

**Abelsonite**

Milton C, Dwornik EJ, Estep-Barnes PA, Finkelman RB, Pabst A, Palmer S: Amer.Min.(1978) 63, 930-937  
USA - Utah - Uintah County - Mahogany zone of the Green River Formation (in drill cores of the)

- United Kingdom: NHM-London - Type: CT: BM 1979,135
- USA: NMNH-Washington - Type: T: 143566 and 145712 (don. C Milton, 1978 and 1979)

**Abenakiite-(Ce)**

McDonald AM, Chao GY: Can.Min.(1994) 32, 843-854

Canada - Quebec - Rouville County - Mont Saint-Hilaire - Poudrette quarry (N45 28', W72 05')

- Canada: CMN-Ottawa - Type: HT: 81501 (one piece of matrix and one single xl mount)

**Abhurite**

Matzko JJ, Evans HT, Mrose ME, Aruzcavage P: Can.Min.(1985) 23, 233-240

Saudi Arabia - Red Sea - Jiddah (30 km N of) - Sharm Abhur

- USA: NMNH-Washington - Type: T: 162403 (don. U.S.Geol.Surv., thru JJ Matzko, 1984)

**Abswurbachite**

Reinecke T, Tillmanns E, Bernhardt H-J: Neues Jahrb.Min.,Abh.(1991) 163, 117-143

Greece - Euböa - Evvia - Mili (and Andros Island, Apikia)

- Germany: RUB-Bochum - Type: HT: 1 rock sample (ca. 100g)

**Acanthite**

Kenngott A: Sitzungsber.Kaiserl.Akad.(1855) IV, 447-468

Czech Republic - Zapadocesky (Western Czechy) - Jachymov

- Austria: NHMW-Wien - Type: HT: A.b.2238

TL of the first description: St. Joachimsthal, Western Bohemia

**Acuminite**

Pauly H, Petersen OV: Neues Jahrb.Min.,Mh.(1987) 502-514

Greenland - South Greenland - Ivigtut (Ivittuut) - Ivigtut Cyrolite deposit / mine

- Denmark: GMK-Copenhagen - Type: HT: 1986.378 (1 sample, vials with fragments and crystals, and various mounted crystals)

**Adamite**

Friedel C: C.R.Acad.Sci. Paris (1866) 62, 692

Chile - Atacama - Copiapo - Chañarcillo

- France: ENSM-Paris - Type: T: (coll. Adam, Nr. 4184)
- France: MHN-Paris - Type: T: 66.34 (don. C Friedel)

**Adamsite-(Y)**

Grice JD, Gault RA, Roberts AC, Cooper MA: Can.Min.(2000) 38, 1457-1466

Canada - Quebec - Rouville County - Mont Saint-Hilaire - Poudrette quarry

- Canada: CMN-Ottawa - Type: CT: CMNMC 82939/40

**Adelite**

Sjögren H: GFF,(1891) 13, 781

Sweden - Värmland - Filipstad - Filipstad - Nordmark, Kittelgruvan

- Sweden: SMNH-Stockholm - Type: HT: HS 6413

**Aerinite**

Von Lasaulx A: Neues Jahrb.Min.(1876) 352-358

Spain - Catalunya - Lleida prov. - Valle de Arán - Caserras

- Poland: Museum Wrocaw - Type: CT:
- France: ENSM-Paris - Type: NT:

**Aerugite**

Davis RJ, Hey MH, Kingsbury AWG: Min.Mag.(1965) 35, 72-83

Great Britain - England - Cornwall - St-Stephen-in-Brannel - South Terras mine (=TL of the NT)

- United Kingdom: NHM-London - Type: NT: BM 1963,481

Species first described from Johannegeorgenstadt, Erzgebirge, Sachsen, Germany by C Bergemann in: Journ. praktische Chem.(1858) 75, 239

**Aeschnite-(Y)**

Brogger WC: Vidensk.-Selsk. Skrifter, Math.-Naturv. Klasse (1906/6) pp. 98-116

Norway - Vest-Agder - Hydra island (formerly Hittero) - Urstad (from a granite pegmatite at)

- Norway: MGMU-Oslo - Type: CT: 22374-22380 (8 crystal fragments and powdered material)

First described as Blomstrandin, 'a Yttrium-Aeschnite'. Renamed following AA Levinson in: Amer.Min.(1966) 51, 152-158

**Afghanite**

Bariand P, Cesbron F, Giraud R: Bull.Soc.fr.Min.Crist.(1968) 91, 34-42

Afghanistan - Badakhshan Province - Sar-e-Sang - Lapis-Lazuli mine

- France: ENSM-Paris - Type: CT: (don. Sorbonne, 1967)

**Afghanite**

Bariand P, Cesbron F, Giraud R: Bull.Soc.fr.Min.Crist.(1968) 91, 34-42

Afghanistan - Badakhshan Province - Sar-e-Sang - Lapis-Lazuli mine

- United Kingdom: NHM-London - Type: CT: BM 1969,72

**Afwillite**

Parry J, Wright FE: Min.Mag.(1925) 20, 277-285

South Africa - Northern Cape Province - Kimberley - Dutoitspan mine

- United Kingdom: NHM-London - Type: CT: BM 1925,80
- USA: NMNH-Washington - Type: T: 095237

from a large dolerite inclusion in kimberlite

**Agardite-(La)**

Fehr T, Hochleitner R: Lapis (1984) 9, n. 1, 22 and 37

USA - New Mexico - Lincoln County - Red Cloud District Gallinas Mts. - Red Cloud Fluorite mine

- USA: NMNH-Washington - Type: CT: 148789 (don. U.S.Geol.Surv., P Modreski, 1981) and 148988 (don. DeMark, 1981)

Unpublished description of P Modreski, U.S.Geol.surv., ca. 1981.

