

GDV TECHNOLOGY ETHIC VECTOR

S.G. Dzhura, V. I. Chursinov, V.V. Yakimishina
(SEIHPE “Donetsk National Technical University”, the DPR)
Tel. +380 (62) 301-08-25. E-mail: dzhura@inbox.ru

Abstract: *In work the perspective method of the solution of a world problem of standardization ethically of the caused design of objects of electronics and electrical equipment by means of the camera of Gas Discharge Visualization (GDV) is considered, advantages of GDV-devices and feature of use of this innovative technology to solutions of the specified problem are analysed*

Key words: *technology of Gas Discharge Visualization (GDV), Kirlian-effect, GDV-bioelektrografy method, innovative technology, the design ethically caused*

Darkness violent growth makes us
Hurry with **radiation shots**,

The Elevated, 913.

Introduction We fully agree with the thought of the Leader of the Big Russian World V.V. Putin: “People will inevitably lose their human dignity without values built into Christianity and other world religions, without morality norms formed during thousands of years. We think it to be natural and correct to defend the values”. [1] We were surprised to find the support of the statement of question in the 50th report of the Club of Rome: “**The mankind is moving on the trajectory of a suicide.** Until the prohibition strong deterrent rules are adopted, it will be reducing short-time utilitarian habits of our current economic paradigm... The mankind needs at least a new thinking and a new philosophy as **the growth old philosophy is obviously incorrect**” [2] and “chapter two of our book is devoted to philosophy with our hopes to find the keys to primary sketches of the improved philosophical belief system. The search can lead to the desire (if not the necessity) to arrive to new “Enlightenment”... Europe will hardly be the new Enlightenment centre, the “Enlightenment 2.0”. The mankind should examine great traditions of other civilizations”. [2] This idea also correlates with E.I. Roerich’s thought: “The destiny of the West is already solved. It has no future. Don’t look for it in any other European country; do not watch the disorder taking place there”. [3]

Further on the report of the Club of Rome reads: “It would be wise to pay attention to spiritual and religious aspects of all civilizations which have recommended the restrictions like that... According to Pope “all this indicates the urgent necessity to move forward to the “active cultural revolution”. [2] Dalai Lama

IV agrees with him: “The planet does not need a great number of “successful people”. The planet desperately needs peacemakers, healers, restorers, storey-tellers and all types of loving people. It needs people with whom it is pleasant to live. The planet needs people with morality, ready to join the battle to make the world alive and humane”. [4] Thus we see the principle necessity to change the objective of education, development of the mankind and interrelations in the world. Per se we need not a new technological breakthrough or scientific and technical revolution (which will speed up human’s degradation) but spiritual and ethical revolution. There are more than enough arguments for the conclusion.

Great mystic war Werner Sombart, a classical author of German sociology brightly specified last century’s confrontation in his book “Traders and Heroes”: “A trader and a hero form two great thesis, two poles for a human being to be oriented on Earth. The trader asks his life on what it can give him. He wants to take, to barter as much as possible for himself at the expense of small possible actions; he wants to close a profitable deal with the life; this means he is poor. The hero asks what he can give to his life. He wants to give, to spend and to sacrifice himself without any expectations of return gifts; this means that he is rich. The trader speaks of “rights” only, the hero- only of his responsibility. And even when his duty is over he feels his inclination to give”. [5]. We think that there is a confrontation between the Big Russian World (true heroes in the terminology of W. Sombart) and the Anglo-Saxon trading world (the trader in the same terminology).

Modern linguistic research also proves the point of view. Paper [6] uses the parametric analysis method based on lexis system parameter “measurements” which are reflected in different types of dictionaries. The method is the most objective tool to mark out subsets of the most important elements of the language lexical system, its lexis core. It is the core meanings that represent linguistic and cultural area of Europe and lexical and semantic typology of European languages (the link coefficients of every group of European official languages have been calculated and the links have been mapped with a certain colour to correspond to the parametric weight coefficient). The coefficients were calculated according to the formula which contained such indications as: 1) functional (use); 2) syntagmatic (wide combinative power); 3) epidigmatic (multiple meaning); 4) paradigmatic (numerous synonymous series).

