

NEW MINERALS APPROVED IN 2007
NOMENCLATURE MODIFICATIONS APPROVED IN 2007
BY THE
COMMISSION ON NEW MINERALS, NOMENCLATURE AND CLASSIFICATION
INTERNATIONAL MINERALOGICAL ASSOCIATION

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The information given here is provided by the Commission on New Minerals and Mineral Names, I.M.A., for comparative purposes and as a service to mineralogists working on new species.

Each mineral is described in the following format:

- IMA number
- Type locality
- Corresponding author
- Chemical formula
- Relationship to other minerals
- Crystal system, Space group; Structure determined, yes or no
- Unit-cell parameters
- Strongest lines in the X-ray powder-diffraction pattern

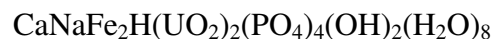
The names of these approved species are considered confidential information until the authors have published their descriptions or released information themselves.

NO OTHER INFORMATION WILL BE RELEASED BY THE COMMISSION

2007 PROPOSALS

IMA No. 2007-001

A quarry, 10 km SSW of the township of Lake Boga, north-western Victoria, Australia
Stuart J. Mills



Uranyl phosphate

Monoclinic: *Cc*; structure determined

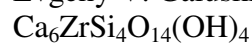
a 19.6441, *b* 7.0958, *c* 18.7029 Å, β 115.692°

6.60(10), 4.07(2), 3.80(2), 3.56(2), 3.31(2), 3.16(4), 2.797(2), 2.002(2)

IMA No. 2007-002

Dovyren massif, Siberia, Russia

Evgeny V. Galuskin



New structure

Orthorhombic: *Pnmm*; structure determined

A 5.666, *B* 18.844, *C* 3.728 Å

5.4260(63), 3.1406(39), 3.0727(100), 2.7468(36), 2.5979(25), 1.8786(26), 1.8640(33),
1.6848(26)

IMA No. **2007-003**

Chende Region, China

Zuxiang Yu

CuPtBiS_3

Lapieite group

Orthorhombic: $P2_12_12_1$; structure determined

a 7.7152, b 12.838, c 4.9248 Å

6.40(30), 5.93(20), 3.24(80), 3.03(100), 2.27(40), 2.14(50), 1.865(60), 1.423(30)

IMA No. **2007-004**

Grandview mine, Grand Canyon National Park, Coconino County, Arizona, USA

Peter A. Williams

$\text{Cu}_3\text{Al}_9(\text{SO}_4)_2(\text{OH})_{29}$

Monoclinic: $P2$, Pm or $P2/m$

a 10.908, b 6.393, c 10.118 Å, β 107.47°

9.667(33), 6.208(100), 5.287(35), 3.949(79), 3.625(10), 2.990(9), 2.816(14), 2.413(9)

IMA No. **2007-005**

Vanadium Queen mine, 18 km east of La Sal, San Juan County, Utah, USA

John M. Hughes

$\text{Na}_2\text{Mg}_2(\text{V}_{10}\text{O}_{28})\cdot 20\text{H}_2\text{O}$

Pascoite-sherwoodite group

Monoclinic: $C2/c$; structure determined

a 23.9019, b 10.9993, c 17.0504 Å, β 118.284°

9.72(100), 9.09(60), 8.19(60), 7.42(70), 6.67(80), 2.882(50), 2.706(50), 1.861(50)

IMA No. **2007-006**

San Piero in Campo, Elba, Italy

Rainer Thomas

$\text{Rb}[\text{B}_5\text{O}_6(\text{OH})_4]\cdot 2\text{H}_2\text{O}$

Neso-pentaborate

Orthorhombic: $Ab2$

a 11.304, b 10.963, c 9.337 Å

3.554(100), 5.481(85), 3.391(63), 2.826(47), 6.018(38), 3.329(38), 2.894(28), 3.259(26)

IMA No. **2007-007**

San Piero in Campo, Elba, Italy

Rainer Thomas

$\text{Cs}[\text{B}_5\text{O}_6(\text{OH})_4]\cdot 2\text{H}_2\text{O}$

Neso-pentaborate

Monoclinic: $C2/c$

a 8.130, b 12.045, c 11.792 Å, β 93.34°

6.023(100), 3/365(68), 2.943(55), 3.278(49), 3.467(44), 3.464(44), 5.886(43), 3.321(34)

