

*D. Chaikovskiy, Master student  
A. Kryvoruchko PhD, As. Prof.  
S. Sukhovetska, language adviser  
Zhytomyr State Technological University*

## **CHARACTERISTICS OF GEOMETRIZATION OF TITANIUM RAW**

Geometrization of mineral deposits is a modeling of deposit by complex usage of information obtained both in the process of prospecting and development, and by taking into account the technological requirements of exploitation.

A solution to mining-geological problems in the development of mineral resources is an essential and important part of exploitation techniques. Usually, interpretation of information about the occurrence and distribution patterns of components is performed by a limited number of parameters obtained in geological exploration. In this regard, the usage of modern methods and means of computer modeling is a necessary requirement for processing output data, which will be further supplemented, to make economically and technologically reasonable decisions.

Deposits of minerals determine the region and ways to use the technology of extraction and processing, that is why creating equal to real objects models is one of the main objectives of surveyor-geological service company. Automatization of mine engineer's workplace is carried out on the basis of geological and surveyor-engineering database.

The quality of minerals depends strongly on the chemical, physical and technological properties. These properties together with mining and geological conditions of occurrence of deposits determine the commercial value of a deposit. The value of deposits increases if there are two or more useful mineral components and the extraction of them is provided simultaneously.

Quantitative and qualitative indicators should provide accurate information about the geographical distribution of minerals and characterize its dynamics within a deposit. Selected research methods should provide opportunity to make the model of a deposit or its technological areas. Thus, one of the most important tasks to be solved during the geotechnical studies and in the process of deposits geometrization is the analysis of geographical location on the basis of geometric characteristics of bodies. One of the most effective tools of modern research and geometrization of basic parameters of alluvial deposits is GIS (geographic information system). GIS technology integrates work with databases, mathematical analysis procedures and image-map methods concerning problems of accumulation, processing and presentation of different spatially-distributed information. The main idea of GIS is to give the user the most effective device for analysis and synthesis of all types of geographically-oriented information. Software SURFER 8.00 can be used as a means of analyzing spatial data at the level of GIS desktop.

Modeling deposits using GIS, forecasting indicators placement for neighboring areas is a basis for optimal problem solving of complex research and development of mineral resources with consideration of geological, technological and economic factors.

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