PŮVODNÍ PRÁCE/ORIGINAL PAPER

Nové poznatky o Au mineralizácii na lokalite Medzibrod (Nízke Tatry), Slovenská republika

New data on Au mineralization at the Medzibrod locality (Nízke Tatry Mts.), Slovak Republic

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Abstract

Interesting samples with macroscopic gold were recently found at the abandoned Sb-Au deposit located near Medzibrod, Nízke Tatry Mts., Slovak Republic. Gold occurs as irregular aggregates and grains up to 7 mm in size enclosed in quartz in association with supergene Fe-oxihydroxides, covellite, barite, Pb-Sb oxides and relicts of primary arsenopyrite, jamesonite, sphalerite and tetrahedrite. Microscopic, euhedral grains of gold up to 10 μm in size enclosed in tetrahedrite were also observed. Two types of gold have been distinguished by chemical analyses. The first has Ag content ranging from 0.24 to 5.45 wt. % and the second Ag-enriched phase has Ag content in the range of 11 to 13.14 wt. %. Minor amounts of Hg (up to 1.44 wt. %), Cu (up to 1.03 wt. %) and Fe (up to 0.30 wt. %) were also detected. However both groups of gold show high finess. Due to paragenetic association of gold (young tetrahedrite stage of Sb-Au mineralization), it should have lower finess. This discrepancy raises an issue about supergene origin of gold.

Key words: *gold, supergene processes, Sb-Au deposit, Medzibrod, Nízke Tatry Mts., Western Carpathians*
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