IMA No. **2007-008**

Koashva apatite quarry, Khibina alkaline massif, Kola Peninsula, Russia

Alexander P. Khomyakov

$\text{Na}_{12}(\text{K},\text{Sr},\text{Ce})_3\text{Ca}_6\text{Mn}_3\text{Zr}_3\text{NbSi}_{25}\text{O}_{73}(\text{O},\text{H}_2\text{O},\text{OH})_5$

Eudialyte group

Trigonal: $R\bar{3}m$; structure determined

a 14.281, c 30.243 Å

6.447(60), 5.719(40), 4.322(71), 3.540(38), 3.222(70), 3.170(50), 2.982(100), 2.860(94)

IMA No. **2007-009**

Monte Trisa, Torrebelvicino, Vicenza, Italy

Paolo Orlandi

$\text{Cu}_6(\text{SO}_4)(\text{OH})_{10}\cdot\text{H}_2\text{O}$

Dimorphous with redgillite

Orthorhombic: $Cmc2_1$; structure determined

a 2.989, b 16.970, c 14.812 Å

7.45(100), 3.73(35), 2.788(18), 2.654(8), 2.503(14), 2.341(9), 2.166(9), 1.598(20)

IMA No. **2007-010**

Zarshuran deposit, Takab region, NW Iran

Werner H. Paar

$\text{PbHgAs}_2\text{S}_6$

Sulphosalt

Monoclinic: P lattice

a 19.113, b 4.233, c 22.958 Å, β 114.78°

8.672(80), 5.680(30), 4.653(50), 3.867(40), 3.395(50), 3.148(40), 2.722(100), 2.187(50)

IMA No. **2007-011**

Venables Valley, 20 km SSW of Ashcroft, British Columbia, Canada

Ronald C. Peterson and Elif Genceli

$\text{MgSO}_4\cdot 11\text{H}_2\text{O}$

Triclinic: $P\bar{1}$; structure determined

a 6.7459, b 6.8173, c 17.2799 Å, α 88.137, β 89.481, γ 62.719°

5.73(35), 5.62(56), 5.41(54), 4.91(84), 4.85(90), 2.988(58) 2.958(100), 2.940(67)

IMA No. **2007-012**

Kato mine, Munakata City, Fukuoka Prefecture, Japan

Satoshi Matsubara

$\text{Pb}_2\text{Cu}_2(\text{Se}^{4+}\text{O}_3)(\text{SO}_4)(\text{OH})_4$

Linarite-chenite group

Monoclinic: $P2_1/m$

a 9.766, b 5.666, c 9.291(10) Å, β 102.40°

4.86(44), 4.47(57), 3.53(39), 3.18(100), 3.14(68), 2.72(22), 2.33(18), 1.813(19)

IMA No. **2007-013**

Mina Santa Rosa, Iquique, Northern Chile

Jochen Schlüter

CuB_2O_4

Natural analogue of copper metaborate

Tetragonal: $I\bar{4}2d$; structure determined

a 11.517, c 5.632 Å

3.797(100), 3.638(47), 2.876(17), 2.775(35), 2.572(26), 2.501(26), 1.822(21), 1.793(20)

IMA No. **2007-014**

Verkhn'echegemskiy volcanic structure, Kabardino-Balkaria, North Caucasus, Russia

Evgeny V. Galuskin

CaZrO_3

Perovskite group

Orthorhombic: $Pnma$; structure determined

a 5.65, b 7.93, c 5.55 Å

4.013(35), 4.009(16), 2.881(25), 2.836(100), 2.796(22), 2.006(29), 1.654(17), 1.622(24)

IMA No. **2007-015**

Sierra de los Filabres, Almería, SE Spain

Roberta Oberti

$\text{K}(\text{CaNa})(\text{Fe}^{2+}_3\text{Al}_2)(\text{Si}_6\text{Al}_2)\text{O}_{22}(\text{OH})_2$

Amphibole group

Monoclinic: $C2/m$; structure determined

a 9.8505, b 18.0075, c 5.3518 Å, β 104.775°

8.420(100), 3.400(38), 3.127(53), 2.714(75), 2.596(49), 2.565(60), 2.340(32), 2.166(34)

IMA No. **2007-016**

Tip Top mine, Custer County, South Dakota, USA

Anthony R. Kampf

$\text{NaFe}^{3+}\text{Mg}_2\text{Fe}^{3+}_2(\text{PO}_4)_4(\text{OH})_2 \cdot 8\text{H}_2\text{O}$

Whiteite-jahnsite group

Monoclinic: $P2/a$

a 15.0811, b 7.1403, c 9.8299 Å, β 110.445°

9.218(100), 4.884(25), 3.537(25), 2.973(25), 2.854(20), 2.819(70), 2.593(25), 1.933(20)