The main concept which unites European languages is the word “blow” represented by 1127 pairs of conditionally equivalent words in European state languages. The word which means “an eye, to look” is the dominant one in the Chinese lexis, and the word meaning “a tree” – in the Japanese one according to the data [6]. This means that Europe tries to be first to strike the “blow” and the East stands on not an aggressive, but a meditative position. The authors [6] used the method of axiological analysis to find out the spiritual value system appropriate to the English mentality and came to the conclusion that the sememe “money” was the paradigmatic dominant of the English lexis. Entrepreneurship spirit has always been peculiar to the English nation which Napoleon called neglectfully “**the nation of shopkeepers**”. [6]

The parametric core of the Russian lexis is totally contrary to the English lexis. The word ‘to give’ ranks first and the word “peace” ranks second here. [6]. Here are two poles of egoism and altruism, black and white (where the black physically absorbs everything and the white reflects it). The reality requires the golden mean as an altruist is up in the clouds and a pragmatist always looks down. This confrontation is reflected in the verse of the modern poet of all the Russia Y.M. Klyuchnikov called “They and We”.

The main human task solving with the help of GDV technology It is Agni Yoga (which is the culmination of the Russian cosmism) where the problem is stated and the method to solve the task the Leader of the Russian World spoke about can be found. E.I. Roerich writes [7]: “The epoch of common Cooperation and cause and all working people and classes’ solidarity is being created. **It is the task of synthesis of the spiritual and the material that is the most vital task the mankind is facing now**”. That is to win the ancient mystic war we need clear and objective high-tech criteria to specify a “friend-stranger” (which show if the individual supports the evolution or is against it). The criterion is given [8]: “The Kirlians couple invention is **the greatest discovery of the century.** The discovery is for the benefit of humanity... **Aura shots will be the best identity card and will specify people’s fitness to office and public duties and responsibilities**”.

The World Inter-Disciplinary Ethic Problem In 2016 a structure of the IEEE (Institute of Electrical and Electronics Engineers, the biggest in the world international nonprofit association of professionals in engineering, the world leader in standard development in radio electronics, electrical engineering and system and network hardware) in parallel with some other organizations (the UNESCO, for example) launched a new initiative in the field of the artificial intelligence (hereinafter AI) ethic standards [9]. The importance of the IEEE efforts is defined by its key role in the community of scientists and engineers working in electrical engineering, electronics, information technologies, telecommunications etc. This will have the direct influence on the AI developers. As a result “Ethically Aligned Design” was developed [10, 11]. The IEEE document describes the main topical threats and risks related with introducing of AI based autonomous systems. According to the dialectic approach everything which is new is sure to have pros and cons of its implementation into life. It is to be said that it’s not for the first time when the AI development risks have been examined. The open letter of the world researchers “Research Priorities to Create Reliable and Useful Artificial Intelligence” which we have signed [12] is a bright example.

The mankind faces the problem of entering the new technological structure. This should be done in such a way for the technologies not to destroy the mankind itself. The detailed arguments are given in the paper [13]. They can be summed up as follows: “Ethics is certainly a good thing but we do not have either time or resources for it now”. It is usually said when the issue is discussed. However it is a big mistake as the society which has technological process limitless capacity and does not have ethics is doomed”. Thus the issue of development of ethics standards in artificial intelligence is the agenda of the world international scientific community [10, 11]. The IEEE standard draft P7000 "Model Process for Addressing Ethical Concerns

during System Design" is an example. It is the modeling standard draft to solve ethic problems under system design. 14 types of project ethic standards for robots and other objects of electronics and electrical engineering are being prepared [9].

The Institute's site says that all ethic standards are to be adopted no later than early summer 2019. The point is, in our opinion, who and how will define whether an action is ethic or not. Judging from the discussion which is taking place on the site this will be a robot. Will the robot be able to solve such a problem? This is the question. The research [14] on the basis of which preliminary solutions have been developed could solve the problem. However it created even more questions than before.

A number of releases have been issued to discuss [10, 11] the problem. We presented our grounded opinion in English [15], and the Russian version of the book [16] was welcomed in the RF [17].

The scientific problem which is to be solved As far as the modern scientific paradigm uses only the physical concept (the meta-physical concept and the hyper-physical one have not been included into it) it is the colossus with feet of clay. The solution is in technologies of gas discharge visualization (hereinafter GDV) or Kirlian's effect.

The research hypothesis is the GDV-device measurement of human's different inner states directly related to his ethic characteristics and inclination to illegal acts.