**Agardite-(Y)**

Dietrich JE, Orliac M, Permingeat F: BM1969/92/420-434

Morocco - Anti Atlas - Quazazate - Jbel Sarhro - Bou-Scour (Cu-mine)

- France: ENSM-Paris - Type: CT: (don. Geol.Surv. Maroc, nr. X25350)
- Morocco: GS-Rabat - Type: CT:
- United Kingdom: NHM-London - Type: CT: BM 1978,24

**Agrellite**

Gittins J, Brown MG, Sturman D: Can.Min.(1976) 14, 120-126

Canada - Quebec - Témiskamingue County - Villedieu Township - Sheffield Lake (Kipawa River)

- United Kingdom: NHM-London - Type: CT: BM 1979,431
- USA: NMNH-Washington - Type: CT: 127007
- Canada: ROM-Toronto - Type: CT: M34496 (350g, don. J Gittins 1976)

**Agrinierite**

Cesbron F, Brown WL, Bariand F, Geffroy J: Min.Mag.(1972) 38, 781-789

France - Limousin - Haute Vienne dép. - Compreignac - Margnac (U-deposit)

- France: ENSM-Paris - Type: CT:
- USA: NMNH-Washington - Type: T: 137454A0

**Ahlfeldite**

Herzenberg R: Zentralbl.Min.,Abt. A (1935) p. 189 and 279

Bolivia - Potosí Dep. - Hiaco near Colquechaca - Pacajake mine

- United Kingdom: NHM-London - Type: CT: BM 1972,347

**Ajoite**

Schaller WT and Vlisidis AC: Amer.Min.(1958) 43, 1107-1111

USA - Arizona - Pima County - Ajo - New Cornelia mine

- USA: NMNH-Washington - Type: T: 113220 (don. U.S.Geol.Surv., T Nolan, 1959)

**Akaganeite**

Nambu M: Min.Mag.(1961) 33, 270-280

Japan - Honshu - Iwate Pref. - Akagane mine

- Japan: NSM-Tokyo - Type: T:

Natural  $\beta$ -FeOOH

**Akatoreite**

Read PB and Reay A: Amer.Min.(1971) 56, 416-426

New Zealand - SW-Island - Eastern Otago - Dunedin (32km SW of) - Akatore Creek (3km S of the mouth of)

- New Zealand: GSNZ-Lower Hutt - Type: T: P39193 (>5g)
- New Zealand: MGDU-Otago - Type: HT:
- USA: NMNH-Washington - Type: T: 137285 (don. PB Read, 1977) and 142541 (don. New Zealand Geol.Surv., thru WA Watters, 1978)

**Akdalaite**

Shpanov EP, Sidorenko GA, Stolyarova TI: ZVMO,(1970) 99, 333-339

Kazakhstan - Karagandinsk. Obl. - Akdala - Solnechnoye-fluorite deposit

- Russia: FMM-Moscow - Type: T:

Hydrothermal

**Akhtenskite**

Chukhrov FV, Gorshkov AI, Drits VS: ZVMO,(1987) 116, 210-221

Russia - Ural-S - Chelyabinsk Oblast - Magnitka (near) - Akhtenskoye limonite deposit

- Russia: MM-St.Petersburg - Type: T: 307/5

Supergene

**Akrochordite**

Flink G: GFF,(1922) 44, 773

Sweden - Värmland - Filipstad - Filipstad - Langban

- USA: NMNH-Washington - Type: CT: 162614, R05396

**Aksaite**

Blazko LN, Kondrateva VV, Yarzhemskii YY: ZVMO,(1962) 91, 447-454

*Kazakhstan - Dzhambul'sk. Obl. - Chelkar - Ak'say*

- USA: NMNH-Washington - Type: T: 160056 (ME Mrose)

*Hydrothermal*

**Aktashite**

Vasil'ev VI: Problems of the metallogeny of Mercury, Izdat.Nauka Moskow,(1968) 111-129; Abstr. in ZVMO,(1970) 99, 64

*Russia - Altai Territory - Gorny Altai - Aktash-Hg-deposit*

- France: ENSM-Paris - Type: CT:

*Hydrothermal*

**Alacranite**

Popova VI, Popov VA, Clark A, Polyakov VO, Borisovskii SA: ZVMO,(1986) 115, 360-368

*Russia - Kamchatka - Uzon caldera (= 2nd TL)*

- Russia: FMM-Moscow - Type: T: (no No.)
- Russia: MSRI-Miass - Type: (?):

*First TL = Chile, Pampa Larga, Alacran Silver deposit*

**Alamosite**

Palache C and Merwin HE: Amer.J.Sci., ser. 4 (1909) 27, 399

*Mexico - Sonora - Municipia de Alamos - Alamos (near) - unnamed prospect (?Kakhetin deposit)*

- USA: HMM-Cambridge - Type: CT: 84959 and 85509 (don. Foote Mineral Company)

**Alarsite**

Semenova TF, Vergasova LP, Filatov SK, Anan'ev VV: DAN,(1994) 338, n4, 501-505

*Russia - Kamchatka - Tolbachik volcano - Main fissure eruption 1975-1976*

- Russia: MM-St.Petersburg - Type: T: (?)

*In fumarolic deposits of the Great Tolbachik fissure extrusion*

**Albite**

Gahn JG, Berzelius JJ: Afhandl.Fys.Kem.Min.(1815) 4, 180

*Sweden - Kopparberg - Falun - Falun - Finnbo*

- France: MHN-Paris - Type: CT: H6727 (don. Berzelius)

**Albrechtschraufite**

Mereiter K: Acta Cryst.(1984) A40, C247

*Czech Republic - Zapadocesky (Western Czechy) - Jachymov*

- Austria: NHMW-Wien - Type: HT: A.a.6740

**Aldermanite**

Harrowfield IR, Segnit ER, Watts JA: Min.Mag.(1981) 44, 59-62

*Australia - South Australia - Adelaide (60km NE of) - Angaston - Moculta quarry (phosphate deposit) (N34 31', E139 03')*

- Australia: MOV-Melbourne - Type: T: M34778 (few mg)

**Aleksite**

Lipovetskii AG, Borodaev YuS, Zav'yalov EN: ZVMO,(1978) 107, 315-321

*Russia - Yakutiya-S - Sutamsky region - Stanovoy range - Alekseevskoye occurrence*

- Russia: MGU-Moscow - Type: T: 79060

*Hydrothermal*

**Alforsite**

Newberry NG, Essene EJ, Peacor DR: Amer.Min.(1981) 66, 1050-1053

USA - California - Fresno County / Mariposa County - Trimmer (5 mls NE of) / Incline (4 mls WNW of), Trumbull Peak - Big Creek-Rush sanbornite deposit / Incline sanbornite deposit

- USA: NMNH-Washington - Type: T: 147511 (don. U.S.Geol.Surv., ME Mrose, 1983; Fresno County)

**Allabogdanite**

Britvin SN, Rudashevsky NS, Krivovichev SV, Burns PC, Polekhovskiy YS: Amer.Min.(2002) 87, 1245-1249

Meteorite-Russia - Sakha Yakutia, Aldan Shield, Onello River Basin, Bol'shoy Dolguchan River, (N62 20', E137 40') - Meteorite Onello - Ni-rich ataxites

- Russia: UDG-St.Petersburg - Type: HT: 1/18632

**Allactite**

Sjögren A: GFF,(1884) 7, 109

Sweden - Värmland - Filipstad - Filipstad - Nordmark, Mossgruvan

- Sweden: SMNH-Stockholm - Type: HT: 83:995

**Allanite-(Ce)**

Thomson T: Tillock's Phil.Mag.(1810) 37, 397 and Trans.R.Soc.Edinb.(1812) 6, 371 (read 1810)

