe(Ti,Nb)_4(Si_4O_{12})_2(O,OH)_4\ 7H_2O$, a new labuntsovite group mineral. *Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva* **130,** 6, 63-67. (In Russian with English abstract).

CHUKANOV, N.V., PEKOV, I.V., ZADOV, A.E., AZAROVA, YU.V. & SEMENOV, E.I. (2003 in press): Kuzmenkoite-Zn, $K_2Zn(Ti,Nb)_4(Si_4O_{12})_2(OH,O)_4\ 6\text{-}8H_2O$, a new mineral of the labuntsovite group from Lovozero massif, Kola Peninsula. *Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva*. (In Russian with English abstract).

Continued on page 6

Continued from page 5(labuntsovite)

CHUKANOV, N.V., PEKOV, I.V., ZADOV, A.E., KRIVOVICHEV, S.V., BURNS, P.C. & SCHNEIDER, J. (2001c): Organovaite-Mn $K_2Mn(Nb,Ti)_4[Si_4O_{12}]_2(OH)_4$ $6H_2O$, a new labuntsovite group mineral from Lovozero Massif, Kola peninsula. *Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva,* **130**, 2, 46-54 (in Russian.).

HORVÁTH, L. (2001): Korobitsynite and tsepinite-Na from Mont Saint-Hilaire. *Micronews* **35,** No.5, 5-6

HORVÁTH, L., PFENNINGER-HORVÁTH, E., GAULT, R.A. & TARASSOFF, P. (1998): Mineralogy of the Saint-Amable sill, Varennes and Saint-Amable, Qu bec, Canada. *Mineralogical Record,* **29,** 83-118.

KHOMYAKOV, A.P., NECHELYUSTOV, G.N., FERRARIS, G., GULA, A., & IVALDI, G. (2001): Labuntsovite-Fe, $Na_4K_4(Ba,K)_2(Fe,Mg,Mn)_{1+x}Ti_8(Si_4O_{12})_4(O,OH)_8$ $10H_2O$ and labuntsovite-Mg, $Na_4K_4(Ba,K)_2(Mg,Fe)_{1+x}Ti_8(Si_4O_{12})_4(O,OH)_8$ $10H_2O$ - two new labuntsovite group minerals from Khibiny and Kovdor alkaline massifs, Kola Peninsula. *Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva,* **130,** No.4, 36-45 (in Russian with English abstract).

KHOMYAKOV, A.P., NECHELYUSTOV, G.N., RASTVETAEVA, R.K., & DOROKHOVA, G.I. (1999): Lemmleinite, $NaK_2(Ti,Nb)_2Si_4O_{12}(O,OH)_2$ $2H_2O$ - a new mineral of the labuntsovite-nenadkevichite family. *Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva,* **128,** No.5, 54-63 (in Russian with English abstract). Abstract: Mandarino (2001), 140.

KUZMENKO, M.V., & KAZAKOVA, M.E. (1955): Nenadkevichite -- a new mineral. *Doklady Akademii Nauk SSSR*., **100,** 1159-1160 (in Russian) English abstract: *American Mineralogist*, **40,** 1154.

MANDARINO, J.A. (2001) *New minerals, 1995-1999.* The Canadian Mineralogist, Special Publication **4.**

MILTON, C., MROSE, M.E., FAHEY, J.J., & CHAO, E.C.T. (1958) Labuntsovite from the Trona mine, Sweetwater County, Wyoming. (abstract) *Geological Society of America Bulletin,* **69,** 1614-1615. Peninsula. *Zapiski Vserossiyskogo*

PEKOV, I.V., CHUKANOV, N.V., KHOMYAKOV, A.P., RASTVATAEVA. R.K., KUCHERINKO, & NEDELKO,V.V. (1999): Korobitsynite, $Na_{3-x}(Ti,Nb)_2[Si_4O_{12}](OH,O)_2$ $3\text{-}4H_2O$, a new mineral from the Lovozero massif. Kola Peninsula. *Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva,* **128,** (in Russian). Abstract: Mandarino (2001), 131.