The Conference in GDV technologies The authors have participated in the international scientific and practical conference "On the Threshold of Future Discoveries" hosted by Kuban State University. It was timed to the 120th anniversary of the Honoured Inventor of Russia S.D. Kirlian who was the first in the world to patent the GDV-method. There were representatives of key scientific schools and GDV- device producers from Russia, researchers from Great Britain and Holland at the conference. Scholars from the USA, Israel and Australia joined the participants via the Internet. We were the only representatives from DonNTU and the DPR. The conference was reported by the mass media of the RF [18]. We made the presentation on the GDV-technologies in education (a fragment from the book "The Universe Ethic Algorithms" [15]) and gave the book to Prof. K. G. Korotkov (the author of the computer method and the corresponding GDV- diagnostics device [19]). In response he gave us the "Bio-well" device (we had used the device of other producer). We express our sincere gratitude to Prof. Korotkov.



Fig.2 From left to right – Prof. K. G. Korotkov (the author of the GDV-device), E.G. Korobova, the Director of the first ever museum of the Kirlians, Dr. S.G. Dzhura (the DPR). Prof. K. G. Korotkov has the book “The Universe Ethic Algorithms” in his hands. S.G. Dzhura thanks Prof. K.G. Korotkov for the GDV-device given to him at the conference and aimed at making further research at DonNTU (the DPR).

The GDV-device application in diagnostics of human’s ethic characteristics

There are some methods developed for the RF Home Office to define people inclined to illegal acts. They are based on the GDV diagnostics [20-23]. Only one step is necessary to define human’s ethic characteristics, his moral portrait which can be used with other purposes (for example job orientation and the posts the person can hold).

The research hypothesis testing is to change field parameters which are measured by the GSV device in different thinking stated of a respondent allows to speak about his intentions. We got some shots that confirm the thesis (see fig. 2-4). Fig.2 is a shot of a person who commits a crime in his thoughts; fig. 3 is a shot of the same person praying.

Энергия 43 Дж ($\times 10^{-2}$) Баланс 86%

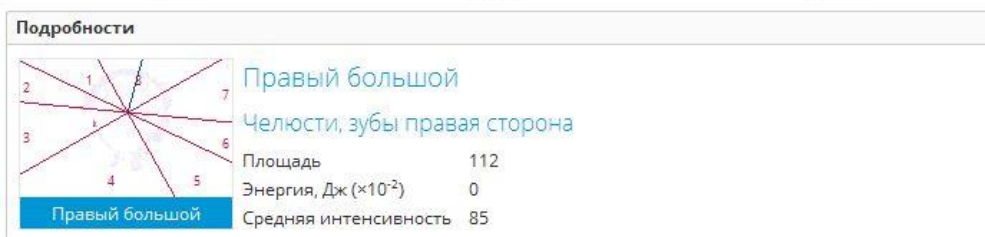
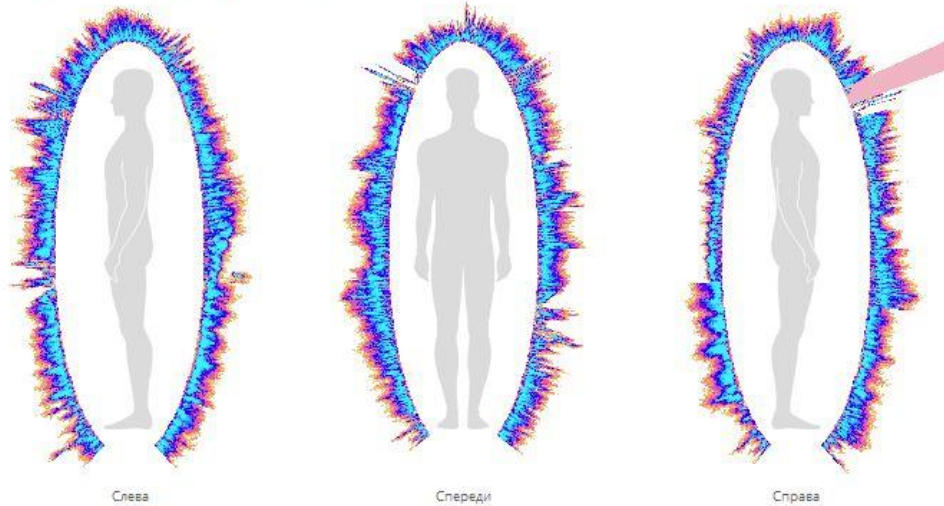


Fig. 2 GDV shot of a person who commits a crime in his thoughts (the first state).