Greenland - South Greenland - Qáqarssuatsiaq at Aluk

- United Kingdom: NHM-London - Type: CT: 94377

New name = Allanite-(Ce)

**Allargentum**

Petruk WL, Cabri LJ, Harris DC, Stewart JM, Clark LA: Can.Min.(1970) 10, 163-172

Canada - Ontario - Timiscaming District - Gillies Limit Township - Hi Ho mine (Patricia and Cadesky vein)

- Canada: GSC-Ottawa - Type: NT: 61343 (pol. section), 61344, 61345
- USA: NMNH-Washington - Type: NT: 135409 (from Petruk)

**Allophane**

Stromeyer F: Gelehrt.Anz. Göttingen,(1816) p. 1251

Germany - Thüringen - Jena (S of) - Saalfeld (near) - Gräfenthal

- Germany: BAF-Freiberg - Type: T: 26104 (?)
- France: MHN-Paris - Type: CT: H6732

**Alluaivite**

Khomyakov AP, Nechelyustov GN, Rastsvetaeva RK: ZVMO (1990) 119,1 117-120

Russia - Kola Peninsula - Lovozero massif - Alluaiv Mt.

- Russia: FMM-Moscow - Type: T: (no No.)
- Russia: MM-St.Petersburg - Type: T: 1993/1-2
- United Kingdom: NHM-London - Type: HT: BM 1994,001 (part of the HT)

In ultra-agpaitic pegmatites

**Althausite**

Raade G, Tysseland M: Lithos,(1975) 8, 215-219

Norway - Buskerud - Modum district - Tingelstad tjern

- Norway: MGMU-Oslo - Type: HT: 21978

**Althupite**

Deliens M, Piret P: Bull.Mineral.(1987) 110, 65-72

Zaire - Kivu - Mwenga - Kobokobo open pit

- Belgium: MRAC-KMMA-Tervuren - Type: HT: RGM 6.178 (a few mg)

**Altisite**

Khomyakov AP, Nechelyustov GN, Ferraris G, Ivaldi G: ZVMO (1994) 123/6, 82-86  
*Russia - Kola Peninsula - Khibiny massif (SE) - Olenii Ruchei apatite deposit*

- Russia: FMM-Moscow - Type: T: p1333/1

*Found in a core of a borehole (depth 470 m)*

**Aluminocopiapite**

Berry LB: Contrib.Mineral.,Univ.Toronto (1947) no. 3, p. 21-34

*USA - California - Trinity County - Island Mountain*

- USA: NMNH-Washington - Type: T: 093834 (don. M Vonsen, 1920)

*USA - Utah - Emery County - San Rafael Swell - Temple Rock (2nd TL)*

- USA: NMNH-Washington - Type: T: 103544 (don. WF Foshag)

**Alumoklyuchevskite**

Gorskaya MG, Vergasova LP, Filatov SK, Rolich DV, Ananiev VV: ZVMO,(1995) 124, n1, 95-100

*Russia - Kamchatka - Tolbachik volcano, - Main fissure eruption 1975-1976, exhalation product*

- Russia: MM-St.Petersburg - Type: T: 2072/1

**Alumopharmacosiderite**

Schmetzer K, Horn W, Bank H: Neues Jahrb.,Mh.(1981) 97-102

*Chile - Antofagasta - Taltal Prov. - Guanaco (NE of) - Emma Luisa mine (near)*

- Germany: MPI-Heidelberg - Type: CT: 101114
- USA: NMNH-Washington - Type: CT: 149527 (don. Univ. Heidelberg, thru K Schmetzer, 1982)

**Alumotantite**

Voloshin AV, Men'shikov YuP, Pakhomovskii YaA: ZVMO (1981) 110/3, 338-345

*Russia - Kola Peninsula - Voron'i Tundry - Vasin Myl'k Mt.*

- Russia: FMM-Moscow - Type: T: 5518
- Russia: GIKB-Apatity - Type: HT:

*In albitized areas of granite pegmatites*

**Alumotungstite**

Davis RJ and Smith GW: Min.Mag.(1971) 38, 261-285

*Malaysia - Perak - Kinta - Kramat Pulai mine*

- France: ENMS-Paris - Type: CT: (don. TG Samaha, 1981)

*Species named by TG Samaha in: Min.Rec.(1981) 12, 82-85*

**Alunite**

Beudant FS: Traité elem. de Minéral (1824) 449

*Ukraine - Karpaten - Muzijevo (= Mukacheva)*

- France: MHN-Paris - Type: HT: 48.145 (1 sample 46x35mm) \*

*Time of publication: Hungary, Muszay \*from the priv. collect. of King Louis XVIII*

**Amarillite**

Ungemach H: C.R.Acad.Sci., Paris (1933) 197, p. 1133

*Chile - Atacama - Copiapo (SE of) - Tierra Amarilla*

- France: MHN-Paris - Type: T: 133.69 (don. H Ungemach)

*Same author in: Bull.Soc.fr.Min.(1935) 58, 200-202*

**Ameghinite**

Aristarain LF, Hurlbut CS: Amer.Min.(1967) 52, 935-945

*Argentina - Salta - Salar del Hombre Muerto - Tincalayu borax deposit*

- USA: HMM-Cambridge - Type: CT: 109054 (field collected by CS Hurlbut)
- France: MHN-Paris - Type: CT: (don. LF Aristarain, 1975)
- USA: NMNH-Washington - Type: CT: 137297 (part of the Harvard-type)

**Amesite**

Shepard CU: Cat.Min. found within about 75 miles of Amherst College (1876) p. 4

*USA - Massachusetts - Hampden County - Chester*

- France: ENSM-Paris - Type: T: (Coll. Adam no. 2170, from CU Shepard, 1875)
- France: MHN-Paris - Type: CT: 125201 (part of the analysed type; don. NMNH, Washington)

**Amicite**

Alberti A, Hentschel G, Vizzalini G: Neues Jahrb.Min.,Mh.(1979) 481-488

*Germany - Baden-Württemberg - Hegau - Höwenegg*

- Italy: IMUMo-Modena - Type: T:
- USA: NMNH-Washington - Type: T: 145843

**Aminoffite**

Hurlbut CS: GFF,(1937) 59, 290-292

*Sweden - Värmland - Filipstad - Filipstad - Langban*

- USA: HMM-Cambridge - Type: T: 94627, 106916-7 (described from HMM coll.; Flink coll. no. 494)
- United Kingdom: NHM-London - Type: CT: BM 1984,423
- USA: NMNH-Washington - Type: T: 137293, R07823
- Sweden: SMNH-Stockholm - Type: HT: 37045