PEKOV, I.V., CHUKANOV, N.V., PETERSEN, O.V., ZADOV, A.E.. YAMNOVA, N.A., KABALOV, Y.K. & SCHNEIDER, J. (2002a): Karupmøllerite-Ca, $(Na,Ca,K)_2Ca(Nb,Ti)_4(Si_4O_{12})_2(O,OH)_4$ $7H_2O$, a new mineral of the labuntsovite group from the Ilímaussaq alkaline complex, South Greenland. *Neues Jahrbuch für Mineralogie, Monatshefte* **Jg. 2002,** 433-444.

PEKOV, I.V., CHUKANOV, N.V., RASTVATAEVA. R.K., ZADOV, A.E. & KONONKOVA, N.N. (2002B): Gutkovaite-Mn, $CaK_2Mn(Ti,Nb)_4(Si_4O_{12})_2(O,OH)_4$ $.5H_2O$, A new mineral of the labuntsovite group from the Khibina massif, Kola Peninsula. *Zapiski Vserossyskogo Mineralogicheskogo Obshchestva* **131,** 2, 51-57.

PEKOV, I.V., CHUKANOV, N.V., ZADOV, A.E.. KRIVOVICHEV, S.V., AZAROVA, YU.V., BURNS, P.C., & SCHNEIDER, J. (2002c): Organovaite-Zn, $K_2Zn(Nb,Ti)_4(Si_4O_{12})_2(O,OH)_4$ $6H_2O$, a new mineral of the labuntsovite group. *Zapiski Vserossyskogo Mineralogicheskogo Obshchestva* **131,** 1, 29-34.

PERRAULT, G., BOUCHER, C., VICAT, J., CANNILLO, J., & ROSSI, G. (1973): Structure cristalline de Nenadkevichite $(Na,K)_{2-x}(Nb,Ti)(O,OH)(Si_2O_6)*2H_2O$. *Acta Crystallographica,* **B29,** 1432-1438. (in French)

PERRAULT, G., BOUCHER, C., VICAT, J., CANNILLO, E., & ROSSI, G. (1973): Nenadkevichite, $(Na,K)_{2-x}(Nb,Ti)_2(O,OH)_4Si_4O_{12}$ $4H_2O$, a new four-fold silica tetrahedra ring structure. *American Mineralogist,* **58,** 1102-1103 (abstract).

PERRAULT, G., VICAT, J., & SANG, N. (1969) UK-19-1 et UK-19-2, deux nouveau silicates hydrates de niobium du Mont St-Hilaire, P.Q. *Canadian Mineralogist*, **10,** 143-144 (abstract).

RAADE, G., FERRARIS, G., GULA, A. & IVALDI, G (2002): Gjerdingenite-Fe from Norway, a new mineral species in the labuntsovite group: description, crystal structure and twinning. *Canadian Mineralogist* **40,** 1629-1639.

SHLYUKOVA, Z.V., CHUKANOV, N.V., PEKOV, I.V., RASTVETAEVA, R.K., ORGANOVA, N.I., & ZADOV, A.E. (2001): Tsepinite-Na, $(Na,H_3O,K,Sr,Ba)_2(Ti,Nb)_2[Si_4O_{12}](OH,O)$ $3H_2O$, a new labuntsovite group mineral. *Zapiski Vserossiyskogo Mineralogicheskogo Obshchestva,* **130,** 43-50 (in Russian with English abstract). *Doklady Rossiyskogo Akademii Nauk,* **358,** 517-519. (In Russian) Abstracted in: Mandarino, J.A. (2001) *New Minerals, 1995-1999*, 258.

Concluded on page 7

TECHNIQUE FOR TRIMMING MICROMOUNTS

A trim saw is often useful for downsizing micromount specimens, particularly to prevent splitting of the specimen in unwanted directions. The bench models, however, can be almost impossible to use for very small pieces. Horst Windisch of South Africa, recently mentioned that he had been using a small diamond blade mounted on a Dremel tool. I located a pack (5) of 3/4" diamond blades at Woodworker's Warehouse for about $15 including the mandrel. These work very well for trimming the back or other unwanted parts of a small specimen. The flat side of the blade is completely covered with diamond chips, so the side can also be used like a grinding wheel to flatten out an edge for mounting. I am running the blade dry, so you have to be careful not to overheat it. You can sharpen it by running it through a piece of brick or similar material. **BE SURE TO WEAR SAFETY GOGGLES. THESE BLADES DO THROW OFF SMALL CHIPS AND DUST.**

