

MEETING OF THE NOMENCLATURE COMMITTEE OF A.I.P.E.A.

(Association Internationale pour l'Etude des Argiles)

Mexico City, 21 July 1975

The following members of the committee were present: G. W. BRINDLEY (chairman), G. PEDRO (secretary), S. W. BAILEY, K. JASMUND and H. M. KOSTER

The following were the main items discussed and the recommendations proposed:

1. Halloysite

The question of the ambiguous notations used to distinguish the more hydrous and the less hydrous forms of halloysite was considered. Terms currently used are:

(1) Halloysite	(2) Halloysite (7Å)	(3) Metahalloysite	(4) Halloysite	(5) Dehydrated halloysite
Hydrated halloysite	Halloysite (10Å)	Halloysite	Endellite	Halloysite

It was unanimously agreed that endellite is seldom used and that halloysite is ambiguous. (1), (3), and (5) use halloysite in different senses. There is little use in attempting now to restrict the name halloysite to one or other form. Scheme (2) alone is unambiguous. Therefore, it was recommended that (2) be used.

2. Smectite

About 10 years ago, AIPEA agreed that the terms "smectite group" and "montmorillonite-saponite group" might be used interchangeably, in the hope that usage would determine the more suitable term.

It was agreed that "smectite" was now almost always used, and therefore it was recommended that "smectite" now be accepted as the group name and that "montmorillonite-saponite" be dropped.

3. Concerning aliettite

The question whether aliettite be accepted as the name of a regular mixed-layer talc-saponite was discussed. It was agreed that the name should be accepted only if it is adequately demonstrated that a mineral exists containing talc and saponite layers with a strictly regular alternation of the layers. It was considered that a Fourier transform should be made available to show the statistical sequence of layers in the minerals hitherto studied. (See F. Veniale and H. M. van der Marel, *Proc. Int. Clay Conf.*, Tokyo 1969, Vol. I, pp. 233–244).

4. Celadonite, glauconite

Brief consideration was given to these terms. It appears that they are often used to indicate the origin of the mineral or minerals. The committee was unable to make a recommendation whether one or both names are required, but it was agreed that retention of both names should not rest on the origins of the minerals.

5. Nimesite

The question was raised whether the name "nimesite" for a nickel analog of amesite was fully proved. Single crystal study of amesite has established that it has a $2H_2$ layer stacking arrangement. From powder diffraction data it is difficult (or impossible) to distinguish $2H_1$, $2H_2$, and $6R$ stacking sequences. It was questioned whether nimesite could be accepted prior to single crystal analysis establishing the layer sequence arrangement.

It was agreed that the name could be retained for the present but questions may arise later if single crystal studies show a different layer sequence.

6. Naming of Mg,Ni hydrous silicates

No agreement was reached on the mole % of nickel where a change from the Mg end-member name to the Ni end-member name should be made. Some members favored making the change at 50 mole % of each component in accordance with the usual mineralogical usage. Others favored a name change at 20 or 25 mole % Ni on the grounds that the Ni mole % is rarely as high as 50%, and either 20 or 25 mole % represents a very high amount of Ni.

7. Kerolite-pimelite series

It was agreed that before acceptance of a talc-like series of Mg, Ni minerals named the kerolite-pimelite series, firmer definition of kerolite was required. It was stated that such a study of kerolite was in progress.

It was recommended that the spelling be "kerolite" rather than "cerolite" because of the Greek origin of the work.

8. Distinction between "Lattice" and "Structure"

It was agreed that the term "lattice" continued to be misused when "structure" was intended. A large majority of speakers at the conference persisted in the misuse of the word "lattice".

It was recommended that speakers, authors, teachers and editors be reminded that a lattice is a point distribution (cf. Bravais lattice) and should not be used when "structure" is intended.

Likewise the use of "layer lattice", and "Schichtgitter", is generally incorrect; layer structure or phyllosilicate is correct terminology.

9. Other business

S. W. Bailey, as a member of the joint I.U.Cr. and I.M.A. committee on nomenclature reported the discussions in progress concerning the development of a systematic symbolic notation for describing layer stacking arrangements and symmetries.

It was agreed that a nomenclature committee should continue to function within the A.I.P.E.A. organization.

Chairman

Secretary

21 July 1975

G. W. BRINDLEY

G. PEDRO