

## **Deposits and ore mineralization associated with Ophiolite Complexes in the Sudetes Mts. (Poland)**

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The Sudetes are situated on the northeasternmost part of the European Variscan Belt and extend on the territories of east Germany, northern Czech and SW Poland. On the Polish part of the Sudetes Ophiolite Complexes occur and they represent the relicts of Paleozoic oceanic floor which are pressed among continental crusts. Similar rocks of the oceanic origin are uncovered in other parts of the European Variscides and are spread between the Bohemian Massif and Iberian Peninsula.

In the Polish Sudetes the major area of the occurrence of ophiolitic rocks is situated in the middle part of the Sudetes where the ophiolite surround the gneisses of the Sowie Gory Block which are interpreted as a microcontinent or a terrane. Elaborated ophiolite consists of the following members: serpentinized peridotites, ultramafic cumulates, mafic cumulates represented by metagabbros, sheeted dykes (metadiabases and metabasalts) and pillow lavas. Petrological and geochemical characteristics of these rocks are very close to typical N-MORB.

The ore deposits and occurrences are distributed parallel to petrological rock alterations. At the lower member of elaborated rocks the chromite 'podiform' type deposits were exploited. In the upper part of this zone the copper mineralization connected with rodingite lenses is distinguished. The Ni-Cu and locally PGE mineralization is located in the ultrabasic cumulates zone. Small-sized Fe-Ti-V deposits occur in mafic cumulates. The pyrite, chalcopyrite and pyrrhotite disseminated mineralisation was found in upper, volcanic member. The features of described mineralization proved that they are typical for mineralization hosted by ophiolite complexes.