190121 Russia, Saint Petersburg 22 Drovyanoy pereulok «Biotechprogress» LLC 02.02.2020

Research work on the topic: "Comparative study of drinking water and the "\*\*\*\*\*" sample by Gas Discharge Visualization (GDV) method"

### **Purpose of work:**

Research: determination of GDV characteristics of three water samples.

#### The content of the work:

### Stage 1:

- 1. Development of an experimental design.
- 2. A set of experimental data.
- 3. Processing of experimental data.
- 4. Analysis of experimental data.
- 5. Description of the results.
- 6. Preparation of a summary report.

The experiment examined drinking mineral water of three types:

- 1. "\*\*\*\*\*", a sample submitted by the customer, 1 liter bottle clogged under the lid.
- 2. "sample 2", drinking water.
- 3. "sample 1", drinking water.

Mentioned above liquids were examined immediately after the depressurization of the package.

GDV parameters were determined with the help of a syringe tool.

The research was carried out on "GDV Camera Pro" device.

The research device N0000008, laboratory one. Was used normal warming.

Normal capture mode:

Dynamics: 10 captures per second, capturing within 10 seconds.

Voltage mode No. 2

The data was processed in "GDV Scientific Laboratory" software.

### Stage 2:

To estimate the impact of a water sample "\*\*\*\*\*" on a person, there was carried out an experiment -three people (a man and two women), according to the instructions, drank (on empty stomach) 150 ml of water. Before taking water, there was a done the first series of captures (10 fingers with and 10 fingers without filter). Second series of finger captures was carried out 20 minutes later after taking water.

The glow of fingers in an electromagnetic field was processed in the following GDV programs:

Program for registration and primary processing of GDV images:

# "GDV Capture"

GDV processing programs:

"GDV Energy Fields"

"GDV Diagram"

"GDV Screening"

The calculated GDV parameters of finger glow were compared before and after "\*\*\*\*\*" water intake and was analyzed difference of the main GDV indicators. In parallel with the experiment, the state of people was monitored by measuring blood pressure and heart rate.

## **Experiment Results:**

## Stage 1:

Figure 1-2 shows graphs of changes in the main GDV parameters versus the discharge time applied to a drop of solution during dynamic shooting. Chart 1. A general summary of area-time dependencies is presented:

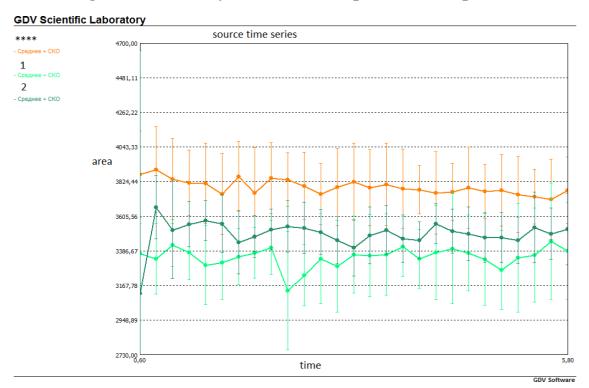


Chart 2. A general summary of dependencies is presented. Average value of intensity time:

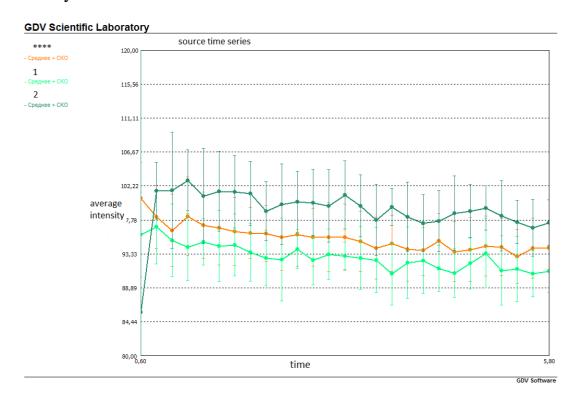
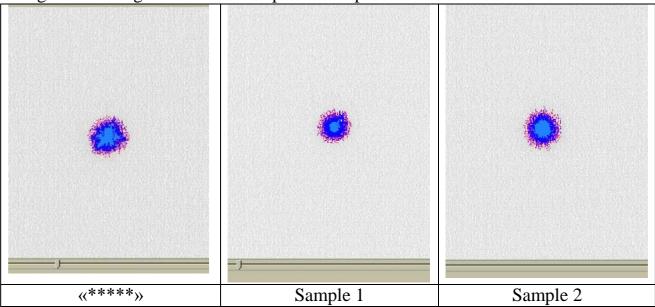