IMA No. **2007-017**

Vesle Arøy island, Langesundsfjord district, Larvik community, Vestfold county, Norway

Alf Olav Larsen

$\text{KNa}_6\text{Be}_2(\text{Si}_{15}\text{Al}_3)_{\Sigma=18}\text{O}_{39}\text{F}_2$

Leifite group

Trigonal: $P\bar{3}m1$; structure determined

a 14.3865, c 4.8733 Å

4.710(29), 4.153(21), 3.386(70), 3.161(100), 3.115(17), 2.466(31), 2.398(19), 2.217(20)

IMA No. **2007-019**

Matsumaezawa pit, Tanohata mine, Tanohata Village, Iwate Prefecture, Japan

Hidemichi Hori

$\text{LiMn}_2\text{Si}_3\text{O}_8(\text{OH})$

Wollastonite group

Triclinic: $P\bar{1}$

a 7.612, b 7.038, c 6.700 Å, α 90.23, β 94.70, γ 105.26°

6.640(35), 3.666(26), 3.134(89), 3.109(69), 2.946(100), 2.814(33), 2.581(22), 2.182(40)

IMA No. **2007-020**

Bambolla mine, Moctezuma, Sonora, Mexico

Joël Brugger

$\text{Ca}_2\text{Mn}^{4+}_2\text{Te}^{6+}_2\text{O}_{12} \cdot \text{H}_2\text{O}$

Tellurate

Monoclinic: $P2$, $P2/m$, Pm , $P2_1$ or $P2_1/m$
 a 10.757, b 4.928, c 8.492 Å, β 102.39°
4.924(34), 4.361(51), 3.267(100), 2.520(71), 2.244(32), 1.996(21), 1.762(39), 1.455(24)

IMA No. **2007-021**

Mount Stafford, Northern Territory, Australia

Edward S. Grew

$\text{Al}_{4.5}\text{SiB}_{0.5}\text{O}_{9.5}$

Structurally related to mullite

Orthorhombic: $Cmc2_1$; structure determined

a 5.7168, b 15.023, c 7.675 Å

5.37(50), 3.38(100), 2.67(60), 2.51(60), 2.19(80), 2.11(50), 1.682(30), 1.512(80)

IMA No. **2007-022**

La Fossa crater, Vulcano, Aeolian Islands, Italy

Francesco Demartin

BiSBr

New structure type

Orthorhombic: $Pnam$; structure determined

a 8.0424, b 9.8511, c 4.0328 Å

4.220(68), 3.740(62), 3.721(44), 2.909(100), 2.429(43), 2.036(47), 1.865(63), 1.774(88)

IMA No. **2007-023**

Mt. Alluaiv, Lovozero alkaline massif, Kola Peninsula, Russia

Alexander P. Khomyakov

$\text{Na}_{15}(\text{Na},\text{Ca},\text{Ce})_3(\text{Mn},\text{Ca})_3\text{Fe}_3\text{Zr}_3\text{Si}_{26}\text{O}_{72}(\text{OH},\text{O})_4\text{Cl} \cdot \text{H}_2\text{O}$

Eudialyte group

Trigonal: $R3$; structure determined

a 14.205, c 30.265 Å

4.316(85), 3.536(41), 3.221(43), 3.166(37), 3.039(41), 2.970(100), 2.848(84), 2.157(34)

IMA No. **2007-024**

Silver Coin mine, Valmy, Iron Point district, Humboldt County, Nevada, USA

Anthony R. Kampf

$[\text{Na}(\text{H}_2\text{O})_{2.5}][\text{Fe}^{3+}_8(\text{PO}_4)_6(\text{OH})_7(\text{H}_2\text{O})_4]$

Meurigite group

Monoclinic: $C2/c$

a 28.835, b 5.1848, c 19.484 Å, β 106.983°

13.80(20), 9.349(100), 4.843(20), 4.318(20), 3.206(40), 3.107(30), 2.971(15), 1.574(20)

IMA No. **2007-025**

Blue Cap mine, about 15 km east of La Sal, San Juan Co., Utah, USA

Anthony R. Kampf

$\text{Ca}_2\text{Mg}[\text{V}_{10}\text{O}_{28}] \cdot 16\text{H}_2\text{O}$

Pascoite group

Monoclinic: $C2/m$; structure determined

a 19.8442, b 9.9353, c 10.7149 Å, β 120.305°

9.242(20), 8.872(30), 8.571(100), 7.270(40), 5.477(15), 4.590(15), 4.355(15), 2.137(20)