**Ammonioalunite**

Altaner SP, Fitzpatrick JJ, Krohn MD, Bethke PM, Hayba DO, Gross JA, Brown ZA: Amer.Min.(1988) 73, 145-152

*USA - California - Sonoma County - The Geysers*

- USA: NMNH-Washington - Type: T: 145596 (found in the collection)

**Ammonioborite**

Schaller WT: Amer.Min.(1931) 16, 114

*Italia - Toscana - Pisa - Val di Cecina - Larderello*

- USA: NMNH-Washington - Type: T: 093756 (don. HS Washington, 1919), 094172 (don. A Pellox, 1921), R06167 (Roebing coll., 1927)

**Ammoniojarosite**

Shannon EV: Amer.Min.(1927) 12, 424-426

*USA - Utah - Kane County - Kaibab fault (W-side)*

- USA: NMNH-Washington - Type: T: 095654 (don. F Haycock, 1927)

**Ammonioleucite**

Hori H, Nagashima K, Yamada M, Miyawaki R: Amer.Min.(1986) 71, 1022-1027

*Japan - Gumma Pref. - Fujioka (100km N Tokyo), Kanto Mountains (NW) - Tatarazawa (a quarry at)*

- USA: NMNH-Washington - Type: HT: 165991 (don. R Miyawaki, 1988)

**Amstallite**

Quint R: N.Jahrb.Min.,Mh.(1987), 253-262

*Austria - Niederösterreich - Waldviertel - Amstall, Graphite quarry*

- Austria: NHMW-Wien - Type: CT: M455 (1 sample)

**Analcime**

Haüy RJ: Journ. des Mines (1797) 5, 278

*Italia - Sicilia - Catania - Catania (8km NE of) - Aci Castello, Isole dei Ciclopi*

- France: MHN-Paris - Type: HT/CT (cryst): H4154 (coll. RJ Haüy, 1797) and H4154ff. (coll. RJ Haüy, 29 specimens, goniometric measurements on 26 xx)

**Anandite-2M1**

Pattiaratchi DB, Saari E, Sahama TH: Min.Mag.(1967) 36 ,1-4

*Sri Lanka - NW-Province - Wilagedera iron ore prospect (from drill cores)*

- France: ENSM-Paris - Type: CT: (don. TH Sahama, 1968)

**Anatase**

Haüy RJ: Traité de Mineral.(1801) 3, 129

*France - Rhône-Alpes - Isère dép. - Dauphiné - St.Christophe near Bourg d'Oisans*

- France: MHN-Paris - Type: CT: H6401 (17 meas. xx)

**Ancylite-(La)**

Yakovenchuk VN, Men'shikov YuP, Pakhomovsky YaA, Ivanyuk GYu: ZVMO (1997) 126/1, 96-108

*Russia - Kola Peninsula - Khibiny massif - Kukisumchorr Mt. (N of) - Marchenko Peak*

- Russia: MM-St.Petersburg - Type: T: 2092/1

**Andersonite**

Axelrod JH, Grimaldi FS, Milton C, Murata KJ: Progr.Abstr.,Min.Soc.Amer.(1948) p. 4

*USA - Arizona - Yavapai County - Bagdad - Hillside mine*

- USA: NMNH-Washington - Type: T: 106112/5 (don. U.S. Geol.Surv., 1950)

**Andorite**

Krenner JA: Math. és Term.Tud.Ért.(1893) 11, 119-122

*Romania - Maramures - Gutâi Mts. - Baia Sprie*

- Hungary: HNHM-Budapest - Type: HT/CT: (1956 destroyed)

*TL at the time of description: Hungary, Felsöbánya*

**Androsite-(La)**

Bonazzi P, Menchetti S, Reinecke T: Amer.Min.(1996) 81, 735-742

*Greece - Cyclades - Andros Island - Plateau of Petalon Mt. (950m alt.)*

- Italy: MMUFI-Firenze - Type: T: 2074/RI

*Second TL = Italy, Valle d'Aoste, Nus (NE of), Valle di St. Barthélemy, Varenche Mn-mine*

**Andyrobertsite**

Cooper MA, Hawthorne FC, Pinch WW, Grice JD: Min.Rec.(1999) 30, 181-186

*Namibia - Tsumeb - Tsumeb mine*

- USA: NMNH-Washington - Type: T: 171847
- Canada: ROM-Toronto - Type: T: M47022, M47110

**Angelellite**

Ramdohr P, Ahlfeld F, Berndt F: Neues Jahrb.Min.,Mh.(1959) 145-151 (and 152-158)

*Argentina - Cerro Pululus - Cerro Pululus Sn-mine, vein "Yareta"*

- Germany: IMK-TU-Berlin - Type: HT (parts of): 94/28 (1 specimen with few xx, ca. 20 loose-broken xx up to 3mm, 9 preparations for crystallogr. invest.)

*It is believed to be of exhalative origin (fumarolic vapors).*



**Anhydrite**

Werner AG: Ludwigs Handb.d.Min.,Leipzig,(1804) 2, 212

*Austria - Tirol - near Innsbruck - Hall*

- Germany: BAF-Freiberg - Type: 16538

**Anilite**

Morimoto N, Koto K, Shimazaki Y: Amer.Min.(1969) 54, 1256-1269

*Japan - Honshu - Akita Pref. - Ani mine*

- Japan: NSM-Tokyo - Type: T: (1 sample)

**Anthonyite**

Williams SA: Amer.Min.(1963) 48, 614-619

*USA - Michigan - Houghton County - Calumet - Centennial mine (4800' level)*

- France: ENSM-Paris - Type: T: (don. SA Williams)
- France: MHN-Paris - Type: T: (don. SA Williams)
- USA: NMNH-Washington - Type: CT,T: 142653 (don. RW Thommsen, 1978) and 162617 (JJ Trelawney coll., 1985)

**Antigorite**

Schweizer E: Ann.Phys.Chem.,Poggend.(1840) 49, 595

*Switzerland - Wallis - Binntal - Geisspfad (ultramafic complex)*

- Switzerland: ETH-Zürich - Type: CT: Wi 4868
- Switzerland: ETHZ-Zürich - Type: CT/T: Wi 4868 (coll. DF Wisser)

**Antimonpearceite**

Frondel C: Amer.Min.(1963) 48, 565-572

*Mexico - Guanajuato - Municipios de Guanajuato and Sonora - Arizpe - La Cipas mine*

- USA: HMM-Cambridge - Type: CT: 90546 (Guanajuato; described from HMM coll.) and 93159 (Sonora; described from HMM coll.)

