

Alterační produkty z experimentů řízené alterace pyritu a markazitu

Alteration products from experiments of controlled alteration of pyrite and marcasite

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Abstract

Three types of samples - large crystals of pyrite from Navajún (Spain), crystals of pyrite from San Jose de Huanzala (Peru) and crystals of marcasite from Bílina (Czech Republic) were altered in controlled conditions with RH in the range 30 - 97 %. Eight mineral phases - coquimbite, copiapite, ferricopiapite, kornelite, paracoquimbite, rhomboclase, rozenite and szomolnokite were identified by PXRD as alteration products. The descriptions and refined unit-cell parameters are given for all determined mineral phase. The differences between studied mineral association and mineral phases formed by alteration of Fe-sulphides in the museum collection are discussed in the paper.

Keywords: alteration, museum collections, coquimbite, copiapite, ferricopiapite, kornelite, paracoquimbite, rhomboclase, rozenite, szomolnokite, Fe-sulphates, Fe-sulphides, X-ray powder diffraction data, unit-cell parameters.

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