

## NEW MINERAL NAMES

### Kobeite

JITSUTARO TAKUBO, YASUO UKAI, and TANE0 MINATO, Studies on the minerals containing rare elements. (II) A new mineral, "kobeite" found at Shiraiishi, Kobe-mura, Kyoto Prefecture, Japan: *J. Geol. Soc. Japan*, **56**, No. 663, 509-513 (1950). Abstracted from a translation by Shigeo Ofuji, edited by Miss Rachel Barker, U. S. Geological Survey, Tokyo.

CHEMICAL PROPERTIES: Two analyses were made on material separated from parisite with a needle and further purified by floating off material with specific gravity less than 3.

	1	2
CaO	1.15	1.23
MgO	0.53	1.28
MnO	0.35	0.84
FeO	0.61	0.62
Fe <sub>2</sub> O <sub>3</sub>	9.67	12.93
Al <sub>2</sub> O <sub>3</sub>	2.69	0.34
Ce <sub>2</sub> O <sub>3</sub>	0.90	0.58
Ce group oxides	0.05	1.63
Y group oxides	23.91	22.21
SiO <sub>2</sub>	2.29	3.83
TiO <sub>2</sub>	33.03	34.72
Nb <sub>2</sub> O <sub>6</sub> +Ta <sub>2</sub> O <sub>5</sub>	5.45	4.84
ThO <sub>2</sub>	1.19	0.82
U <sub>3</sub> O <sub>8</sub>	12.64	9.95
PbO	—	0.13
H <sub>2</sub> O <sup>+</sup>	3.19	3.75
H <sub>2</sub> O <sup>-</sup>	0.92	0.44
Sum	98.57	100.14
Analyst	Taneo Yasuo	J. Takubo

This gives very nearly AB<sub>2</sub>(O, OH)<sub>6</sub> where A=Y, U, etc., B=Ti, Nb, etc., like the euxenite-polycrase and the blomstrandine-priorite series.

PHYSICAL PROPERTIES: In radiated crystals and parallel growths, color black, luster vitreous. Brittle, optically isotropic, brown in thin plates. Metamict and remains so (microscope and x-ray study) when heated at 900° C. for 30 minutes in an electric furnace. Strongly radioactive.

OCCURRENCE: In a pegmatite associated with parisite, zircon, monazite, tscheffkinitite, xenotime, bitotite, albite, smoky and white quartz, and muscovite.

NAME: For the locality.

DISCUSSION: Differentiated by the authors from polycrase and blomstrandine by the low Nb<sub>2</sub>O<sub>5</sub>+Ta<sub>2</sub>O<sub>5</sub> content. Presumably a variety, but needs further study.

MICHAEL FLEISCHER

### Magniophilite

A. A. BEUS, Magniophilite and mangankoninckite, two new minerals from pegmatites: *Doklady Akad. Nauk S.S.S.R.*, **73**, 1267-1279 (1950).

The name magniophilite is given to a salmon-pink mineral, occurring in prismatic crystals associated with triphylite in microcline-muscovite pegmatite at Kyrk-Bulaka,

Turkestan Ridge. Analysis gave: FeO 16.95, Fe<sub>2</sub>O<sub>3</sub> none, MnO 30.77, CaO 0.54, MgO 9.50, P<sub>2</sub>O<sub>5</sub> 42.53, H<sub>2</sub>O<sub>-</sub> 0.42; sum 100.71%, corresponding to (Mn, Fe, Mg)<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> with Mn:Fe:Mg=434:236:235. Optically positive with  $\alpha=1.695$ ,  $\beta=1.706$ ,  $\gamma=1.712$ , all  $\pm .002$ ;  $2V=45-48^\circ$ . X-ray powder data (12 lines) are given.

DISCUSSION: An unnecessary name for magnesian graptomite. The indices of refraction given correspond to an optically negative mineral with high  $2V$ .

M. F.

#### Mangankoninckite

A. A. BEUS, *loc. cit.*

Pinkish violet to blue fine-grained material in the oxidized part of the pegmatite contained FeO none, Fe<sub>2</sub>O<sub>3</sub> 33.62, Mn<sub>2</sub>O<sub>3</sub> 2.72, P<sub>2</sub>O<sub>5</sub> 31.44, H<sub>2</sub>O<sub>-</sub> 7.98, H<sub>2</sub>O<sub>+</sub> 24.13; sum 99.89%, corresponding to (Fe, Mn)PO<sub>4</sub>·3H<sub>2</sub>O. G.=2.65,  $n=1.68-1.70$ .

DISCUSSION: An unnecessary name for a manganian variety. The validity of koninckite is questionable; likely it is strengite or phosphosiderite.

M. F.

#### Perrierite

STEFANO BONATTI AND GLAUCO GOTTARDI, Perrierite, nuovo minerale ritrovato nella sabbia di nettuno (Roma). *Rend. acad. nazl. Lincei, Classe sci. fis., mat. e nat.*, Ser. 8, 9, No. 6, 361-368 (1950).