IMA No. **2007-026**

Blue Cap mine, about 15 km east of La Sal, San Juan Co., Utah, USA

Anthony R. Kampf

$\text{Zn}_3\text{V}_2\text{O}_7(\text{OH})_2 \cdot 2\text{H}_2\text{O}$

Zn-dominant analogue of volborthite

Hexagonal: $P\bar{3}m1$; structure determined

a 6.0818, c 7.1793 Å

7.211(100), 4.252(20), 2.968(50), 2.628(35), 2.470(40), 1.773(20), 1.513(20), 1.485(25)

IMA No. **2007-027**

Allende meteorite, Pueblito de Allende, Chihuahua, Mexico

Chi Ma

$\text{Sc}_4\text{Zr}_3\text{O}_{12}$

New structure type

Trigonal: $R\bar{3}$; structure determined

a 9.396, c 8.720 Å

4.698(5), 2.900(100), 2.513(18), 1.779(27), 1.776(32), 1.515(19), 1.450(4), 1.152(4)

IMA No. **2007-028**

Tsumeb, Namibia

Marcus J. Origlieri

AsSbO_3

Claudetite group

Monoclinic: $P2_1/n$; structure determined

a 4.5757, b 13.1288, c 5.4216 Å, β 95.039°

4.99(32), 3.51(100), 3.282(82), 3.238(71), 2.805(39), 2.801(31), 2.656(28), 2.279(34)

IMA No. **2007-029**

Allende meteorite, Pueblito de Allende, Chihuahua, Mexico

Chi Ma

(Mo,Ru,Fe,Ir,Os)

Hexagonal: $P63/mmc$

a 2.7506, c 4.4318 Å

2.382(24), 2.216(26), 2.098(100), 1.622(15), 1.375(17), 1.255(18), 1.169(20), 1.150(14)

IMA No. **2007-030**

La Fossa crater, Vulcano, Aeolian Islands, Italy

Francesco Demartin

$\text{K}_2[\text{AlF}_3\text{SO}_4]$

Orthorhombic: $Pbcn$; structure determined

a 10.810, b 8.336, c 6.822 Å

6.631(70), 5.429(14), 3.317(28), 2.983(100), 2.702(82), 2.648(14), 2.208(30), 1.712(58)

IMA No. **2007-031**

Mount Kukisvumchorr, Khibina alkaline massif, Kola Peninsula, Russia

Alexander P. Khomyakov

$\text{K}_3\text{Na}_3\text{Ca}_5\text{Si}_{12}\text{O}_{30}\text{F}_4 \cdot \text{H}_2\text{O}$

Canasite group

Monoclinic: Cm ; structure determined

a 18.846, b 7.242, c 12.650(2) Å, β 111.84°

5.872(31), 4.724(20), 4.711(25), 4.204(40), 3.012(22), 2.915(100), 2.357(30), 2.310(23)

IMA No. **2007-032**

Poudrette quarry, Mont Saint-Hilaire, Rouville County, Québec, Canada

Igor V. Pekov

$\text{NaBe}(\text{CO}_3)(\text{OH})\cdot 2\text{H}_2\text{O}$

New structure type

Tetragonal: $P4/mcc$; structure determined

a 13.087, c 5.404 Å

13.01(100), 9.20(62), 3.611(34), 3.256(95), 2.693(44), 2.605(37), 2.489(60), 2.076(32)

IMA No. **2007-033**

Allende meteorite, Pueblito de Allende, Chihuahua, Mexico

Chi Ma

MoNiP

Barringerite group

Hexagonal: $P\bar{6}2m$

a 5.681, c 3.704 Å

2.298(100), 2.094(69), 1.918(73), 1.852(24), 1.408(20), 1.332(17), 1.316(18), 1.111(14)

IMA No. **2007-034**

Luobusa mine, Qusong County, Tibet, China

Fang Qinsong

WC

Hexagonal: $P\bar{6}m2$

a 2.902, c 2.831 Å

2.833(44), 2.511(94), 1.878(90), 1.449(25), 1.291(36), 1.233(22), 1.149(23), 0.9008(23)

IMA No. **2007-035**

Luobusa mine, Qusong County, Tibet, China

Shi Nicheng

$(\text{Cr}_4\text{Fe}_4\text{Ni})_{29}\text{C}_4$

Hexagonal: $P6_3mc$; structure determined

a 18.839, c 4.4960 Å

6.920(100), 4.530(35), 3.596(55), 2.493(36), 2.023(98), 1.998(32), 1.825(47), 1.798(45)

