

The most valuable part of the book to prospectors will probably be Chapter 7, which answers, in clear, non-technical language 17 basic questions that beginners are likely to ask.

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NEW MINERAL NAMES

Cymrite

W. CAMPBELL SMITH, F. A. BANNISTER AND MAX H. HEY, Cymrite, a new barium mineral from the Benallt manganese mine, Rhiw, Carnarvonshire: *Mineral. Mag.*, **28**, 676-681 (1949).

CHEMICAL PROPERTIES: Analyses were made by Hey, No. 1 below on 7 mg., almost free from impurities; No. 2 on 20 mg. that contained some reddish-brown oxide minerals. No. 3 is the theoretical composition for $\text{BaAlSi}_3\text{O}_8(\text{OH})$.

	SiO_2	Al_2O_3	BaO	H_2O	Fe_2O_3	MnO	Sum
1.	44.8	10.5	[38.5]	3.1	2.8	0.3	[100]
2.	37.65	14.94	31.50	5.31	9.26	0.86	99.52
3.	45.79	12.95	38.97	2.29	—	—	100.00

Heated in a closed tube, the mineral decrepitates, gives off water, and becomes pearly, white, and opaque.

CRYSTALLOGRAPHY: Rotation and Laue photographs show the mineral to be hexagonal. There is a pseudo-cell with $a' 5.33$, $c 7.67$ Å.U., containing $\text{Ba}_2\text{AlSi}_3\text{O}_8(\text{OH})$; the true cell has $a=8a'=42.6$ Å.U. Cleavage basal, perfect. Prismatic cleavage noted in thin section. Flakes heated to bright redness had $a 5.29$, $c 7.78$ Å.U., but the index of refraction had dropped to 1.523. X-ray powder data are given.

PHYSICAL AND OPTICAL PROPERTIES: Colorless, in plates up to 7 mm. across and about $\frac{1}{2}$ mm. thick. Also in fibrous specimens with satiny luster. Optically uniaxial, negative; two samples gave (Na light):

	ω	ϵ	Birefringence
1.	$1.6225 \pm .001$	$1.6125 \pm .001$	$0.0094 \pm .0004$
2.	1.6195	1.6115 to 1.6140	0.008 (white light)

For No. 2, ω (Hg-green) 1.624

$D_{20} 3.413 \pm .005$ by suspension in Clerici solution on four carefully selected fragments.

OCCURRENCE: Associated with ganophyllite at the Benallt mine.

NAME: From the Welsh name for Wales, Cymru (pronounced kumry).

MICHAEL FLEISCHER

Llallagualite

MARK C. BANDY, Mineralogia de Llallagua, Bolivia. La Paz, 1946, 69 pp.; through *Mineral. Mag.*, **28**, 732 (1949).

Provisional name for rhombohedral phosphate, which has perhaps the composition of monazite, named for the locality.

M. F.

Patifioite

M. C. BANDY, *op. cit.*; through *Mineral. Mag.*, **28**, 735 (1949).

"Provisional name for yellow tetragonal crystals, probably a phosphate or arsenate.

Named for Simon Iturbi Patiño, who was the first to work the Llallagua mines."

DISCUSSION: Names such as these, published without descriptions, have no standing.
M. F.

DISCREDITED MINERALS

Franquenite = Slavikite

RENÉ VAN TASSEL, L'identité entre slavikite et franquenite: *Bull. inst. roy. sci. nat. Belg.*, **25**, No. 7, 15 pp. (1949).

Comparison of franquenite (see *Am. Mineral.*, **31**, 327 (1946)) with slavikite from Valachov, Mandat, and Troja, Czechoslovakia, and Alcaparossa, Argentina, shows their identity. Analyses, optical data, and *x*-ray data are given.

M. F.

Renierite

J. F. VAES, La Reniérite (Anciennement appelée "Bornite orange"). Un sulfure germanifère provenant de la Mine Prince-Leopold, Kipushi (Congo belge): *Ann. soc. belge géol.*, *Bull.* **72**, Nos. 1-2, 19-32 (1948).

Re-examination of a mineral previously identified by various workers as orange bornite, cubanite, luzonite, and valleriite showed it to contain germanium.

CHEMICAL PROPERTIES: Analyses of four samples gave

	1	2	3	4
Cu	41.35	41.63	42.05	41.10
Fe	13.84	13.73	13.78	13.73
Ge	6.80	7.75	6.37	6.80
Zn	3.53	3.53	3.94	3.70
As	0.95	0.87	0.79	1.00
S	31.83	31.51	31.69	31.65
Pb	tr.	tr.	tr.	tr.
Sum	98.30	99.02	98.62	98.37 ^a

^a Also Ga tr., Sn 0.16, Insol. 0.20.

Spectrographic analysis showed no element present that would account for the low summations. Soluble in HNO₃.

CRYSTALLOGRAPHIC AND PHYSICAL PROPERTIES: Occurs in idiomorphic grains and in crystals up to 1.5 mm. in geodes. Isometric hextetrahedral, but shows anisotropism in reflected light. Color orange bronze. Hardness 4½, G. higher than that of malachite, lower than that of barite hence about 4.4. An impure sample had G. 4.31. Magnetic and has polarity.

OCCURRENCE: Occurs as inclusions in chalcopyrite, sphalerite, galena, and tennantite, and contains inclusions of tennantite.

NAME: For A. Renier, director of the Geological Survey of Belgium.

DISCUSSION: A comparison is given of renierite and germanite with the conclusion that the differences in chemical composition and physical properties are too great to consider renierite a variety of germanite. The differences are 13.8% Fe, (7.8% in germanite), bronze in color (germanite is reddish-gray), magnetism (not stated whether germanite is magnetic), anisotropy, (but it is stated that this may be an anomaly and that *x*-ray study is needed).

It seems to me that until further evidence is provided, the name reinierite is unjustified for what appears to be ferroan germanite.

M. F.