

Posnjakite from Cornwall

WHILE examining and surveying the disused workings of the Drakewalls mine, Gunnislake, we have found specimens of the recently described¹ species posnjakite in old stopes (now inaccessible) above the deep adit level.

The posnjakite occurs as crystalline crusts, associated with brochantite and langite, coating the slaty micaceous mudstone of the walls of the stope and sometimes cementing rock fragments on the floor. The appearance of the encrustation is similar to that of the langite from Fowey Consols mine, St. Blazey, and in both cases the minerals are post-mining formations deposited by steadily trickling copper-bearing ground waters. A hot and humid atmosphere, as in the Drakewalls stopes, appears to be a necessary condition for the formation.

Posnjakite is the monoclinic dimorph of langite (orthorhombic) $\text{Cu}_4(\text{SO}_4)(\text{OH})_6 \cdot \text{H}_2\text{O}$, and occurs with the latter on Fowey Consols specimens in the British Museum (Natural History).² It is not known whether the original langite described by Maskelyne was in fact a mixture of the two dimorphs.

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¹ [КОМКОВ (А. И.) and НЕФЕДОВ (Е. И.)] КОМКОВ (А. И.) и Нефедов (Е. И.), 1967. Зап. Всесоюз. мин. общ. (*Mem. All-Union Min. Soc.*), **96**, 58 [M.A. 18-285].

² P. G. EMBREY (priv. comm.).