Mike Swanson

MONT ST.-HILAIRE COLLECTING DATES, 2003

Tentative dates (not formally placed on the Montreal Mineral Club Web Site) include:

May 22-23, Saturday and Sunday (Memorial Day Weekend)
July 5, Saturday
July 26, Saturday
September and October dates are not announced yet

continued from page 6 (labuntsovite)

SEMENOV, E.I., & BUROVA, T.A. (1955): On the new mineral, labuntsovite, and the so-called titanoelpidite. *Doklady Akademii Nauk SSSR*., **101,** 1113-1116 (in Russian). English abstract: *American Mineralogist,* **41,** (1956) 163.

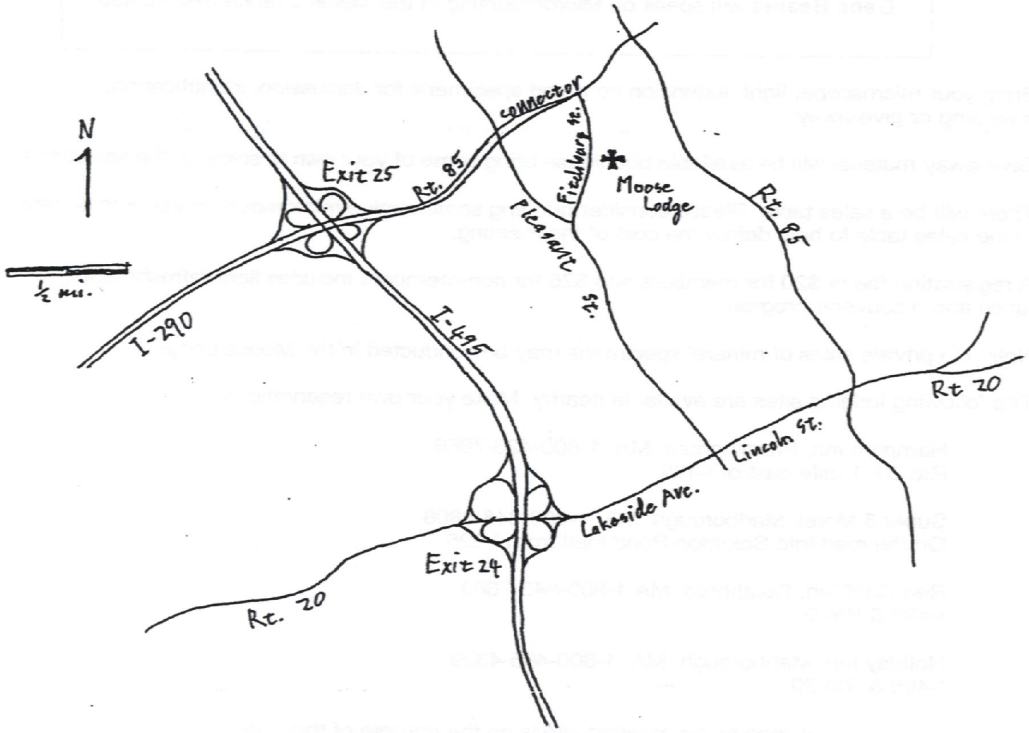
SUBBOTIN, V.V., VOLOSHIN, A.V., PAKHOMOVSKY, YA.A., BAKHCHISARAYTSEV, A.YU., PUSHCHAROVSKY, D.YU., RASTSVETAEVA, R.K., & NADEZHINA, T.N. (1998) Vuoriyarvite, $(K,Na)_2(Nb,Ti)_2Si_4O_{12}(O,OH)_2\ 4H_2O$, a new mineral from carbonatites of the Vuoriyarvi massif (Kola Peninsula).

TARASSOFF, P. (2002): Vuoriyarvite from Mont Saint-Hilaire. *Micronews* **36,** No.2, 6.

Reprinted with permission of the author and the CMMA *Micronews*.

Moose Lodge, Marlborough, MA

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



Michael W. Swanson, Editor
Micromounters of New England *Newsletter*
24 South County Road
Leyden, MA 01301-9429