

PŮVODNÍ PRÁCE/ORIGINAL PAPER

## Mineralogická charakteristika a chemismus Fe-gahnitu z Cetoraze u Pacova, Česká republika

Mineralogy and chemical composition of Fe-gahnite from Cetoraz near Pacov, Czech Republic

LENKA LOSERTOVÁ\*, ZBYNĚK BUŘIVAL A ZDENĚK LOSOS

Ústav geologických věd, Přírodovědecká fakulta, Masarykova univerzita, Kotlářská 2, 611 37 Brno;

\*e-mail: lena.los@seznam.cz

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### Abstract

Macroscopic crystals and grains of Fe-bearing gahnite with diameter 2 - 4 mm occur in quartz veins and layers of muscovite-biotite orthogneisses and greisens eastern of Cetoraz near Pacov (Czech Republic). Chemical composition of the studied Fe-gahnite is quite similar to other metamorphosed occurrences of gahnite connected with Zn-sulphidic ores or gahnite from Al-rich metasediments (27 - 28 % of hercynite, 8 % of spinel and 1 % of galaxite end member). Sphalerite is supposed to be original source of Zn, especially regarding to assemblage of gahnite and pyrite. Several reactions of sphalerite with aluminum rich silicates yielding gahnite, pyrite and silicates are known. Retrograde metamorphism of Cetoraz greisens resulted in alteration of gahnite by thin muscovite (sericite) rims and sometimes pseudomorphs of muscovite after gahnite.

**Key words:** gahnite, chemical composition, greisen, Cetoraz, Moldanubian, Czech Republic

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