



The phenomenon of contactless activation of liquid living organisms.

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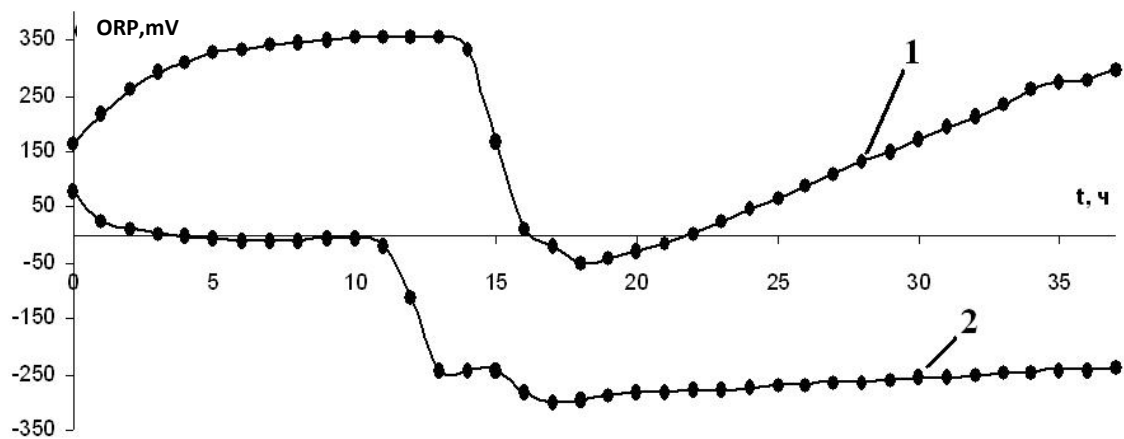
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For the first time, obtaining structured water with a negative ORP without changing its chemical composition (the phenomenon of contactless activation of liquids - BAF) during electrolysis with a diaphragm was predicted theoretically by I.L. Gerlovin in 1982, based on the physical theory of the fundamental field developed by him [1]. The effect was discovered and investigated experimentally by V.M. Bakhir only in 1992 [1]. In experiments [1], sealed thin-walled containers made of a dielectric with an isotonic sodium chloride solution (ampoules, capsules, or a PVC tube) were placed in the working chambers (anode or cathode) of an electrochemical diaphragm activator. As a rule, ampoules were activated for 30 min. with the current turned on, or with the current turned off immediately before immersing the containers with the solution in electrochemically activated (ECA) media. After exposure of sealed ampoules in anolyte or in catholyte, the ORP index of the isotonic solution changed significantly, with a slight change in pH, which can be considered a manifestation of non-contact ECA. This effect is qualitatively the same during the operation of the electrolyzer and after its shutdown. Anolyte and catholyte act on sodium chloride solution through glass, lavsan and fluoroplastic. In this case, for glass and lavsan, the direction of changes in pH and ORP corresponds to the sign of electrochemical treatment (anodic or cathodic), while for fluoroplastic, an inversion of the sign is characteristic. After 2 hours, the pH and ORP indicators, changed as a result of contactless ECA, undergo relaxation, which indicates the absence of penetration of stable electrolysis products into the closed ampoules. Consequently, contactless ECA is carried out at the energy level, without concomitant transport (mass exchange) of ions through the wall of the ampoules [1].

Later, the effect was obtained in an electrolyzer without a diaphragm (1999) [3] and explained without the theory of the fundamental field on the basis of the classical physics of nonlinear dynamic resonance systems - resonant microclusters of water dipoles (1984) [2, 4]. Further studies have established that many substances, including those included in various drugs, when dissolved, lead to the effect of BAF [5].

Several works are known that touch on the topic of radiation in living organisms (the Kirlian effect, mitogenetic radiation ...). In this regard, an assumption arose about the possibility of non-contact activation of liquids in the process of the vital activity of microorganisms. Therefore, experiments were carried out, the essence of which was as follows. Thin-walled dielectric containers with distilled water (50 ml) were immersed in pasteurized milk (400 ml). The experiments were carried out under conditions optimal for the growth of microorganisms in a thermostat ($T = 300\text{ C}$) for several days.

It can be seen from the graphs (Fig. 1) that the ORP of activated distilled water (1) changes synchronously with the ORP of milk (2). In the control distilled water, which was under the same conditions, the ORP changed insignificantly during the entire experiment $\sim (+50)\text{ mV}$.



Pic. 1. Dynamics of ORP of souring milk (2) and non-contact distilled water activated by it (1).

It should be noted that the minimum ORP values of both liquids coincide in time with the stationary phase of bacterial culture growth (plateau). The graph also reflects the active growth of microorganisms in the place of sharp decreases in ORP and the cessation of growth in the population due to the accumulation of metabolic products (slow relaxation).

Thus, it can be assumed about active radiation by microorganisms in the process of their vital activity, which causes the effect of BAF. This discovery can become the basis for new extremely simple and supersensitive non-contact methods for accounting for the state of a living system without interfering with its structure.

List of publications:

[1] Prilutskiy V.I., Bakhir V.M., Electrochemically activated water: Abnormal properties, mechanism of biological action, M., VNIIMT NPO "Ekran" JSC, 228 (1997) - [sb10.htm](#).

[2] [Shironosov V.G., The problem of two magnetic dipoles taking into account the equations of motion of spins, Izv. universities, Physics, 74-78 \(1985\) - sb22e.htm](#), п.4.3.

[3] [Shironosov V.G., Shironosov E.V., Experiments on contactless electrochemical activation of water, collection of articles. Report 2nd Int. Simp. Electrochemical activation in medicine, agriculture, industry. - M.; VNIIMT JSC NPO «Ekran», Ch 1, 66-68 \(1999\) - sb15-12e.htm](#).

[4] [Shironosov V.G., Resonance in physics, chemistry and biology, Izhevsk, Ed. house "Udmurt University", 1-92 \(2001\) - sb22e.htm](#).

[5] [Dubrovskaya O.A., Mulakhmetov R.F., Shironosov V.G. The phenomenon of contactless activation from microhydrin and chemical reactions, Yekaterinburg, Collection of abstracts VNKSF-8, 597-599 \(2002\) - sb26-2e.htm](#).

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Found a mistake?

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