**Antimonselite**

Chen Luming, Zhang Qifa, Li Deren, Wang Guanxin: Acta Min. Sinica (1993) 13, 7-11

*China - Guizhou Province - Kaiyang U-Hg-Mo-deposit*

- China: NMG-Beijing - Type: T:

**Antlerite**

Hillebrand WF: U.S. Geol.Surv.Bull.(1889) 55, p. 54

*USA - Arizona - Mohave County - A and P Railroad, Yucca Station (near) - Antler mine*

- USA: NMNH-Washington - Type: T: 047698 (don. CW Cunningham, 1888)

**Anyuuite**

Razin LV, Sidorenko GA: Mineral.Zhurnal.(1989) 11, n4, 88-96

*Russia - Magadan Oblast - Chukot Peninsula - Bolshoi Anyui River basin*

- Russia: FMM-Moscow - Type: HT: (no No.) a polished section containing anyuuite  
*In concentrates of gold-bearing alluvium*

**Apachite**

Cesbron FP and Williams SA: Min.Mag.(1980) 43, 639-641

*USA - Arizona - Gila County - Hayden (near) - Christmas mine*

- USA: UA-Tucson - Type: T:
- France: MHN-Paris - Type: T: 180.95 (don. SA Williams)
- United Kingdom: NHM-London - Type: CT: BM 1980,532

**Aplowite**

Jambor JL, Boyle RW: Can.Min.(1965) 8, 166-171

Canada - Nova Scotia - Hants County - Walton (4km S of) - Magnet Cove Barium Corporation

- France: ENSM-Paris - Type: CT:
- Canada: GSC-Ottawa - Type: HT: 12145 (<50mg)

**Apuanite**

Mellini M, Merlino S, Orlandi P: Amer.Min.(1979) 64, 1230-1242

Italia - Toscana - Lucca - Alpi Apuane, Stazzema (NE of) - Buca della Vena mine

- France: ENSM-Paris - Type: T: (don. M Mellini, 1980)
- Italy: MCSN-Milano - Type: T: M23269 (2 spec., don. P Orlandi, 1981), M23733 and M30349 (don. P Orlandi, 1982 and 1995)
- Italy: MSNU-Pisa - Type: T: 3202 (1 sample)

**Arakiite**

Roberts AC, Cooper MA, Hawthorne FC, Grice JD, Feinglos MN: Min.Rec.(2000) 31, 253-256

Sweden - Värmland - Filipstad - Filipstad - Langban

- United Kingdom: NHM-London - Type: T: BM1921, 301
- USA: NMNH-Washington - Type: T: 134608

**Aramayoite**

Spencer LJ: Min.Mag.(1926) 21, 156-162 (and 163-168)

Bolivia - Potosí Dep. - Sud-Chicas Province - Chocoya - Animas mine (of the Aramayo Comp. de Mines in Bolivia)

- United Kingdom: NHM-London - Type: HT: BM 1980,532
- USA: NMNH-Washington - Type: T: 95553 (not mentioned in the NMNH-Catalogue)

**Aravaipaite**

Kampf AR, Dunn PJ, Foord EE: Amer.Min.(1989) 74, 927-933

USA - Arizona - Graham County - Aravaipa mining district, Klondyke (6 km NE of), Laurel Canyon - Grand Reef mine

- USA: LACMNH-Los Angeles - Type: HT: 33608
- USA: NMNH-Washington - Type: HT (part of): 166058 (don. CMNH, AR Kampf)

**Arcanite**

Frondel C: Amer.Min.(1950) 35, 596-598

USA - California - Orange County - Trabuco Canyon - Santa Ana tin mine

- USA: HMM-Cambridge - Type::

**Archerite**

Bridge PJ: Min.Mag.(1977) 41, 33-35

Australia - Western Australia (SE) - Eucla - Madura Motel (near) - Petrogale Cave (S31 54', E127 00')

- Australia: WAM-Perth - Type: T: MDC 5901 (0.2g)

Compare biphosphammite

**Arctite**

Khomyakov AP, Bykova AV, Kurova TA: ZVMO (1981) 110/4, 506-508

Russia - Kola Peninsula - Khibiny massif - Vuonnemiok River Valley

- Russia: FMM-Moscow - Type: T: 82132
- Russia: GIKB-Apatity - Type: T: 5708/2
- Russia: MM-St.Petersburg - Type: T: 120/1
- United Kingdom: NHM-London - Type: HT: BM 1994,002 (part of)

From a drill core, foidite-pegmatite

**Arcubisite**

Karup-Moller S: *Lithos*,(1976) 9, 253-257

*Greenland - South Greenland - Ivigtut (Ivittuut) - Ivigtut Cyrolite deposit / mine*

- Denmark: GMK-Copenhagen - Type: HT: 1973.114 (1 polished sample)

**Ardaite**

Breskovska VV, Mozgova NN, Bortnikov NS, Gorskov AI, Tsepin AI: *Min.Mag.*(1982) 46, 357-361

*Bulgaria - Rhodope Mts. (eastern) - Madjarovo polymetallic ore deposit*

- Bulgaria: NHMSo-Sofia - Type: CT:
- Bulgaria: NMEM-Sofia - Type: CT:

**Ardealite**

Schadler J: *Zeitschr.Krist.*(1931) 80, 349-352

*Romania - Transylvania - Sebes Mts. - Pestera Cioclovina (P-deposit in a cave)*

- United Kingdom: NHM-London - Type: CT: BM 1933,87

**Ardennite**

Von Lasaulx A and Bettendorff A: *Bericht. Niederrh.Ges.*(1872) 29, 189

*Belgium - Luxembourg province - Vielsalm (near) - Salmchâteau*

- Poland: MMUWr-Wroclaw - Type: CT: MMWr-14794 (don. A. von. Lasaulx) and MMWr-14796 (don. A. Bettendorff)

*See also A von Lasaulx in: Neues Jahrb.Min.*(1872) 930-934, (1873) 124-125, (1874) 276-278 and (1876) 363-368

**Argentojarosite**

Schaller WT: *Jour. Washington Acad.Sci.*(1923) 13, p. 233

*USA - Utah - Utah County - East Tintic District - Tintic Standard mine*

- United Kingdom: NHM-London - Type: CT: BM 1957,357
- USA: NMNH-Washington - Type: T,CT,CT: 104272/4 (don. U.S.Geol.Surv., WT Schaller, 1942), 094707 (don. U.S.Geol.Surv., WT Schaller, 1923), and R06309 (Roebing coll.)

