

## STRUCTURAL-LINGUISTIC APPROACH TO THE UNIQUE MINERAL DEPOSITS' MODELING

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Practice of modeling shows that the more detailed and comprehensive deposit's study is carried out, the higher is the degree of deposit's «anomalous», «unlikeness» in compare with other deposits, and the prototypes chosen for deposit's modeling are «anomalous», «unique» objects and do not form compact groups. What «regular» characteristics can be discovered on the «single», «anomalous», «unique» object? Apparently, based on the mathematical methods of regularities' finding these characteristics should be searched studying single phenomena's' structure, studying certain correlation between their component parts. In the formal type (J. T. Tou, R.C. Gonzalez) «phrase structure's grammars»  $G$  could be presented as:  $G=(V_n \ V_t, \ P, \ ?, \ S)$  where  $V_n$  is an ensemble of nonterminal symbols;  $V_t$  - an ensemble of terminal symbols;  $P$  - an ensemble of grammar production, reflecting the structure;  $?$  - membership function to the fuzzy set;  $S$  - a certain start symbol. Language  $L(G)$ , generated by  $G$  - an ensemble of strings from symbols satisfying the condition : each string can be removed from  $S$  by the corresponding using of grammar production  $P$  and  $?$ . The approach is considered wherein unique and large deposits are described by linguistic fuzzy symbols.  $G$  reconstruction based on the collection of given prototypes, unique and large deposits is concluded in such choice of  $V_n$ ,  $V_t$  and  $?$ , that they answered on a requirement of generalities and preservation of prototypes «uniqueness». The process of evaluation of the new objects consists in using of grammar  $P$  with application of mathematical methods (linguistic, fuzzy variables, plenty of such variables, very small number of prototypes, operations with subjective membership functions). Some possible approaches, realizing this methodology are proposed.