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## EXPERIMENTAL SUBSTANTIATION OF THE POSSIBLE MECHANISM OF THE LASER THERAPY.

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This work deals with the hypothesis about the possible mechanism of reaction of biological objects on the exposure to the quantuum generator of electromagnit radiation (EMR), including lasers. The hypothesis is based on the study which resulted in the experimental discovery of the torsion component of radiation of quantuum sources (of electromagnit radiation), and also of the property of torsion radiation to carry complex information about the structure of spin systems,} its [radiation] mutagen properties.

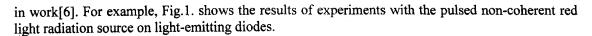
By the end of the 20-th century biology has come to face a number of problems connected with storage, processing and transmission of information which have no solution within the framework of traditional science. They are the mechanisms of memory and thinking, the mechanisms of recognition in the process of ontogenetic development of the organism and in the process of functioning of its immune system, the mechanisms of reaction on the exposure to the factors of environment which leads to mutations on the level of the genetic apparatus and so on. A number of actually existing phenomena of parapsychology and extrasensorics, which have remained unrecognized by orthodox science also bear a direct relation to informational exposure.

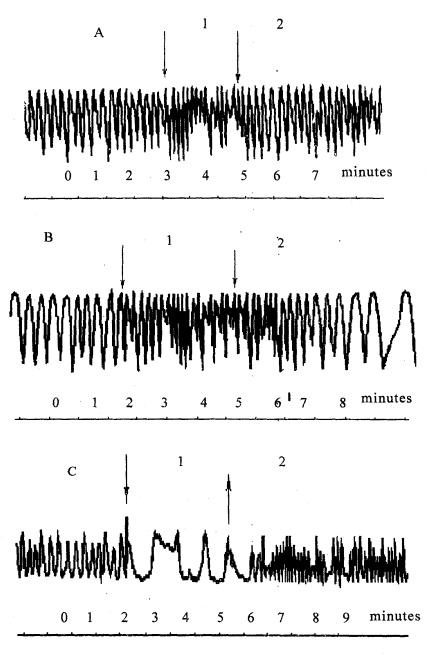
Medicine failed to explain the mechanisms of diagnosing using Foll's method, the mechanisms of therapy using some pharmaceutical and homeopathic remedies, different types of physiotherapy, sonar, magnet, microwave, laser therapy. From the position of traditional science the physotherapeutical effect is being achieved when treating the internal organs by laser radiation, looks somewhat paradoxical, for the penetrating ability of the latter into biological tissues is defined by the fractions of millimeters or millimeters. Yet the possibility of conducting the procedure of such action through clothes, fabric and plaster bandages causes a greater astonishment. Another paradox appeared more than half a century ago when it was discovered that the number of mutations depends on the degree of ionization of bioobjects by X-ray and gamma-radiation, and on the other hand the number of mutations has no dependence on the energy of quantum of the acting factor whatsoever.

All the enumerated problems of psychophysiology, biophysics, genetics, medicine are connected with the existence of an information-carrier, which according to [2] is torsion fields (TF) - the fields of torsion of time- space of Physical Vacuum (PV). The absence of methods of detecting and recording torsion fields using technical devices could not make it possible to get down to studying its nature and properties, however, presently this obstacle has been surmounted. There had been created detectors of torsion radiation on electric double layers occurring on the surface of division of phases and on transition layers in semi-conductor devices.

The experimental researches which had been carried out using these devices proved Akimov's conception about EGS-polarization of PV [2] and opened a new way to the solution of many of the listed above problems. In particular, there had been discovered the torsion component of electromagnet radiation (EMR) the existence of which followed from the EGS-conception. A unique property torsion fields to carry complex information had been experimentally proved and theoretically substantiated in works [2], [4], [5].

The experiments were carried out using both the coherent monochromatic laser radiation source and the pulsed non-coherent radiation source on semi-conductor light-emitting diodes (LED). The results of the investigations and the methods being used are given a detailed treatment







As the torsion radiation detector the generator of self-sustained oscillations on p-n transitions (the subject of "know how") was used. The detector was protected from EMR-action.

