

MINERALOGICAL MAGAZINE, AUGUST 1996, VOL. 60, P 670

Mineral names applied to synthetic substances

ERNEST H. NICKEL

CSIRO Division of Exploration & Mining
Wembley,
WA 6014,
Australia

GUIDELINES on mineral nomenclature published by the Commission on New Minerals and Mineral Names (CNMMN) of the International Mineralogical Association (Nickel and Mandarino, 1988) include the following statement: "If an artificial substance has been given a name, and a mineral corresponding to that substance is subsequently discovered, the name given to the artificial substance does not necessarily have to be applied to the mineral". However, when the artificial substance corresponds to an existing mineral, it is commonly referred to by the name of its mineralogical analogue. Ideally, mineral names should be given only to naturally-occurring substances formed by geological processes, yet it is recognized that a mineral name is a convenient short-hand way of referring to a synthetic substance that corresponds to a particular mineral. Following requests from editors of several major mineralogical journals for guidance in the editorial treatment of manuscripts containing such names, members of the CNMMN have discussed this question with a view to making recommendations acceptable to the mineralogical community.

Recommendations

(1) Unmodified mineral names are not to be used for synthetic substances corresponding to existing minerals, chemical analogues of existing minerals, or hypothetical minerals.

(2) If the synthetic substance has a simple formula, then preference should be given to the use of a chemical formula instead of a mineral name.

(3) Synthetic substances that correspond to existing minerals with long or complex chemical formulae may be given mineral names suitably

modified to clearly indicate their synthetic origin. Thus, for example, a synthetic topaz can be referred to as synthetic topaz, synth-topaz or topaz (synth).

(4) Synthetic substances that are chemical analogues of existing minerals with long or complex chemical formulae may also be given mineral names suitably modified to clearly indicate their synthetic origin. Thus, for example, a synthetic hydroxyl analogue of topaz can be referred to as synthetic OH-topaz, synth-OH-topaz or topaz-(OH)-synth.

(5) If modified mineral names are used as indicated above, then this usage should extend throughout the published paper, including title, text, figure captions, and table captions.

(6) In languages other than English, the translated equivalents of "synthetic" and "synth" may be used in modified mineral names.

(7) Abstractors and compilers should faithfully copy the modified mineral names in their abstracts and/or compilations, and not refer to synthetic products by unmodified mineral names.

References

- Nickel, E.H. and Mandarino, J.A. (1988) Procedures involving the IMA Commission on New Minerals and Mineral Names, and guidelines on mineral nomenclature. *Mineral. Mag.*, **52**, 275–92.

[Manuscript received 3 October 1995]

(Publication of this paper has been authorized by the Commission on New Minerals and Mineral Names of the International Mineralogical Association – E.H. Nickel, vice-chairman)