Baumite discredited

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Based on the results of Guggenheim and Bailey (1989), in which the material originally described as the Zn- and Mn-rich serpentine mineral baumite (Frondel and Ito, 1975) was shown to be mixtures of several serpentines and chlorites, the International Mineralogical Association (IMA) Commission on New Minerals and Mineral Names has approved the discreditation of baumite as a mineral species.

One of the serpentine phases was shown to be a modulated 1:1 layer silicate structurally similar to greenalite and caryopilite but with larger structural domains. Although this layer silicate could not be described completely, it contained coherent scattering domains of two polytypes. Alternatively, these polytypes may be described as modules because both appear to be required to stabilize the caryopilite-greenalite structure (Guggenheim et al., 1982). Consistent with the need to fully describe a new mineral and the suggestion by Guggenheim and Eggleton (1988, p. 713) that each structural variation in a polysomatic or homologous series should not be denoted as a new species, this mineral has not been given a new species name. Instead, it should be referred to as a zincian caryopilite or zincian greenalite, depending on the dominance of Mn or Fe, respectively.

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