Fig. 3 Various glow of water samples in .bmp format:



The proposed sample belongs to the group of mineral \*\*\* drinking water of medium activity, has a large glow area, with a sufficiently large average intensity.

Stage 2.

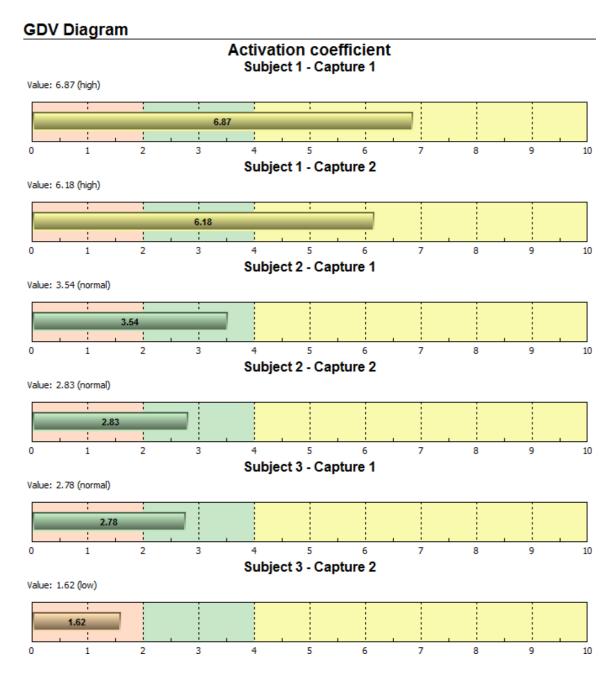
Monitoring indicators of pressure and pulse of people taking water "\*\*\*\*\*":
Chart 1

	before			after 10 min		
Name	pulse	right	left	pulse	right	left
Testee 3	58	113/66	108/68	64	116/61	107/70
Testee 2	63	114/64	108/62	62	109/67	113/73
Testee 1	63	143/80	136/90	58	141/83	149/93

Table 1 shows that pulse didn't change sufficiently, the changes are within the measurement error.

During analysis of main GDV parameters, such an indicator as "activation coefficient" reacted most. Moreover, it decreased significantly at all subjects twenty minutes later after drinking of "\*\*\*\*" water, this can be seen on Fig. 1.

Fig. 1 Change of the "activation coefficient" of Testees before and after drinking water "\*\*\*\*\*".



It was interesting to see the change of "activation coefficient" at the chart of systems of organs which reacted the same way and made the main contribution to the decrease. Calculating in "GDV Screening program" showed these systems - digestive and immune systems - see Fig. 2 and Fig. 3.

Fig. 2 Change in the "activation coefficient" of the <u>digestive system</u> of Testees before and after drinking "\*\*\*\*" water.