The difference is clearly seen. There is 1 J energy growth, and the radiation square increased from 112 to 407 (that is 3.6 times as much!) although the average intensity changed from 85 to 87 units. Other characteristics are interesting too (see fig. 4-6).

Энергия 44 Дж ($\times 10^{-2}$) Баланс 86%

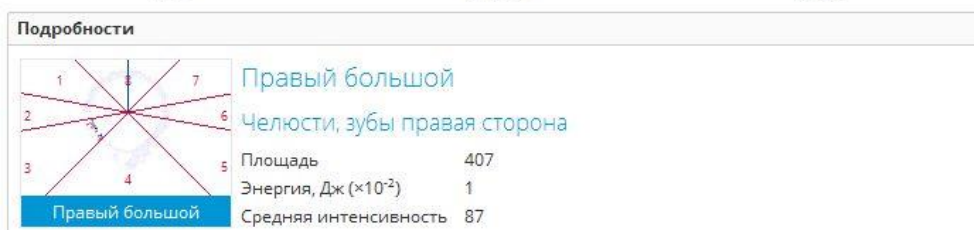
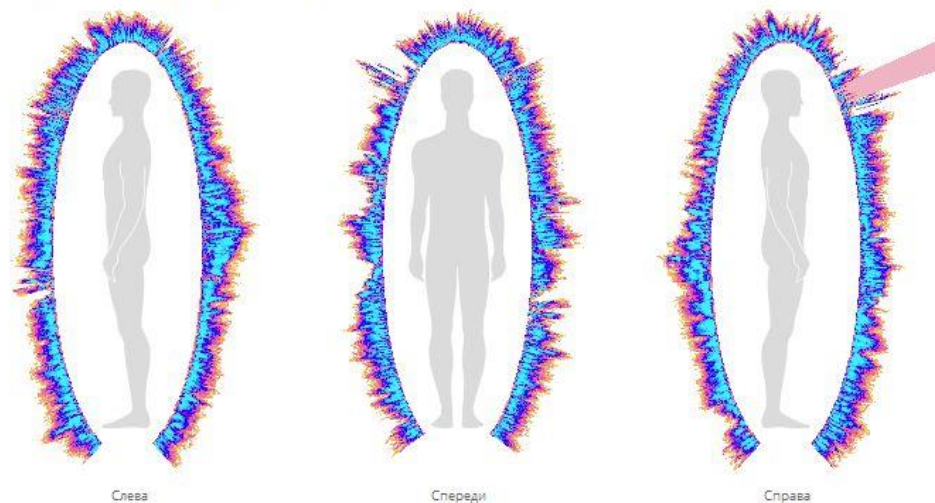


Fig. 3 GDV shot of a person who prays (the second state).