The mineral was found as grains and crystals up to 0.2 mm. in the tuffaceous sands of Nettuno. It resembles epidote in habit. It is rare, perhaps 0.1%, but is easily recognized by its marked pleochroism. The crystals are monoclinic, prismatic, with  $a:b:c=2.047:1:2.380$ ,  $\beta 113^\circ 28'$ . Fifteen forms were recognized. Frequently twinned on (100). No cleavage was noted; fracture uneven to conchoidal. Biaxial, neg.,  $2V_x$  very small, with  $nX=1.90-1.95$ ,  $nZ=2.02-2.06$ ; absorption strong  $Z>Y>>X$ ; Z opaque to deep brown, Y opaque to rose-violet, X yellow;  $Z=b$ ,  $X \wedge a+24^\circ$ ;  $2V_x$  very small. Color black to brownish, luster resinous; streak brown. G.=4.3, hardness=5½. Analysis of a sample 95% pure, containing zircon, monazite, spinel, and with inclusions believed to be apatite gave: SiO<sub>2</sub> 18.21, TiO<sub>2</sub> 20.71, P<sub>2</sub>O<sub>5</sub> 2.07, FeO 5.47, MgO 0.92, CaO 3.85, rare earths 43.45, ThO<sub>2</sub> 4.60, Na<sub>2</sub>O 1.00, H<sub>2</sub>O none; sum 100.28%. This gives SiO<sub>2</sub>:TiO<sub>2</sub>=1:1, but a formula can not be computed, as the atomic weight of the rare earths was not determined. The mineral dissolves in hot, concentrated H<sub>2</sub>SO<sub>4</sub>. The Nettuno sands were derived from the weathering of tuffs and contain pyroxene, ilmenite, garnet, and magnetite. Further work is in progress. The name is for the Italian mineralogist, Carlo Perrier.

DISCUSSION: Bonatti and Gottardi point out that perrierite has a composition close to that of chevkinite (tscheffkinite), which they consider to be a non-crystalline mineral. However, the literature contains optical and goniometric and x-ray data on chevkinite. The physical and optical properties of perrierite fall in the range listed for chevkinite and many interfacial angles of perrierite are close to some given for chevkinite, although the orientations adopted are apparently different. No evidence is presented that the supposed new mineral perrierite differs from tscheffkinite.

M. F.

#### Nickel Cabrerite

#### Cobalt Cabrerite

HEINZ MEIXNER, Über Cabrerit. *Neues Jahrb. Mineral.*, Monatsh. 1950, 169-174.

HEINZ MEIXNER, Kobalt cabrerit, ein neues Mineral aus der Magnesitlagerstätte auf der Millstätter Alpe bei Radenthein, Karnten. *Neues Jahrb. Mineral.*, Monatsh. 1951, 17-19.

The name cabrerite was given in 1868 by Dana to material described by Ferber in 1863 and which corresponded to annabergite containing 9.3% MgO. In 1937, Barth showed that some "cabrerite" had the optical properties of annabergite. In the first paper cited above, Meixner shows that material from near Friesach, Carinthia, has  $\beta=1.630$ ,  $\gamma=1.657$ , and gave tests for Ni, Mg, As, and H<sub>2</sub>O (Co not mentioned—M.F.), hence is a member of the solid solution series (Ni, Mg)<sub>3</sub>(AsO<sub>4</sub>)<sub>2</sub>·8 H<sub>2</sub>O, with Ni:Mg about 2:1. In the second paper, Meixner describes incrustations on magnesite from near Radenthein, Carinthia, with  $\beta=1.625$ ,  $\gamma=1.657$ , which gave tests for Co and As (Ni not mentioned—M.F.). This corresponds to a member of the erythrite-hoernesite series with a composition approximately Co<sub>1.8</sub>Mg<sub>1.2</sub>(AsO<sub>4</sub>)<sub>2</sub>·8 H<sub>2</sub>O. The name cobalt cabrerite is suggested for this material and nickel cabrerite for the member of the solid solution series annabergite-hoernesite.

DISCUSSION: These are unnecessary names for magnesian erythrite and magnesian annabergite.

M. F.

#### DISCREDITED MINERALS

##### Eschwegeite (= tantalian polycrase)

ELYSIARIO TAVORA, Eschwegeita e euxenita. *Anais acad. brasileira ciencias*, **23**, 119-128 (1951).

Eschwegeite from the type locality, Rio Dôce, Minas Gerais, Brazil, was metamict, but gave a sharp x-ray powder pattern after being heated to 1,000°. The data were indexed and correspond to an orthorhombic cell with  $a_0=5.516$ ,  $b_0=14.550$ ,  $c_0=5.154$  Å, in good agreement with available data on the euxenite-polycrase series. From the original analysis, eschwegeite is a tantalian polycrase.

M. F.

##### Harttite (= calcian svanbergite)

ELYSIARIO TAVORA, Constantes reticulares da harttita. *Anais acad. brasileira ciencias*, **23**, 129-134 (1951).

X-ray study of material from the type locality, São José River, Lençóis, Bahia, Brazil, showed it to be a member of the alunite-beaudantite group, with lattice constants intermediate between those of woodhouseite and svanbergite. The original analysis corresponds to a calcian svanbergite.

M. F.