Fig. 1A: position 1- the begining of action with the right sight of the radiator; 2- the end of action. With the begining of action the frequency of the detector has sharply risen, after its termination - has restored.

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Fig. 1B: position 1-action with the right side of the radiator, position 2 - action with its rear side. As in experiment A during the action with the right side of the radiator the frequency of oscillations of the detector increased. During the action with the rear side it became lower than the initial frequency.

Fig.1C: The action was conducted in reverse order. first with the rear side (position 1), then with the right side (position 2). The results are as follows: during the action with the rear side the frequency of the detector went lower than the initial one, and during the action with the right side-exceeded the initial.

The results show, the active factor which evokes the reaction of the detector- the nonelectromagnet component of radiation of the source has torsion nature, and consequently the EMRradiator which we used, is a torsion generator, similar to those with axial symmetry, described in work [2].

Torsion radiation coming from the quantum generator- the EMR source can be a carrier of complexinformation about the structure of the spin system of the molecules of the substance. The modulation of radiation by such information is being conducted by means of transmitting this radiation through the matrix containing the molecules of this substance. Such radiation modulated by information can cause mutations on exposure of biological objects to it. The aforesaid has resulted from our experiments using medical remedies when treating the patients, applying the method of field transmission of information, and also using the results of the experiments on the informational action on unsoaked plant seeds [6].

On exposure of the bean seeds depending on the nature of the substance of the matrix, alteration of all the indexes in comparison to the samples occur. These indexes characterize productivity of the variety under study - of the average number of corns in the pod, of the average number of pods in the bush, of the average number of corns and their average mass per bush. Deviation of these indexes in both sides (in comparison to the control value) can reach tens of percents and the total deviation in both sides (in comparison to the control) up to 100%. The table shows the dependence (in %) of an average productivity (mass of corns in grams per bush) on the substance of the matrix on 3-minute informational exposure of the bean seeds to the torsion component which was coming from the pulsed semi-conductor laser ( =0,89nm., the frequency of pulses in the burst- 3kHz, the frequency of the bursts - 100 Hz). Same indexes became lower in comparison to the control indexes by 6%.

The action may be carried out by a combination of several substances. The result of such actions is not additive reflection of the results of the action of each component separately. As for instance, the exposure to the radiation modulated by information about the structure of the spin system of Vit.C increased productivity by 26% and exposure to the torsion field modulated by information about aspirin UPSA decreased it by 19%. But the action of a combination of the both substances increased productivity by 48%.

The results of the exposure depend on its duration. Exposure of the unsoaked seeds to radiation, modulated by one and the same information depending on the time of the exposure may either sharply decreased the germinating capacity and further growing of the sprouts, or increase the parameters in comparison to the control ones. The number of such extremes for different substances may be different and they may not coincide.

On penicillin information exposure", the first minimum was observed on 25 second exposition; the second - on 2 minute exposition. On exposure to levomicin the minimums appeared on 6 and 25-

second exposition, and to oleotetrin - on 6 and 60-second exposition, whereas for penicillin maximum corresponded to the 6-second exposion. For mummy the minimums fell on 10-30 second exposition, maximums - on 1 and 2 minute exposition.

The results of the experiments which were described above and also in work [6] show the effectiveness of the exposure of the vital activity of biological objects to informational torsion fields, actuality of their usage in medicine and in different biotechnologies. They explain the paradox of the laser therapy and ray genetics, Kaznacheev's citopathic effect, paradoxical results of Chzhan Kan' Chzhen's experiments and so on .We have all weighty reasons to assume that there is a direct exposure of the field component of genome to informational torsion fields. The medical effect being the result of exposure of patients to torsion radiation which contains information about medications, considerably exceeds the effectiveness of the so- called laser physiotherapy (being in fact a particular case of the torsion therapy) where there is no information about the medical substance [6].

The universality of the laser therapy which is effectively being used in almost all, except oncology, spheres of medicine suggest the idea that on the level of a whole organism the torsion component of laser radiation (also which was not modulated by information) affects its homeostatic systems, activating immune processes. Such activation is possibly conditioned by change of the field component of cell-genome and consequently of the genotype of a bioobject.

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