

НОВОЕ ОПРЕДЕЛЕНИЕ ОТДЕЛЬНЫХ МИНЕРАЛЬНЫХ ВИДОВ

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A NEW DEFINITION OF A DISTINCT MINERAL SPECIES

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The criteria for the definition of a new mineral currently used by the Commission on New Minerals Nomenclature and Classification (CNMNC) of the International Mineralogical Association (IMA) involve what can be called the *principle of the dominant constituent*: a mineral is a distinct species if the set of dominant constituents (ions or neutral species) at the sites in the crystal structure is distinct from that of any other mineral with the same structural arrangement. This criterion has been successful in defining minerals across the complete range of chemical compositions encountered in Nature. However, there are still some problems with this approach: (1) there is one situation where this criterion does not (quite) work, and (2) the approach is compatible neither with Chemical Thermodynamics nor with current usage in Petrology. Here, I examine these issues and suggest a modification of the definition of a distinct mineral species that is compatible with both Thermodynamics and Petrology, and which applies to all minerals in a simple and straightforward manner.