IMA No. **2007-036**

Luobusa mine, Qusong County, Tibet, China

Li Guowu

TiFeSi_2

Orthorhombic: $Pbam$; structure determined

a 8.6053, b 9.5211, c 7.6436 Å

3.822(35), 2.294(18), 2.230(97), 2.124(100), 2.098(43), 1.911(44), 1.829(19), 1.292(19)

IMA No. **2007-037**

Horoman, Samani-cho, Samani-gun, Hokkaido, Japan

Arashi Kitakaze

$\text{Fe}_6\text{Ni}_3\text{S}_8$

Tetragonal: $P4/mmm$

a 8.707, c 10.439 Å

6.160(10), 3.080(100), 2.955(32), 2.435(6), 1.984(25), 1.947(51), 1.825(60), 1.805(54)

IMA No. **2007-038**

Horoman, Samani-cho, Samani-gun, Hokkaido, Japan

Arashi Kitakaze



Tetragonal: $P4_2/mmm$

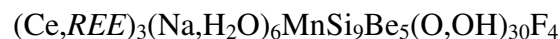
a 10.089, c 10.402 Å

5.880(15), 3.118(100), 3.050(20), 2.703(5), 1.981(5), 1.873(25), 1.844(50), 1.595(45)

IMA No. **2007-039**

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

Joel D. Grice



Monoclinic: $C2/c$; structure determined

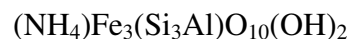
a 11.654, b 13.916, c 16.583 Å, β 95.86°

8.120(100), 3.543(39), 3.454(21), 3.176(19), 2.959(24), 2.863(48), 2.749(23), 2.668(33)

IMA No. **2007-040**

Fuengirola, Málaga Province, Spain

María Dolores Ruiz Cruz



Mica group

Monoclinic: $C2/m?$

a 5.296, b 9.199, c 10.412(6) Å, β 99.991°

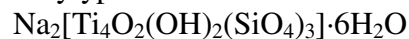
10.242(83), 3.422(46), 3.170(33), 2.290(16), 2.011(16), 2.007(18), 1.544(23), 1.524(15)

IMA No. **2007-041**

Koashva Mountain, Khibiny Massif, Kola Peninsula, Russia

Victor N. Yakovenchuk

Polytype *C*

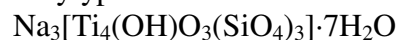


Cubic: $P\bar{4}3m$

a 7.856 Å

7.88(100), 4.53(30), 3.20(80), 2.774(30), 2.622(40), 2.478(40), 1.96(30), 1.843(30)

Polytype *T*



Trigonal: $R3m$

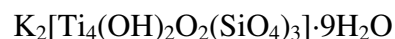
a 10.94, c 13.97 Å

7.88(100), 3.277(60), 3.175(80), 2.730(50), 2.607(70), 2.471(50), 1.960(60), 1.916(50)

IMA No. **2007-042**

Koashva Mountain, Khibiny Massif, Kola Peninsula, Russia

Victor N. Yakovenchuk



Cubic: $P\bar{4}3m$

a 7.808 Å

7.85(100), 3.91(20), 3.201(80), 2.765(20), 2.602(30), 2.471(40), 1.951(30), 1.839(30)

IMA No. **2007-043**

Koashva Mountain, Khibiny Massif, Kola Peninsula, Russia

Victor N. Yakovenchuk

$\text{Cu}[\text{Ti}_4(\text{OH})_2\text{O}_2(\text{SiO}_4)_3] \cdot 7\text{H}_2\text{O}$

Cubic: $P\bar{4}3m$

a 7.850 Å

7.87(100), 3.94(20), 3.205(80), 2.774(20), 2.616(30), 2.481(30), 1.960(30), 1.843(30)

IMA No. **2007-044**

Biachella Valley, Sacrofano municipality, Rome province, Latium region, Italy

Nikita V. Chukanov

$(\text{Na,Ca,K})_8(\text{Si}_6\text{Al}_6\text{O}_{24})(\text{SO}_4)_2(\text{OH})_{0.5} \cdot \text{H}_2\text{O}$

Cancrinite group

Trigonal: $P3$; structure determined

a 12.913, c 79.605 Å

11.07(19), 6.45(18), 4.782(15), 3.720(100), 3.576(18), 3.469(14), 3.300(47), 3.220(16)

