

STRUCTION GEOMETRY METHOD OF FORECASTING AND PROSPECTING OF VOLCANOGEN-SEDIMENTARY ORE DEPOSITS

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The new method is based on some geometrical laws on the presence of constant or regularly-variable parameters that define the outline and position of orebodies relative to each others. It offers quite an accurate forecasting of new orebodies of mineral deposits timed to certain levels of ore formation. The general idea of the new forecasting and prospecting method consists in: (1) restoration of the orebody to its structure as of a period of ore formation; (2) study of geological, geochemical and structural-geometrical regularities of orebody location; (3) determination of the position and parameters (shape, dimensions, composition and resource) of unknown orebodies from the coordinates and parameters of known orebodies and laws of their interposition during ore formation. The method was tested mainly on non-ferrous and rare metals volcanogenic sedimentary stratiform deposits (lying conformable in host rocks) and, to a lesser extent, on crosscutting vein and stockwork deposits. The gained experiments shows that new method of forecasting and prospecting yields the best results in the regions of known deposits, but it can be also used in the areas, where are known only ore occurrences or strong geophysical/geochemical anomalies. The project has been developed for creation of a computer software for automatized forecast of mineral deposits.