



Algorithm of an estimation of an influence of the hydrogeological, geotectonical and technogenic factors complex on formation of groundwater chemical composition

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The developed technology is assumptive to partial automate evaluative of stage of investigation for carbonaceous mineral waters to use in the process of conduction the apparatus of informational analysis in the combination with the elements of the theory of «discerning forms»(Lisenkov A.B., Goppa V.D.) This is essentially heuristic approach, because it allows combining the apparatus of the theory “discerning forms” and the experience of experts, working in the regime of dialogue with computer technology.

The new technology realizing in four stages:

1. The selection of initial exponents for the informational research models. The circle of the exponents is expedient to limit to the list a-priory influential or changing the composition of carbonaceous mineral waters. In our opinion for these purposes could be allotting next groups of the exponents: landscape, geologic, hydro geologic, tectonic and man-caused load, as well as three groups of the exponents (landscape, tectonic, man-caused load) might be obtaining with consume of the result of encode the SFP. The remained exponents might be received from the results of preliminary and particulars research, experience of exploitation, so as with consume GIS-technology.
2. The formation informative search models are emanating in two stages: on first stage it has to estimate information of the initial exponent's correlative with function of purpose and selection informative. On second stage, from single indications we compos-

ing complex by the method of sorting and calculating the information likewise correlative with function of purpose. From the most informational compound indications is composing train matrix, which presents it the image of learned region and circulation carbonaceous mineral waters (informational search model).

3. Testing informative model accomplishing by the way juxtaposition the test part with form. In case if the model is effective, so on it basis realizing resolution conjectural problem (search sections are suitable for putting-up explorative works), i.e. accomplishing next fourth stage. In the other case is realizing return to the first and second stages.

The experience of structure similar models for Kislovodsk territory group of entrails the carbonaceous mineral water has shown it adequate efficiency and combination the informative indications is stressing the role of thickness water reservoir breed in forming chemical composition of mineral water, the role of tectonic certain configuration and extension in orientation fluid's streams and also the influence of natural or man-caused border of pressure on mass carrying carbonic acid.

Proposed theory allows reducing budgetary or investment disbursements on conducting evaluative works in 5-6 times, also might be used in planning the net monitoring and forming the management of ecological hydro geological solutions in conditions of uncertainty.