IMA No. **2007-045**

Colima volcano, Colima State, México

Mikhail Ostrooumov

K_3VS_4

Orthorhombic: $Pnma$

a 9.138, b 10.627, c 9.131 Å

3.464(77), 3.237(57), 3.229(66), 2.926(70), 2.890(52), 2.799(100), 2.787(75), 2.676(80)

IMA No. **2007-046**

Sarbai Mine, Turgai region, Kazakhstan

Luca Bindi

$[\text{Cu}_6\text{As}_2\text{S}_7][\text{Ag}_9\text{CuS}_4]$

Pearceite-polybasite group

Trigonal: $P\bar{3}m1$; structure determined

a 7.3218, c 11.8877 Å

11.89(54), 3.063(38), 2.972(100), 2.797(44), 2.476(45), 2.349(45), 2.168(42), 1.831(50)

IMA No. **2007-047**

Mina Asunción, Sierra Gorda, Caracoles District, Antofagasta Province, Chile

Joël Brugger

$\text{Pb}_2[\text{B}_5\text{O}_9]\text{Cl} \cdot 0.5\text{H}_2\text{O}$

Hilgardite group

Orthorhombic: $Pnn2$; structure determined

a 11.3757, b 11.5051, c 6.5568 Å

5.71(80), 4.04(100), 3.29(40), 3.16(30), 2.84(100), 2.55(40), 2.019(70), 1.877(40)

IMA No. **2007-049**

Kumdy Kol, Kokchetav, Northern Kazakhstan

Shyh-Lung Hwang

$\text{NaAlSi}_3\text{O}_8$

Feldspar group

Orthorhombic: $P2nn$ or $Pmnn$

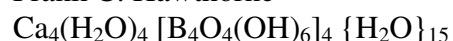
a 8.24, b 8.68, c 4.84 Å

5.97, 4.33, 4.21, 4.18, 4.12, 3.76, 3.23, 3.02, 2.95, 2.74

IMA No. **2007-050**

Santa Rosa mine, Sijes, Salta province, Argentina

Frank C. Hawthorne



New structure type

Orthorhombic: $Pca2_1$; structure determined

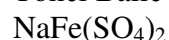
a 12.161, b 40.477, c 10.1843 Å

10.501(10), 9.992(5), 5.226(7), 4.623(6), 3.837(7), 3.118(7), 2.612(6), 2.538(6)

IMA No. **2007-051**

Eldfell, Heimaey island, Vestmannaeyjar archipelago, Iceland

Tonči Balić-Žunić



Yavapaiite group

Monoclinic: $C2/m$

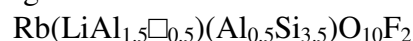
a 8.022, b 5.135, c 7.123 Å, β 92.15°

3.72(76), 3.64(54), 3.43(54), 2.77(100), 2.72(57), 2.57(31), 2.370(63), 1.650(32)

IMA No. **2007-052**

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

Igor V. Pekov



Mica group

Monoclinic: $C2/c$

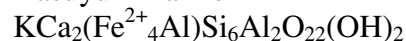
a 5.191, b 9.025, c 20.40 Å, β 95.37°

10.1(60), 5.08(40), 4.55(80), 3.98(40), 3.49(50), 3.35(60), 2.575(100), 2.017(50)

IMA No. **2007-053**

Kabutoichiba, Kameyama, Mie Prefecture, Japan

Yasuyuki Banno



Amphibole group

Monoclinic: $C2/m$; structure determined

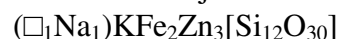
a 9.937, b 18.108, c 5.335 Å, β 105.30°

8.48(81), 3.40(51), 3.15(46), 2.72(100), 2.61(59), 2.57(43), 2.36(37), 2.17(39)

IMA No. **2007-054**

Klöch, north of Bad Radkersburg, Eastern Styria, Austria

Hans-Peter Bojar



Milarite group

Hexagonal: $P6/mcc$; structure determined

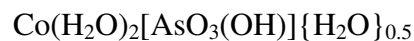
a 10.120, c 14.298 Å

7.149(100), 5.540(43), 4.130(40), 3.736(70), 3.227(67), 2.920(40), 2.770(68), 2.530(43)

IMA No. **2007-055**

Keeley mine, South Lorrain Township, Timiskaming District, Ontario, Canada

Frank C. Hawthorne



New structure type

Monoclinic: $P2_1/n$; structure determined
 a 4.7058, b 9.299, c 12.738 Å, β 98.933°
7.446(100), 6.267(44), 3.725(29), 3.260(25), 3.089(20), 2.998(31), 2.970(21), 2.596(23)