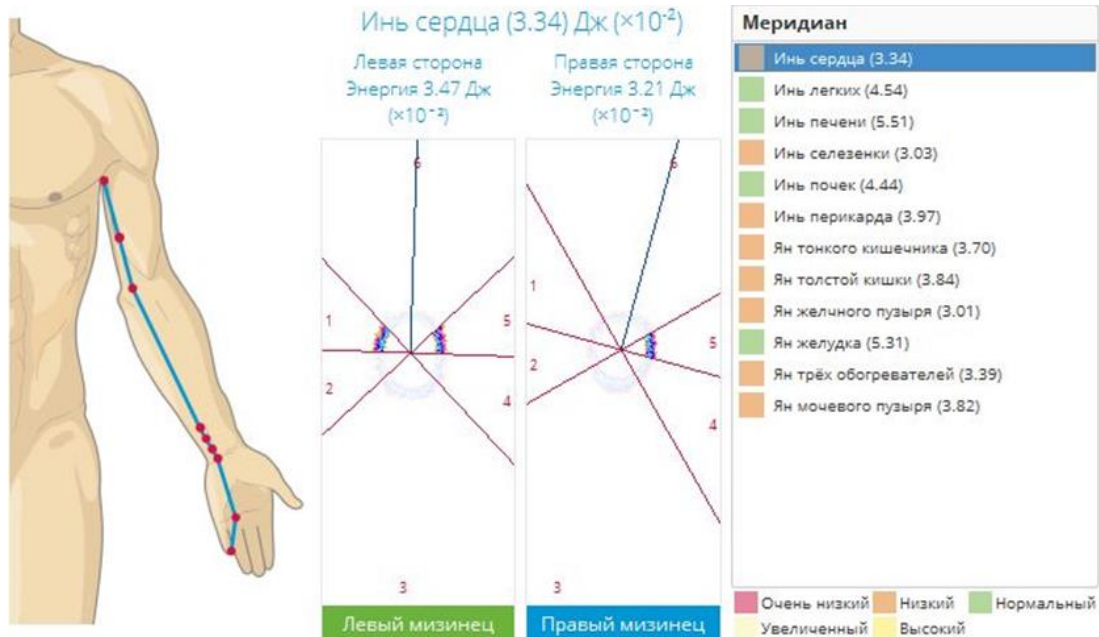


Fig. 4 Yin-Yan balance in the first state.

