

THE EVALUATION OF POORLY STADIED AND UNTAPPED GOLD DEPOSITS OF KAZAKHSTAN WITH USE OF MATHEMATICAL METHODS

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The evaluation of gold deposits of Kazakhstan was concluded in following. Before the evaluation of fuzzy decision rule by means of the algorithm «Fuzzy decision rules» the fuzzy degrees of similarity of fuzzy class deposits' prototypes with each other were estimated and degrees of similarity of fuzzy class non-deposits' prototypes with each other were estimated also; and on the base of these evaluations using algorithm of fuzzy classification by Tamura classification of 1-st and 2 classes' objects were built. Second problem has been concluded in the following. Having for a number of objects sufficiently reliable evaluations of gold resources, it is necessary to get the certain equation, giving the opportunity to estimate the gold resources for the object by object's geological description in accepted system of features. This task was solved with the help of package of algorithms and programs of liner and nonlinear identification. For the resources' evaluation algorithms of method of modeling by Monte-Carlo were used also. Goldbearing objects were recommended wherein the above- mentioned evaluations behave in the most coordinated manner. Computer processing is conducted by G.K.Dvornichenko and L.A.Kostrova.