IMA No. **2007-056**

Suizhou L6 chondrite: Dayanpo, Suizhou County, Hubei Province, China

Ming Chen

FeCr_2O_4

Spinel group

Orthorhombic: $Bbmm$

a 9.462, b 9.562, c 2.916 Å

2.650(100), 2.389(20), 2.089(10), 1.953(90), 1.566(60), 1.439(15), 1.425(15), 1.337(40)

IMA No. **2007-057**

Granite quarry 10 km SSW of the township of Lake Boga, northwestern Victoria, Australia

Stuart J. Mills

$\text{CuFe}^{3+}_2(\text{PO}_4)_2(\text{OH})_2 \cdot 4\text{H}_2\text{O}$

Whitmoreite group

Monoclinic: $P2_1/c$

a 9.863, b 9.661, c 5.476 Å, β 92.45°

9.849(100), 6.892(80), 4.924(80), 4.386(90), 4.333(45), 4.225(35), 2.697(60), 2.654(31)

IMA No. **2007-058**

Altebürg, Otting and Seelbronn in and around the Ries Crater in Bavaria, Germany

Ahmed El Goresy

TiO_2

Baddeleyite group

Monoclinic: $P2_1/c$

a 4.606, b 4.986, c 4.933 Å, β 99.17°

2.929(100), 2.626(91), 2.494(24), 2.437(42), 2.017(40), 1.742(40), 1.686(42), 1.54(31)

IMA No. **2007-059**

Talnakh deposit, Noril'sk-Talnakh camp, Taimyr Autonomous District, Siberia, Russia

Anna Vymazalová

$\text{Pd}_3\text{Pb}_2\text{Te}_2$

Shandite group

Orthorhombic: $Pmnm$; structure determined

a 8.599, b 5.9381, c 6.3173 Å

6.3152(34), 3.1572(33), 3.0495(100), 2.5456(63), 2.4424(34), 2.2786(42), 2.1637(71),
1.8906(42)

IMA No. **2007-060**

Ratti quarry, Baveno, Verbania, Piemonte region, Italy

Fabrizio Nestola

$(\text{Ce}, \text{Ln}, \text{Ca})_9(\text{Al}, \text{Fe}^{3+})(\text{SiO}_4)_3[\text{SiO}_3(\text{OH})]_4(\text{OH})_3$

Cerite group

Trigonal: $R3c$; structure determined.

a 10.581, c 37.932 Å

3.405(27), 3.250(26), 2.914(100), 2.647(58), 2.198(40), 1.923(34), 1.750(46), 1.732(34)

IMA No. **2007-061**

Mono Lake, California, USA

Hexiong Yang

$\text{KNaMg}_2(\text{PO}_4)_2 \cdot 14\text{H}_2\text{O}$

Struvite group

Orthorhombic: *Pmnb*; structure determined

a 6.9349, *b* 25.1737, *c* 11.2189 Å

4.302(100), 4.184(22), 3.262(20), 2.803(32), 2.786(43), 2.767(51), 2.742(48), 2.670(51)

OLDER PROPOSALS

IMA No. **2006-019a**

Cassagna mine, Val Graveglia, eastern Liguria, northern Apennines, Italy

Riccardo Basso

$(\text{Ca}, \text{Mn}^{2+})_4(\text{Fe}^{3+}, \text{Mn}^{3+}, \text{Al})_4(\text{OH})_4(\text{V}^{3+}, \text{Mg}, \text{Al})_2(\text{O}, \text{OH})_4(\text{Si}_3\text{O}_{10})(\text{SiO}_4)_2$

Orthorhombic: *Cmcm*; structure determined

a 6.066, *b* 8.908, *c* 18.995 Å

9.52(100), 4.98(45), 4.85(50), 4.03(40), 3.02(60), 2.66(70), 2.54(60), 2.32(40)

IMA No. **98-053a**

Bendada near Guarda, province Beira Alta, central Portugal

Uwe Kolitsch

$\text{Fe}^{2+}\text{Fe}^{3+}_2(\text{AsO}_4)_2(\text{OH})_2 \cdot 4\text{H}_2\text{O}$

Whitmoreite group

Monoclinic: *P2₁/c*; structure determined

a 10.239, *b* 9.713, *c* 5.552 Å, β 94.11°

10.22(10), 7.036(8), 4.833(3), 4.520(2), 4.250(5), 3.490(2), 2.907(3), 2.865(4)

IMA No. **2002-045b**

Menzenschwand, Southern Black Forest, Baden-Württemberg, Germany

Kurt Walenta and Frédéric Hatert

$(\text{K}, \text{U}, \square)(\text{UO}_2)_3(\text{AsO}_4)(\text{OH})_4 \cdot \text{H}_2\text{O}$

New structure type

Orthorhombic: *Cccm*; structure determined

a 8.154, *b* 11.55, *c* 13.75 Å

6.71(80), 6.03(100), 3.78(70), 3.33(80), 2.96(60), 2.88(40), 2.63(50), 1.942(50).

