

## **Separation of gold and silver mineralization in Muruntau, Uzbekistan**

ANTONOV A.E., ISLAMOV F.I., PARAMONOV Y.I., State Committee on Geology, Tashkent, Uzbekistan

Gold and silver mineralization in black-shale terrigene complexes concentrate in different parts of the same ore fields. Distinctive "pairs" of gold and silver deposits (Muruntau -- Kosmanchi, Daugyztau -- Vysokovoltnoye, etc.) are to be observed.

Gold mineralization is represented by subconcordant or cross-cutting ore bodies with gold-silver ratio from 4:1 (Muruntau) up to 1:1 (Daugyztau, etc.). These ore bodies have gold-sulphide-quartz and gold-sulphide (pyrite, arsenopyrite) composition.

Potassium metasomatism and homogenizing temperature of 420-450° up to 340° are typical for these ore bodies.

Silver ore bodies with gold-silver ratio of 1:100-1:300 is confined to quartz veins in the flanks of the same ore fields. Silver mineralization is low-temperature, homogenizing temperature varies from 270° to 220°.

Separation of gold and silver in the ore processes is considered by authors as general regularity of ore systems' evolution in black-shale terrigene complexes.