NEW MINERAL NAMES

Kandites, Smectites

G. Brown, Report of the clay minerals group subcommittee on nomenclature of the clay minerals. *Clay Minerals Bull.*, **2**, No. 13, 294–302 (1955).

Tentative proposals on nomenclature include the following:

"Smectites is the name proposed for the minerals at present variously known as the montmorillonoids, montmorins, minerals of the montmorillonite group, or frequently even montmorillonites. Smectites are defined as minerals composed of 2:1 or triphormic layers, which, when the readily exchangeable cations are replaced by Na^+ and the material is saturated with glycerol, give a basal spacing of 18 Å, approximately. Such minerals have a cation exchange capacity of 70–120 m.e./100 g. for readily exchangeable cations."

"Kandites is proposed for what are presently known as the minerals of the kaolinite group or the kaolin minerals. These are the minerals composed of 1:1 (diphormic) layers with essential chemical composition close to $Al_2O_3 \cdot 2SiO_2 \cdot 2H_2O$."

"The group names are plural but an individual member of the group may be called for example 'a smectite.' The group names can also be used as adjectives, for example 'the smectite content.'"

Discussion: I think that the proposed names are bad ones and I hope that they are never used. New names for minerals or mineral groups should not be introduced unless absolutely necessary. The terms "kaolinite group minerals" and "montmorillonite group minerals" have been in general use for many years and are understood by all workers in the field, and this is an advantage that far outweighs the use of fewer words. The resurrection of the long abandoned smectite, which had been used for both montmorillonite and halloysite, is particularly unfortunate.

I hope that all who are concerned with clay minerals will send comments on these and other problems of nomenclature to the British Clay Minerals Group and to the Committee on Nomenclature of the Mineralogical Society of America, so that these will have a basis for future discussion of the problems.

Michael Fleischer

Ledikite

G. Brown, *op. cit.*

The name ledikite is proposed for the material described by G. F. Walker, *Mineralog. Mag.*, **29**, 72–84 (1950), as a hydrous mica bearing the same relation structurally to biotite as dioctahedral illite does to muscovite.

The name is for the locality, East Ledikin, Aberdeenshire.

Discussion: Walker (1950) wrote: "In spite of these difficulties, however, it is not proposed to introduce a new mineral name at this time, since it is felt that this would be likely merely to add to the existing confusion in the nomenclature of the clay micas, especially since data on the trioctahedral clay mica itself are still rather scanty."

Yoder and Eugster, *Geochimica et Cosmochimica Acta*, **6**, 182–183 (1954), discussed Walker's data and stated, "An examination of the diffuse *x*-ray pattern and the accompanying table of indexed reflections published by Walker suggests that this material is a 1 *Md* trioctahedral mica."

The status of this material and, indeed, the whole nomenclature of the hydrous micas therefore require reconsideration. Dr. Walker's statement of 1950 quoted above is still a good one, and I regret that he has not agreed to the subcommittee's proposal of this new name.

M. F.

Ordonezite

G. Switzer and W. F. Foshag, *Am. Mineral.*, **40**, 64–69 (1955).

Rabbittite

M. E. Thompson, A. D Weeks and A. M. Sherwood, *Am. Mineral.*, **40**, 201–206 (1955).

Navajoite

A. D. Weeks, M. E. Thompson and A. M. Sherwood, *Am. Mineral.*, **40**, 207–212 (1955).

Goldichite

A. Rosenzweig and E. B. Gross, *Am. Mineral.*, **40**, 469–480 (1955).

Hawleyite

R. J. Traill and R. W. Boyle, *Am. Mineral.*, **40**, 555–559 (1955).

Cerianite

A. R. Graham, *Am. Mineral.*, **40**, 560–564 (1955).

Neomesselite

C. Frondel, *Am. Mineral.*, **40**, 828–833 (1955).

Beta-Roselite

C. Frondel, *Am. Mineral.*, **40**, 828–833 (1955).

Paramontroseite

H. T. Evans, Jr., and M. E. Mrose, *Am. Mineral.*, **40**, 861–875 (1955).

Murdochite

J. J. Fahey, *Am. Mineral.*, **40**, 905–906 (1955).
C. L. Christ and J. R. Clark, *Am. Mineral.*, **40**, 907–916 (1955).