**Argentopentlandite**

Rudashevskii NS, Mitkenov GA, Karpenkov AM, Shishkin NN: *ZVMO*,(1977) 106, 688-691

*Russia - Krasnoyarsk Territory - Noril'sk district - Talnakh - Oktyabr'skoye deposit*

- Russia: FMM-Moscow - Type: T: 74159

*Second TL: Tuva A.R., Khovu-Aksy*

**Argentotennantite**

Spiridonov EM, Sokolova NF, Gapeev AK, Dashevskaya DM, Evstigneeva TL, Chvileva TN, Demidov VG, Balashov EP, Shul'ya VI: *DAN-SSSR*,(1986) 290, 206-210

*Kazakhstan - (North) - Kvartsitoviye Gorki deposit*

- Russia: FMM-Moscow - Type: :

*As small grains - up to 0.1mm - in the polymetallic ore*

**Argutite**

Johan Z, Oudin E, Picot P: *Tschemmaks Min.Petr.Mitt.*(1983) 31, 97-119

*France - Midi-Pyrénées - Haute Garonne dép. - Plan d'Argut deposit*

- France: ENSM-Paris - Type: T:

**Argyrodite**

Weisbach A: *Neues Jahrb.Min.*(1886) 2, 67

*Germany - Sachsen - Freiberg (near) - Brand-Erbisdorf - Himmelsfürst mine*

- Germany: BAF-Freiberg - Type: T: 7056 (coll. Weisbach, 1885)

*In this species has been found germanium for the first time.*

**Arhbarite**

Schmetzer K, Tremmel G, Medenbach O: Neues Jahrb.Min.,Mh.(1982) 529-533

*Morocco - Anti Atlas - Quazazate (S of) - Bou Azzer - Arhbar mine*

- Germany: MPI-Heidelberg - Type: HT: 10 11 15 (1 spec.)
- USA: NMNH-Washington - Type: T: 160383 (don. K Schmetzer, 1984)

**Aristarainite**

Hurlbut CS, Erd RC: Amer.Min.(1974) 59, 647-651

*Argentina - Salta - Salar de Hombre Muerto - Tincalayu borax deposit*

- USA: HMM-Cambridge - Type: T: 109679 (field collected by CS Hurlbut)
- France: MHN-Paris - Type: CT: (don. LF Aristarain, trough E Hurlbut, 1975)
- USA: NMNH-Washington - Type: T: 137296 (part of the Harvard-type)

**Armalcolite**

Anderson AT, Bunch TE, Cameron EN, Haggerty SE, Boyd FR, Finger LW, James OB, Keil K, Prinz M, Ramdohr P, El Goresy A: Proc. Apollo 11 Lunar Sci.Conf.(1970) 1, 55-63

*Moon - Mare Tranquillitatis (Apollo 11 landing site)*

- USA: LPI-Houston - Type: HT/CT:

**Armangite**

Aminoff G, Mauzelius R: GFF,(1920) 42, 301-309

*Sweden - Värmland - Filipstad - Filipstad - Langban*

- Sweden: SMNH-Stockholm - Type: HT: 21030

**Armenite**

Neumann H: Norsk Geologisk Tidsskrift,(1939) 19, 312-313

*Norway - Buskerud - Kongsberg - Armen Ag-mine*

- France: ENSM-Paris - Type: CT:
- Norway: MGMU-Oslo - Type: CT: 17061-17063

**Armstrongite**

Vladykin NV, Kovalenko VI, Kashaev AA, Sapozhnikov AN, Pisarskaya VA: Dokl.Akad. Nauk SSSR (1973) 209, 1185-1188

*Mongolia - Gobi - Khan Bogdinskii massif*

- France: MHN-Paris - Type: T: (don. NV Vladykin, 1974)

**Arnhemite**

Martini JEJ: Bull. South African Speleological Assoc.(1994) 33, 66-69

*Namibia - Windhoek (150km E of) - Arnhem Cave*

- South Africa: TMSA-Pretoria - Type: T:

**Arrojadite**

Guimaraes D: Public. da Inspectoria de Obras Contra as Seccas, Rio de Janeiro (1925) 58, 11p

*Brazil - Paraíba - Serra Branca pegmatite*

- United Kingdom: NHM-London - Type: CT: BM 1927,1145
- USA: NMNH-Washington - Type: NT: 096111 (Serra Branca pegmatite)
- USA: NMNH-Washington - Type: NT (or PT): 105948/9 (don. U.S.Geol.Surv., 1949)

*First description of the species by D Guimaraes in: Public. da Inspectoria de Obras Contra as Seccas, Rio de Janeiro (1925) 58, 11p. - from Brazil, Parahiba, Serra Branca pegmatite. - Compare PB Moore, T Araki, S Merlino, M Mellini, PP Zanazzi in: Amer.Mi*

**Arsenbrackebuschite**

Hofmeister W, Tillmanns E: Fortschr.Mineral.(1976) 54, Beiheft 1, p.38

Germany - Baden-Württemberg - Schwarzwald - Kinzigtal, Oberwolfach - Clara mine (=2nd TL)

- Germany: IMKU-Stuttgart - Type: CT: CL1,14

First TL: Tsumeb, Namibia. Compare K. Schmetzer and W. Beresinski in Neues Jahrb.Min.,Mh.(1978) 193-196

**Arsendescloizite**

Keller P, Dunn PJ: Mineral.Rec.(1982) 13, 155-157

Namibia - Otavi - Tsumeb

- Germany: IMKU-Stuttgart - Type: CT: NM 08 (frag. xx)
- USA: NMNH-Washington - Type: CT: 148303

**Arseniopleite**

Igelström LJ: Neues Jahrb.Min.(1888) 2, 117

Sweden - Västmanland - Skinnskatteberg - Riddarhyttan - Sjögruvan

- Sweden: SMNH-Stockholm - Type: HT: g30314

**Arsenosiderite**

Dufrénoy A: Annal. Mines,(1842) 4th. ser., 2, 343

France - Bourgogne - Saône-et-Loire dép. - Macon, near - Romanèche

- France: MHN-Paris - Type: CT: 41100; 48228 (from Dufrénoy)

**Arsenobismite**

Means AH: Amer.J.Sci.(1916) ser. 4, 41, 127

USA - Utah - Juab County - Tintic District - Mammoth mine

- USA: HMM-Cambridge - Type: CT: 96687 (don. MIT, AH Means)

Discredited as a mixture of Preisingerite, minor Atelestite and minor Beudantite/Segnitite in: Neues Jahrb.,Mh.(1999) 322-336.