IMA No. **2006-051**

Dolores prospect, Pastrana, Murcia Province, Spain

John L. Jambor

$(\text{Ca}, \text{Cu}, \text{Na}, \text{Fe}^{3+}, \text{Al})_{12}\text{Al}_2(\text{AsO}_4)_8(\text{OH}, \text{Cl})_x \cdot n\text{H}_2\text{O}$

Smolianinovite group (?)

Monoclinic: *P2₁/a* or *Pa*

a 9.972, *b* 22.44, *c* 5.272(8) Å, β 92.9°

22.0(100), 11.16(70), 4.983(50), 3.655(25), 3.333(45), 3.003(30), 2.767(30)

IMA No. **89-035a**

Glücksstern mine, Gottlob Hill, Friedrichroda, Thüringen, Germany

Thomas Witzke

LaVO_4

Xenotime group

Tetragonal: $I4_1/amd$; structure determined

a 7.406, c 6.504 Å

3.707(100), 2.939(5), 2.759(10), 2.623(7), 2.309(5), 2.088(5), 1.902(4), 1.853(19)

WITHDRAWAL OF AN APPROVED MINERAL

Proposal 2005-012 was approved (mineral and name) in June 2005. The authors have recently submitted additional data on this phase which show that it is merely a monoclinic polytype of mackelveyite-(Y), namely mackelveyite-(Y)-2*M*. The approval for this proposal is thus withdrawn.

CHANGES IN EXISTING NOMENCLATURE

IMA No. 07-A

The mineral surkhobite and its name are revalidated. Surkhobite is redefined as $(Ba,K)_2CaNa(Mn,Fe^{2+},Fe^{3+})_8Ti_4(Si_2O_7)_4O_4(F,OH,O)_6$, it differs from jinshajiangite because Mn prevails over Fe^{2+} , and it differs from perraultite because Ca dominates in the A(6) site. Decision IMA No. 06-E [Species and name surkhobite (IMA 2002-037) have been discredited because the species corresponds to jinshajiangite (IMA 81-061)] is thus nullified.

Meurigite

The approval of IMA No. 2007-024 necessitates a name change for meurigite (IMA No. 95-022) into meurigite-K.

Ardennite

The approval of IMA No. 2005-037 for ardennite-(V) and its publication in *Eur. J. Mineral.*, 19 (2007), 581-587 necessitates a name change for ardennite into ardennite-(As).

IMA No. 07-B

The mineral calcio-olivine is redefined as the calcium-dominant member of the olivine group. Calcio-olivine is the natural equivalent of synthetic γ - Ca_2SiO_4 , not of synthetic α - Ca_2SiO_4 as erroneously reported in literature. Calcio-olivine is a polymorph of larnite, monoclinic β - Ca_2SiO_4 .

IMA No. 07-C

Several decisions have been taken on the nomenclature of a number of mineral names:

The authors of new-mineral proposals should use a suffix nomenclature rather than a prefix nomenclature. Some minerals in well-known groups are to be renamed.

Mineral names consisting of two words are to be renamed.

Mineral names having superfluous hyphens are to be renamed (with the exception of the current amphibole names, for which a subcommittee is discussing a new nomenclature).

Minerals named after localities or persons should have the original spelling in their name, including the diacritical marks. A list of such names is to be published.

Mineral names having superfluous diacritical marks (marks not present in the original names of localities or persons) are to be renamed.

Lists of mineral names to be changed by these decisions have been published by the chairman in *Mineralogical Record*, 39 (2008), 131-135. The paper is available on the CNMNC website.

PUBLICATION OF IMA-CNMNC REPORT

The report of the Subcommittee for Unnamed Minerals on a system of codification for unnamed minerals has been published by Dorian G.W. Smith and Ernest H. Nickel in *Canadian Mineralogist*, 45 (2007), 983-1055. The paper contains a complete list of unnamed minerals. Paper and lists are available on the CNMNC website.