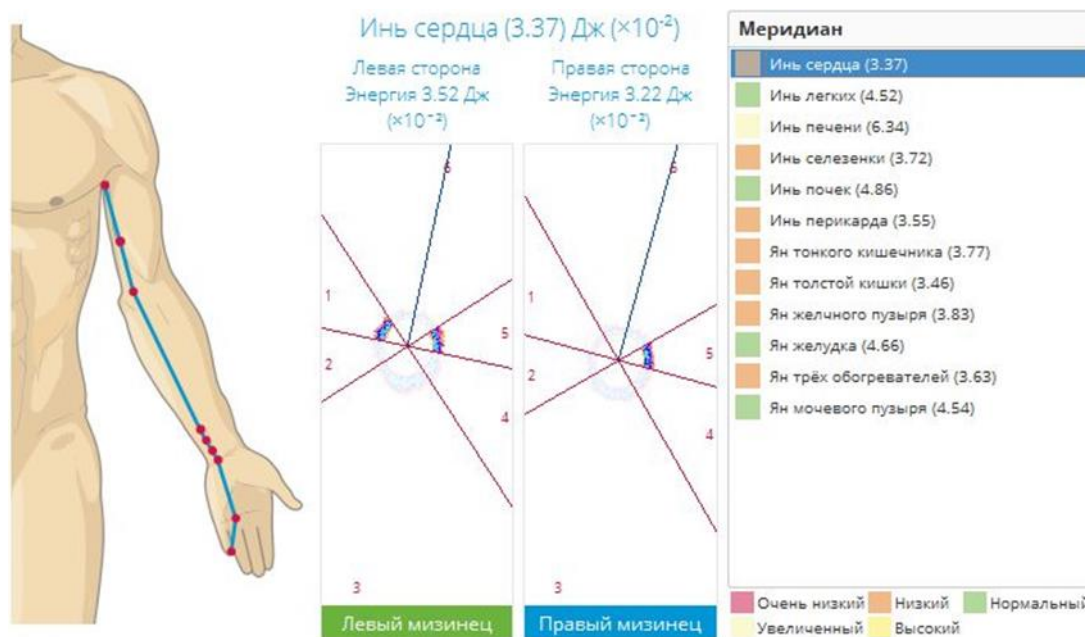


Fig.5 Yin-Yan balance in the second state

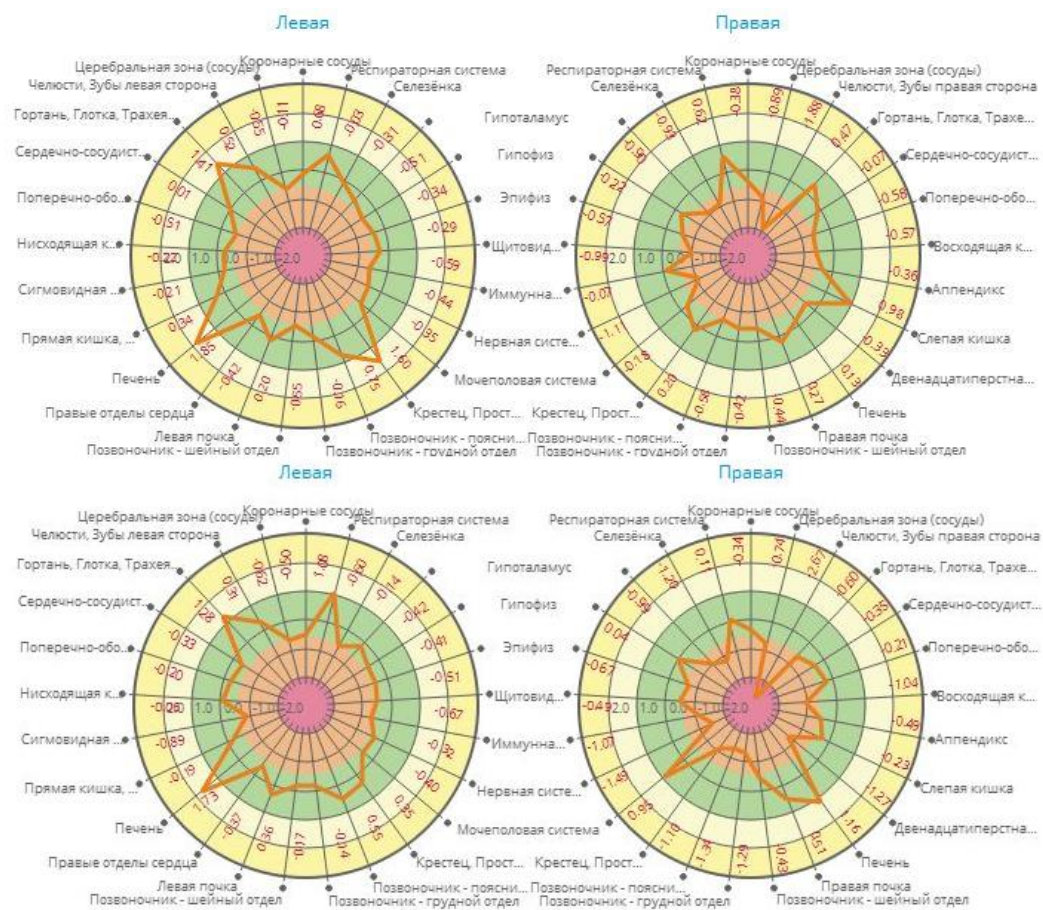


Fig. 6 Pie charts of organs potential spreading in the first state (top) and the second one (bottom) are clearly different

Ethic norms formalization includes two main tasks. The first one is creation of the norm forms, and the second one- choice of the corresponding mathematical tool to work with the forms: comparison, measurement, analysis etc. Fuzzy, many-valued or possibilistic logic is rather developed area which achieved the level of practically applied technologies. It is important to clarify the AI and the ethic norm qualitative parameters. The ethic norms formalization is closely connected with the more general task which is humanitarian knowledge. These are such approaches as 1) Boolean algebra; 2) many-valued logics; 3) fuzzy logic and probability theory; 4) solution verbal analysis.

Each of the approaches has its drawbacks and do not completely solve the problem. It is not clear what is the recording organ (the first problem) and how a robot can estimate person's thought and intention ethicality (the second problem).

We think that the GDV method of the world leader of GDV technologies "Bio-Well" can be rather promising in this sense. Moreover, its competitors have already found a partial solution of the problem. For example, "Krounoskop" is able to identify loyalty to a partner according to the GDV radiation (which, from our point of view, is an ethic characteristic). The method to detect offence inclined people is ethic characteristic identification [21]. **Conclusions:** 1) we confirm the research hypothesis on the possibility to measure ethic characteristics with the GDV technology. The offered technology can be examined in the packet with other

methods to solve the tasks of ethically aligned design of electric engineering and electronics objects. 2) Besides scientific and technical revolution the humanity urgently needs moral and spiritual one in which the GDV technology will play a decisive role. 3) We would like everybody to take part in it as “the mankind is doomed without ethics”. 4) There are various dangers in introducing it, but this subject matter is a single question to be discussed. 5) We would like to offer a discussion on the tactics and strategy of the above issue. 6) The future GDV devices could be placed into mobile phones and this could be their competitive advantage (and could be the funding source of the work). 7) “The century’s greatest discovery” – the GDV technologies – is to be for the humanity’s good. They will be beneficial not only to the DPR and the entire Russian World, but also to the mankind if they are introduced into different research institutions and interested organizations. We would like to thank Prof. K.G. Korotkov and our Destiny for the chance to use the research results.