**Arsenoclasite**

Aminoff G: KVA handl.(1931) 9, 52-57

Sweden - Värmland - Filipstad - Filipstad - Langban

- United Kingdom: NHM-London - Type: CT: BM 1931,59
- Sweden: SMNH-Stockholm - Type: HT: 500597

**Arsenocrandallite**

Walenta K: Schweiz.Min..Petr.Mitt.(1981) 61, 23-25

Germany - Baden-Württemberg - Schwarzwald (N) - Neubulach

- USA: NMNH-Washington - Type: T: 150251

**Arsenoflorencite-(Ce)**

Nickel EH and Temperly JE: Min.Mag.(1987) 51, 605-609

Australia - South Australia - Eyre Peninsula - Kimba (S33 08', E136 25')

- Australia: MOV-Melbourne - Type: HT/CT: M38084(HT), M38085(CT)
- United Kingdom: NHM-London - Type: CT: BM 1986,481
- USA: NMNH-Washington - Type: CT: 163782
- Australia: SAM-Adelaide - Type: HT: G14965 (fragment of HT)

**Arsenogoyazite**

Walenta K, Dunn PJ: Schweiz.Min.Petr.Mitt.(1984) 64, 11-19

Germany - Baden-Württemberg - Schwarzwald - Kinzigtal, Oberwolfach - Clara mine

- USA: NMNH-Washington - Type: CT: 150232

**Arsenohauchecornite**

Gait RI, Harris DC: *Min.Mag.*(1980) 43, 877-878

*Canada - Ontario - Sudbury District - Denison Township, Lot 6, Con. IV - Vermilon mine*

- Canada: ROM-Toronto - Type: CT: M29206-M29208 (approx. 1g, don. RC Butler 1969)

**Arsenopalladinite**

Bannister FA, Claringbull GF, Hey MH: *Chem. Index of Minerals* (1955) p. 23 and 339

*Brazil - Minas Gerais - Itabira*

- United Kingdom: NHM-London - Type: HT: BM 1934,72

*New description of the species by AM Clark, AJ Criddle, EE Fejer in: Min.Mag.(1974) 39, 528-543*

**Arsenopalladinite**

Bannister FA, Claringbull GF, Hey MH: *Chem. Index of Minerals* (1955) p. 23 and 339

*Brazil - Minas Gerais - Itabira*

- USA: NMNH-Washington - Type: CT: 142504 (don. NHM-London; types of isomertieite, atheneite and palladseite on the same specimen)
- Canada: ROM-Toronto - Type: T: M34726 (<1mg)

*New description of the species by AM Clark, AJ Criddle, EE Fejer in: Min.Mag.(1974) 39, 528-543*

**Arsenopolybasite**

Frondel CI: *Amer.Min.*(1963) 48, 565-572

*Peru - Huancavelica - Castrovirrey(i)ma district - Quespisiza (=Quespesisa) mine*

- USA: HMM-Cambridge - Type: CT: 82633 (Quespisiza; described from the HMM-coll.)

*Germany - Sachsen - Freiberg (near) - Neuer Morgenstern mine*

- USA: HMM-Cambridge - Type: HT: 110527 (Freiberg)

**Arsenuranospathite**

Walenta K: *Jahresh.geol.Landesamt Baden-Württemberg*,(1963) 6, 113-128

*Germany - Baden-Württemberg - Schwarzwald - Menzenschwand and Wittichen*

- Germany: IMKU-Stuttgart - Type: HT/CT: MK5,40

*Compare K. Walenta in: Min.Mag.(1978) 42, 117-128*

**Arthurite**

Davis RJ and Hey MH: *Min.Mag.*(1964) 33, 937-941

*Great Britain - England - Cornwall - Gunnislake - Hingston Down Consols mine*

- United Kingdom: NHM-London - Type: HT: BM 1964,74 and 75

**Artinite**

Brugnatelli L: *Rend.Ist.Lombardo* (1902) ser.2, 35, 874

*Italia - Lombardia - Sondrio (Valtellina) - Val Malenco - Val Lanterna; Campo Francia*

- Italy: MCSN-Milano - Type: T: M13215, M13217, M22182 and M22191 (coll. P Sigismund)

**Artroeite**

Kampf AR, Foord EE: *Amer.Min.*(1995) 80, 179-183

*USA - Arizona - Graham County - Aravaipa mining district - Grand Reef mine*

- USA: LACMNH-Los Angeles - Type: HT: 39338

**Arupite**

Buchwald VF: *Neues Jahrb.Min.,Mh.*(1990) 76-80

*Meteorite-Brazil - Santa Catharina, Sao Francisco do Sul (S26 13', W48 36') - Meteorite Santa Catharina - Iron, Ataxite (anomalous)*

- USA: NMNH-Washington - Type: HT: 659, 804, 847 and more

*Secondary phosphate of the severely weathered meteorite*

**Arzakite**

Vasil'ev VI, Pal'chik NA, Grechishchev OK: Geol.Geofiz.(1984) 7, 54-63

*Russia - Tuva A.R. - Arzak ore deposit*

- Russia: CSGM-Novosibirsk - Type: T:
- Russia: MM-St.Petersburg - Type: 1677/1

*In the oxidized zones of the ore deposit, hydrothermal.*

**Asbecasite**

Graeser S: Schweiz.Min.Petr.Mitt.(1966) 46, 367-375

*Switzerland - Wallis - Binntal - Wann-Gletscher (orthogneiss of Monte Leone Nappe)*

- France: MHN-Paris - Type: T: 180.40 (don. S Graeser)
- United Kingdom: NHM-London - Type: T: BM 1966,222
- Switzerland: NMBA-Basel - Type: HT/CT: SG750
- USA: NMNH-Washington - Type: T: 143117 (don. W Kahn, 1978)

**Aschamalmite**

Mumme WG, Niedermayr G, Kelly PR, Paar WH: Neues Jahrb.Min.,Mh.(1983) 433-444

*Austria - Pinzgau - Salzburg - Untersulzbachtal - Aschamalm*

- Australia: MOV-Melbourne - Type: CT:
- Austria: NHMW-Wien - Type: CT/HT: HT:L8710, CT:L8711
- USA: NMNH-Washington - Type: CT: 160379

**Ashburtonite**

Grice JD, Nickel EH, Gault RA: Amer.Min.(1991) 76, 1701-1707

*Australia - Western Australia (NW) - Capricorn Range - Ashburton Downs (11.4km WSW of) - mineral claim 84, small Cu-deposit (S23 20', E117 05')*

- Canada: CMN-Ottawa - Type: CT: CMN58391 (many crystals, tot. 10mg)
- Australia: MOV-Melbourne - Type: CT: M40712

**Ashcroftine-(Y)**

Hey MH, Bannister FA: Nature,(1932) 130, p. 858 and Min.Mag.(1933) 23, 305-308

*Greenland - South Greenland - Igaliko (Igaliku) - Tunugdliarfik (Tunulliarfik) - Narssârssuk*

- United Kingdom: NHM-London - Type: HT: 1924,867
- USA: NMNH-Washington - Type: CT: 095320, R04333

*Formerly named as Kalithomsonite by Gordon SG, Proc.Acad.Nat.Sci.Phil.(1924) 76, 261. New name = Ashcroftine-(Y)*

