Compositional zoning in the Besshi deposit

Kosei Komuro[1]; Kazuyasu Shindo[2]

[1] Life Environment. Sci., Univ. Tsukuba; [2] Earth Evolution Sciences, Univ. Tsukuba

The Besshi-type deposits are known as a type of volcanogenic massive sulfide deposit. They are considered to have been formed in association with hydrothermal activities at mid-oceanic ridges. The Besshi deposit, the type of this, occurs as stratiform or stratabound ore bodies concordantly with bedding in the sedimentary rocks of green schist facies in the Sanbagawa metamorphic belt. The ores are known to be composed mainly of pyrite and chalcopyrite, with subordinate amounts of sphalerite, magnetite, hematite and pyrrhotite. In part, piedmontite schist was found closely with the sulfide ores. In this study, mineral and chemical compositions of hangingwall ores with oxide phases at the Ikadazu deposit, Besshi mine, have been examined. A formative model for mineralogical and chemical zoning will be presented.