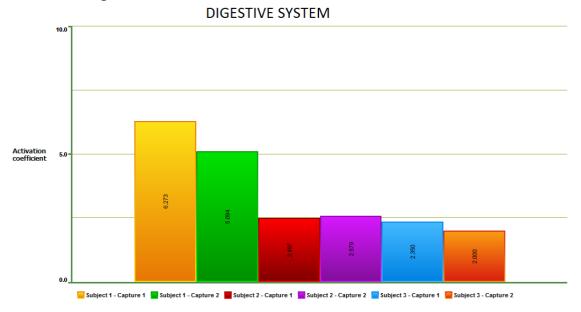
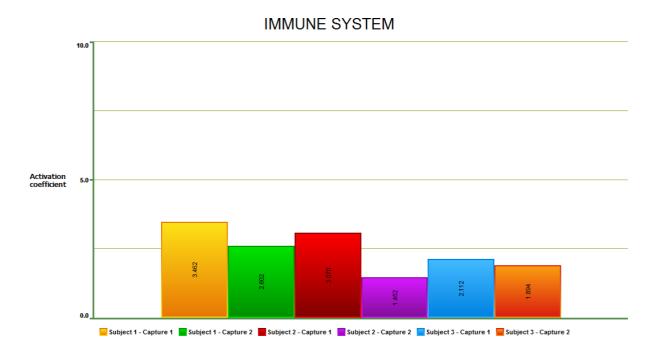


Fig. 3 Change of "activation coefficient" of the <u>immune system</u> of Testees before and after drinking "\*\*\*\*" water.



Figures 4 and 5 clearly show similar changes in the calculation of the "activation coefficient" of the pituitary gland of the endocrine system.

Fig. 4 Change in the "activation coefficient" of the hypophysis of Testees before and after drinking water "\*\*\*\*\*".

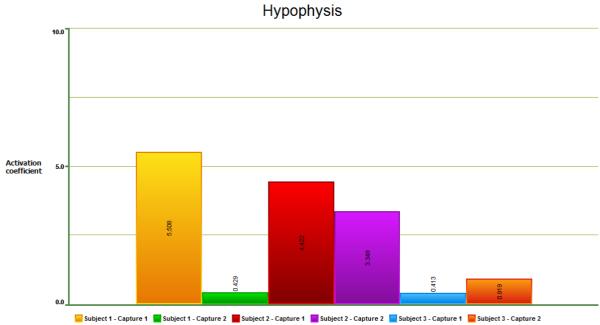
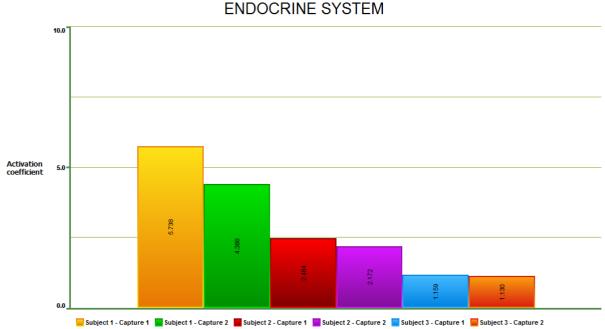


Fig. 5 Change in the "activation coefficient" of the endocrine system of Testees before and after drinking "\*\*\*\*\*" water.



The activation coefficient reflects the level of a person's mental state, such drastic changes are not preventive, therefore we recommended to limit the primary dose of water "\*\*\*\*\*" up to 50 ml.

When analyzing other main GDV-indicators, no significant fluctuations were found (Fig. 6-8).

Fig. 6 Change in the "GDV-area" ("GDV Energy Field") of Testees before and after drinking "\*\*\*\*" water.

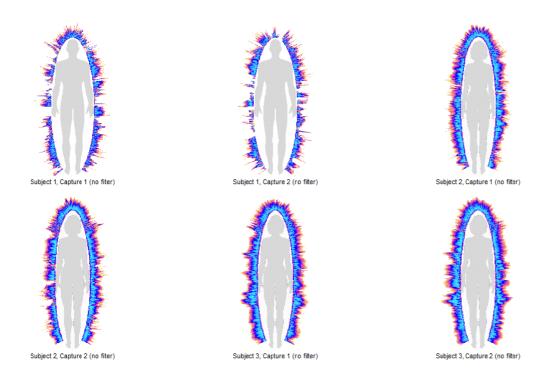


Fig. 7 Change of the "coefficient of symmetry" of Testees before and after drinking "\*\*\*\*" water.