Tavorite

M. L. Lindberg and W. T. Pecora, *Am. Mineral.*, **40**, 952–966 (1955).

Barbosalite

M. L. Lindberg and W. T. Pecora, *Am. Mineral.*, **40**, 952–966 (1955).

Gonyerite

C. Frondel, *Am. Mineral.*, **40**, 1090–1094 (1955).

M. F.

NEW DATA

Fischerite (=Wavellite) (?)

N. G. Sumin, Are fischerite and wavellite identical minerals? *Trudy Mineralog. Muzeya, Akad. Nauk. S.S.S.R.*, No. **5**, 146–152 (1950); from an abstract by Wilhelm Eitel in *Chem. Abs.*, **49**, 15649 (1955).

EMIL FISCHER. Über die Selbständigkeit des Minerals Fischerit. *Heidelberger Beitr. Mineral. Petrog.*, **4**, 522–525 (1955).

Fischerite was described in 1844 by R. Hermann. Wherry (*Am. Mineral.*, **2**, 32 (1917) suggested that it was identical with wavellite. Sumin examined material from Nizhnii Tagil (type locality) and from Mednorudyansk, Urals. Fischer examined a sample from Nizhnii Tagil in the Humboldt University collection, marked "Coll. G. Rose" and 5 similar samples from the Freiberg collection, labelled as having been sent from Russia to Breithaupt in 1838.

Goniometric data gave $a:b=0.594:1$ (Sumin), 0.5505:1 (Fischer). Wavellite has $a:b=0.5577:1$ (Dana, 7th Ed., Vol. 2, p. 962, as the average of rather discordant values). X-ray powder patterns of fischerite and wavellite appear to be identical (Sumin) (Fischer). G. (fischerite) 2.43 (Sumin), 2.32–2.36 reported for wavellite. Hardness (fischerite) 4–5 (Sumin); $3\frac{1}{2}$–4 reported for wavellite. Fischerite is optically biaxial, positive with α 1.531, β 1.540, γ 1.552, 2V 65° (Sumin, who states that these are higher than the data for wavellite. (However, even higher indices have been reported for wavellite, see Dana, p. 963.)

The original analysis of fischerite corresponds to $6\ Al_2O_3 \cdot 3\ P_2O_5 \cdot 24\ H_2O$, whereas the accepted formula of wavellite corresponds to $6\ Al_2O_3 \cdot 4\ P_2O_5 \cdot 26\ H_2O$. New analyses (Fischer) gave: P_2O_5—wavellite 34.7, fischerite 35.3, fischerite (green crust) 35.7%; ignition loss—wavellite 28.2, fischerite 27.5, fischerite (green crust) 24.7%. The crust contains a little copper. Fischer states that the low H_2O and the Cu of the crust indicate the presence of callaite or chalcosiderite, and this was confirmed by the x-ray powder photographs.

From his data, Sumin concludes that fischerite is an independent species; from his own data, Fischer concludes that fischerite is identical with wavellite.

DISCUSSION: The x-ray data seem to me to be decisive in favor of Fischer's conclusion.

M. F.

Scawtite

J. MURDOCH, *Am. Mineral.*, **40**, 505–509 (1955).
J. D. C. MCCONNELL, *Am. Mineral.*, **40**, 510–514 (1955).

Hewettite, Metahewettite

W. H. BARNES, *Am. Mineral.*, **40**, 689–692 (1955).

Niggliite

W. O. J. G. MEIJER, *Am. Mineral.*, **40**, 693–696 (1955).

Kutnahorite

C. FRONDEL AND L. H. BAUER, *Am. Mineral.*, **40**, 748–760 (1955).

M. F.

DISCREDITED MINERALS

Beyrichite

C. MILTON AND J. M. AXELROD, *Am. Mineral.*, **40**, 767–769 (1955).

Schizolite (=manganoan pectolite)

W. T. SCHALLER, *Am. Mineral.*, **40**, 1022–1031 (1955).

Melanolite (=delessite)

C. FRONDEL, *Am. Mineral.*, **40**, 1090–1094 (1955).

M. F.