References

1. V.V. *Putin*. Shorthand record of the speech at the meeting of the “Valdai” Club 19.09.2013. Access mode: <https://rg.ru/2013/09/19/stenogramma-site.html>
2. E. U. *Weizcacker*, A. *Wijkman*. Come on! Capitalism, Short-termism, Population and the Destruction on the Planet. A Report to the Club of Rome written to its 50th anniversary in 2018. Access mode http://www.roerich.com/zip3/_rome_50_.zip
3. E.I. *Roerich*. Letters. Volume IX (1951-1955). - M.: MCP, 2009, 608 p. [Electronic Resource] Access mode: http://www.roerich.com/zip2/ei_9.zip
4. Dalai Lama XIV. Quotations. [Electronic Resource] Access mode: <http://cpsy.ru/cit1146.htm>
5. W. *Sombart*. Works. V. 2. Traders and Heroes. – Access mode : <https://www.twirpx.com/file/229667/>
6. Community of Europe According to Lexis Data: monograph / A.A. *Kretov*, O.M. *Voevudskaya*, I.A. *Merkulova*, V.T. *Titov*; Voronezh State University.- Voronezh: Publishing House VSU, 2016.- 412 p.- Access mode: <https://www.twirpx.com/file/2358734/>
7. E.I. *Roerich*. Letters. (The letter of 18.06. 1936). Volume IV (1936). M.: MCP, 2002. – Access mode: http://www.roerich.com/zip2/ei_4.zip
8. Agni Yoga Sides. 1965.
9. G.V. *Roizenzon*. Ethic Standards in Artificial Intelligence// Program Engineering: Methods and Technologies of Data-processing Systems 2018: proceedings of the II International Scientific and Practical Conference, volume 1. November 14-18th 2018. – Donetsk, DonNTU, 2018. -. 227-236.
10. Ethics in action. The IEEE Global Initiative on Ethics of Autonomous and Intelligent System. - Режим доступа: <https://ethicsinaction.ieee.org/>
11. Ethically aligned design. Vision for Prioritizing Human Well-being with Autonomous and Intelligent Systems. Version 2. – For Public Discussion. - Режим доступа: https://standards.ieee.org/content/dam/ieee-standards/standards/web/documents/other/ead_v2.pdf

12. Open letter "Research Priorities to Create Reliable and Useful Artificial Intelligence".- Access mode: <https://futureoflife.org/ai-open-letter-russian/?cn-reloaded=1>
13. *Leongard*. Technologies against the Human Being – M.: АСТ, 2018. – 349 p.
14. V.A. *Lefevr*. Consciousness Algebra/ V.A. Lefevr.—M.: «Kogito-Centre», 2003.
15. *Dzhura S.G.* The Universe Ethic Algorithms. - Saarbruken: LAMBERT Academic Publishing, 2015. – 534 p. - Режим доступа: http://www.roerich.com/iic/russian/ovs/_dzhura_eng_2015_.pdf
16. *Dzhura S.G.* The Universe Ethic Algorithms (in Russian). - Saarbruken: LAMBERT Academic Publishing, 2014. – 393-405 p. Access mode: http://www.roerich.com/iic/russian/ovs/dzhura_book_rus_2014_.pdf
17. The Diploma of the Prize-Winner of the All-Russian Contest of Scientific Books. Access mode: http://roerich.com/iic/russian/ovs/_dipl_kniga_2016_.jpg
18. In the World of Wonderful Discharges. Scientific and Practical Conference timed to Semen Kirlian's jubilee. TV "Russia", Kuban. [E-resource]. Access mode: <https://www.youtube.com/watch?v=X09HSRZcYfc>
19. Bio-well. The official site of the company which produces the GDV-devices. Access mode <https://www.bio-well.com/ru/home.html>
20. *K.G. Korotkov*. GDV Bio-electrography Method at the Current Stage. StPb, 2017. – Access mode: http://www.phantastike.com/other/metod_grv/zip/
21. The Method to Reveal People Inclined to Illegal Actions // *K.G. Korotkov, E. V. Kryzhanovski, S. I. Filatov, Y.R. Fillaposyants*. – M.: SU SIA "Special Process and Communication" of the MHA of the RF, 2005.- 32 p.
22. *D.I. Muromtsev*. Automated System of Processing and Analysis of Dynamic GDV-grams of Biological Objects. Dissertation Abstract.- StPb, 2003.
23. *A. Y. Kondratyev, N. V. Kisileva, A.R. Laptev*. Examination of Servicemen with the Signs of Apparent Deconditioning Malfunctions by the GDV-bio-electrography Method// Proceedings of the Conference "Nerobiotelecom". StPb: 2004, p. 125-127.