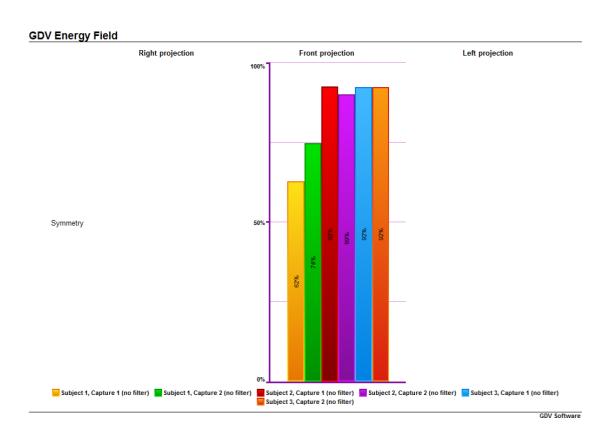
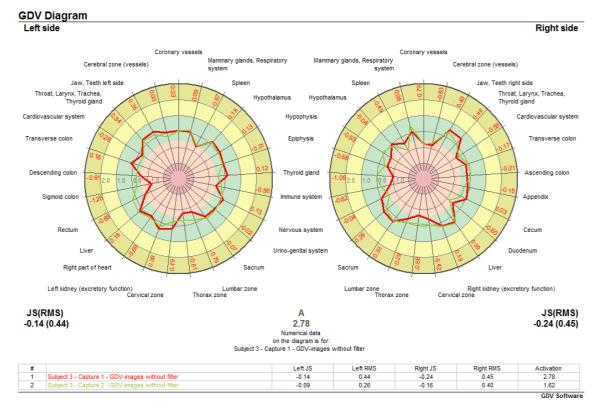


Fig. 8 Changes of Testee 3 before and after drinking of water "\*\*\*\*\*", calculated in the program "GDV Diagram"



An example of analysis in Appendix 1 to the report.

## **Conclusion:**

The fact that in the analysis of the main GDV-indicators of significant homogeneous fluctuations were not found (except for obvious changes in the values of the activation coefficient) may be the result of a very small amount of data selection for this study (the effect on three people does not allow to reveal full statistically significant patterns). Further studies require the participation of a larger number of participants in the experiment (at least 20 people) and drinking of water should be repeated, that is the only way to get the cumulative effect of the impact. As mentioned earlier, decrease of activation coefficient reflects the stressful state of human systems when drinking this water, such drastic changes are not preventive, therefore, we recommend that with initial dose of "\*\*\*\*\*" water should be limited to a dose of 50 ml.

\*\*\* Mineral water is water from underground sources. Its main difference from the ordinary water from our water taps is in its constant chemical composition and high amount of natural mineral components. Passing through soil strata, it is enriched with various minerals, trace elements and becomes completely disinfected. Such water has certain specific physicochemical properties, has a special taste and that has a beneficial effect on the body.

Another feature of mineral water is called by physicians as high physiological value. Such water must contain the most valuable mineral salts and trace elements for the human body.

Obviously, the issue is not only and not so much in dissolved substances, but in the ability of water to accumulate information, i.e. to remember. Escaping from great depths, being exposed to high temperatures and high pressures, the water went through a physicochemical and information processing that was still unknown to us. Namely, it is not yet possible to unambiguously identify it in physicochemical laboratories.

In this paper, we propose a method for recording the informational component of a liquid - GDV-graphy. This method allows you to identify slight differences of liquids which are close in physicochemical composition. This method makes it possible to identify differences as directly - by gas-discharge glow of the liquid itself, as indirectly - by gas-discharge glow of a biological object after drinking of various liquids.