**Ashoverite**

Clark AM, Fejer EE, Cressey G, Tandy PC: Min.Mag.(1988) 52, 699-702

*Great Britain - England - Derbyshire - Ashover - Milltown*

- United Kingdom: NHM-London - Type: HT: BM 1982,5

**Asisite**

Rouse RC, Peacor DR, Dunn PJ, Criddle AJ, Stanley CJ, Innes J: Amer.Mineral.(1988) 73, 643-650

*Namibia - Grootfontein district - Asis farm - Kombat mine*

- Canada: GSC-Ottawa - Type: CT: 64565
- United Kingdom: NHM-London - Type: HT: BM 1986,304

**Asselbornite**

Sarp H, Bertrand J, Deferne JJ: Neues Jahrb.Min.,Mh.(1983) 417-423

*Germany - Sachsen - Erzgebirge - Schneeberg, Neustädtel - Weisser Hirsch mine / Walpurgis vein*

- Switzerland: MHN-Geneve - Type: HT: 435/50 (80g)
- USA: NMNH-Washington - Type: CT: 142229

**Astrocyanite-(Ce)**

Deliens M, Piret P: Eur.J.Min.(1990) 2, 407-411

Zaire - Shaba - Kolwezi - Musonoi open pit (S10 46', E25 18')

- Belgium: IRSNB-Brussels - Type: HT: RC 3.513 [10mm rosettes on kamotoite-(Y)]

**Astrophyllite**

Scheerer T: Berg- und hüttenmännische Zeitung,(1854) 13, 389-392

Norway - Telemark - Brevik (formerly Brevig) district - [Langesundfjord area

- Germany: BAF-Freiberg - Type: T: 26244

**Atacamite**

Gallitzin D de: Recl. Noms Min.(1801) p. 9 (named the mineral)

Chile - Atacama - (? Tarapacá, Collahurasi or another locality of the Atacama desert)

- France: MHN-Paris - Type: HT: 5.98 (brought 1785 from Chile by Dombey, a voyager for the Museum, analyzed 1786; 100g)

First description by the Duc La Rochefoucauld, A Baumé and AF de Fourcroy in: *Mém Acad.R.Sci. for 1786 (1788) p. 465 (original name = "Cuivre muriaté de Pérou")*

**Atelestite**

Breithaupt A: Charakt.Min.Syst., 3rd ed.(1832) p. 307

Germany - Sachsen - Erzgebirge - Schneeberg - Junge Kalbe (Neuhilfe Flacher vein)

- Germany: BAF-Freiberg - Type: T: 21749 (6 spec.) ??

**Athabascaite**

Harris DC, Cabri LJ, Kaiman S: Can.Min.(1970) 10, 207-215

Canada - Saskatchewan - Beaverlodge Lake - Uranium City - Martin Lake mine

- Canada: GSC-Ottawa - Type: CT: 61581, 61582, 62052
- Canada: ROM-Toronto - Type: CT: M29432 (<1mg, pol.sect., don. DC Harris)

**Atheneite**

Clark AM, Criddle AJ, Fejer EE: Min.Mag.(1974) 39, 528-543

Brazil - Minas Gerais - Itabira

- United Kingdom: NHM-London - Type: HT: BM 1977,259
- USA: NMNH-Washington - Type: T: 142504A0 (on same specimen with and filed under arsenopalladinite)

**Atlasovite**

Popova VI, Popov VA, Rudashevskiy NS, Glavatskikh SF, Polyakov VO, Bushsmakin AF: ZVMO,(1987) 116, 358-367

Russia - Kamchatka - Tolbachik volcano - Main fissure eruption 1975-1976, sublimate from the fumaroles

- Russia: FMM-Moscow - Type: T: (no No.)

**Aubertite**

Cesbron F, Ginderow D, Sichére MC, Vachey H: Bull.Min.(1979) 102, 348-350

Chile - Antofagasta - Calama (8km W of) - Queténa mine

- France: ENSM-Paris - Type: HT: (no nr.; brought back by a mission of the BRGM, thru J Aubert, 1961)



**Aurostibite**

Graham AR, Kaiman S: Progr. and Abstr. Ann. Meeting of MSA,(1951) p. 15

*Canada - Northwest Territories - Great Slave Lake (N shore of) - Yellowknife Bay (W side of) - Giant Yellowknife mine*

- Canada: GSC-Ottawa - Type: CT: 61458 (pol. section)
- Canada: ROM-Toronto - Type: MT: M37248 (<1mg, pol. section)

*Same authors in: Amer.Min.(1952) 37, 461-469. Second TL: Ontario, Timiskaming District, McGarry Township, Virginiatown (1.25km NE of), Larder Lake, Chesterville mine*

**Autunite**

Brooke HJ, Miller WH: Phillips "Introduction to Mineral, p.519 (name!)"

*France - Bourgogne - Saône-et-Loire dép. - L'Ouche d'Jau - St. Symphorien-de-Marmagne, Autun*

- France: MHN-Paris - Type: CT: H6307 (18 samples de Champeaux)

*First found by Champeaux*

**Averievite**

Starova GL, Krivovichev SV, Fundamensky VS, Filatov SK: Min.Mag.(1997) 61, 441-446

*Russia - Kamchatka - Great Tolbachik fissure eruption, fumarole deposits*

- Russia: MM-St.Petersburg - Type: T:

**Avogadrite**

Zambonini F: Atti R. Accad.Lincei.Rend.Cl.Sci.fis.mat.nat. Roma, ser. 6 (1926) 3, 644-649

*Italia - Campania - Napoli - Vesuvio, Monte Somma*

- France: MHN-Paris - Type: T: 126.148 (don. Palumbo, fragment of 7x6 cm)

*In lava, saline sublimation*

**Awaruite**

Skey W: Trans. New Zealand Inst.(1886) 18, 401

*New Zealand - SW-Island - Gorge River (not Awarua Bay!)*

- New Zealand: GSNZ-Lower Hutt - Type: T: P21969 (>100mg)

**Azoproite**

Konev AA, Lebedeva VS, Kashaev AA, Ushchapovskaya ZF: ZVMO,(1970) 99, 225-231

*Russia - Irkutsk Oblast - Lake Baikal - W coast between Aya and Uhlán-Noor capes - Tazheran massif, in Skarn*

- France: ENSM-Paris - Type: CT: V16383
- Russia: FMM-Moscow - Type: T: 72890, 72891, 72892
- Russia: MM-St.Petersburg - Type: T: 1481/1-3
- France: MHN-Paris - Type: CT:

**Azurite**

Beudant FS: Traité élément. Minéral.(1824) 2, 373

*France - Rhône-Alpes - Rhône dép. - Lyon, near - Chessy (and other localities!)*

- France: MHN-Paris - Type: CT: 103 isol. xx