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Abstract Book

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Asst. Prof. Dr. Umut ÖZKAYA

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Asst. Prof. Dr. Umut ÖZKAYA

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Asst. Prof. Dr. Umut ÖZKAYA

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Application method definition of direction of solution movement and direction to its sources

Oleksandr Kostiuk

The Department of Mineralogy, Petrography and Geochemistry / Ivan Franko National University of Lviv, Ukraine

kostol@email.ua

Abstract. The temperature as it is known is one of the most important physical-chemical factor of endogenous mineralization. It is definited in particular in all etaps of ore bodies, development both during mobilization of useful components and during its concentration.

The scheme of the determination of the mineral-forming fluids move direction and direction to its sources was studied.

Thermobarogeochemical methods use makes possible not only reveal the main physical-chemical mineralization parameters by inclusions in the minerals but also objectively value the most important etaps of useful minerals deposits formation in the time and space

Within all investigated auriferous deposits homogenization of the inclusions of productive carbon-dioxide-aqueous fluids (initial in the productive quartz – IV and secondary in the early quartz – III generations) had taken place mainly in middle – temperature range from 500 to 130ºC. Within all investigated copper ore manifestation homogenization of the inclusions of productive fluids had taken place mainly in middle – temperature range from 540 to 380ºC.

Everywhere within investigated standard objects increase of mineral-forming fluids temperature into ore bodies and deposits on the whole depth have been fixed; fluids into ore localization area have been supplied in direction from lower ore bodies horizons to the upper ones in the form of streams where fractionation (heterogenization) of productive fluids and useful component deposition have taken place; ways of the fluids supply into ore localization area ore connected with deep ruptured structures or intrusive massif.

Keywords – fluidal inclusions, quartz, ore objects, gold, sphalerite