

Радиоактивность и радиоактивные элементы

**WHETHER PROBABLY TO CHANGE
A HALF-LIFE PERIOD OF RADIOACTIVE
ELEMENTS**

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In work the structure of new formation which is named as giperplazmon, and be radiated by it a field - a hyperfield is considered. This hyperfield is capable to change a half-life period of radioactive elements, and probably structure of a nucleus of a radioactive element. The hypothesis about presence of unknown force which unites particles in a nucleus of giperplazmon is stated.

In early work the concept of giperplazmon for an explanation of the effects observable in low temperature chemically active fluorinecarbon plasma is entered. The nature of the observed phenomenon has for physics, apparently, fundamental character since change a half-life period of radioactive elements. To tell the truth, while the effect is found out on three isotopes from 6 on which tests were carried out. So ¹³⁷Cs, ¹⁴⁴Ce and ³²P to an irradiation a hyperfield has not reacted. Probably, capacity of a dose of an irradiation a hyperfield was small, existence any other factors about which we either do not know is possible, or we know, but we do not give to them value.

This work has the beginning in 1976 when in journal «Successes of physical sciences» two clauses of such patriarch of quantum physics as Heisenberg W have been published. In article it wrote: to understand crisis of modern physics, it is necessary to return to sources of a century for the mistake there has been made. We have been very much surprised, as considered, that physics «on rise». A unique weak place of physics - it could not explain an origin of a life. But soon we have forgotten this theme. In central press I publish article devoted to anomaly in a spectrum of one molecules fluorinecarbon of plasma in 1981 - free radical C₂. In this article was the scheduled of dependence of intensity of number rotary lines from the rotary energy observable in argon which had good linear dependence as against the similar schedule executed in an atmosphere of gas CF₄ is resulted. In 3 months I have doubted as a result of the work and have decided to repeat experiment. However we needed almost 1.5 years to learn to reproduce experiment stably.

At first sight business looked so, that under strictly certain conditions of experiment in fluorinecarbon to plasma the complex particle which we have named a giperplazmon possessing internal structure is formed. The nature of the forces uniting only excited molecules of one type in giperplazmon holding in this condition and giving to the excited molecules, completely new properties, still it is necessary to study them. Roughly 60 % of the excited molecules such as C₂, getting inside of it giperplazmon, passed from excited a condition in not excited without radiation of electromagnetic energy, i.e. giperplazmon took away from them the electromagnetic energy equal to size of electronic transition and transformed it to other form of a field - a hyperfield, permeability of this field at

present also is not known. Generation giperplazmon influences backs optical electron its influence is not strong, but it is well appreciable on schedules. It means, that a primary factor influencing generation, the total orbital moment optical electron molecules or their projection on internuclear an axis) is. Alternation of lines on the poster 2 means that depending on orientation total a back optical electron, intensity of generation giperplazmon though at integration of spectral lines of a triplet (the poster 3), we, nevertheless, notice generation giperplazmon changes, but it has other kind. It is necessary to tell, that still any effect as figure of the schedule is reproduced stably there is looked through. Even is so exact, that two figures imposed against each other completely coincide. This effect reminds the experiences of the Franc - Hertz which made in the beginning of XX century and has proved a quantum structure of atom. But that there can quantize still is for us while the big riddle. The solution of it, probably, can have any relation both to internal structure giperplazmon, and to its external environment.

We investigated an opportunity of redistribution of energy inside a molecule, have considered a variant of transfer of energy to other molecules and, at last, a RVT-exchange, but the missed energy and have not found. And, molecules or simple free radicals, apparently, more giperplazmon were not kept and could leave it. Their place was occupied with other simple free radicals which are taking place in the excited condition. Further process repeats. Probably, they were involved in process repeatedly. Today early do any statements.

What force unites a nucleus in cluster, is not clear yet, just as the nature cluster. Studying with the help of electronic spectroscopy of emission of molecules will give us only partial the information about giperplazmon (and the degree of its reliability too is unknown). Other part, unknown to physics of today, remain as not found out. If the made assumptions are true, supervision of a nucleus of a giperplazmon probably through the central area of things in common giperplazmon with a graphite electrode and, hence, through graphite is optimum. Probably, at formation giperplazmon there is a change of the nature of particles after accumulation of energy by a nucleus and their transformation into other particles which are a source of a field. Though, it too does not explain generation of a unknown field. But as the reflected electric field destabilizes an external environment, it means, that it will consist not from usual fluorinecarbon plasmas. Here it is necessary to note two moments: The first moment is that the external electromagnetic field shields a nucleus giperplazmon as the reflected electromagnetic field destabilizes fluorinecarbon the plasma surrounding giperplazmon. And the second - radiation all the same occurs through the center of a nucleus of electrodes as only in this point it concerns some plasma and an end face of a graphite electrode. It is possible to assume, that the form of distribution of radiation looks like a cone. To some extent it explains the flat form giperplazmon. Not clearly as why the plane of existence giperplazmon is inclined under a corner of 45 degrees to a core of an electrode.

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Especially at such offer we should study completely new physical phenomenon. At formation the characteristic smell of fluorine disappears. Absence of a smell of fluorine too can speak well about transformation into a nucleus of initial particles. Experimental check, despite of the significant saved up experimental information, will be enough difficult as will demand, most likely, new approaches. Probably, with hollow cathode with graphite liner hollow cathode, consisting of two cylindrical anodes and accumulate of the nitrogen located after the second anode the direct relation to experiences with cyanogen has experiments. The schedule, constructed in coordinates similar to radical C_2 , and break of the second sort having in the structure, is characterized in parameter p (the poster 4), is equal to parameter p for the schedule constructed on an electronic spectrum for a giperplazmon (the poster 3.).

Now it is known just, the hyperfield passes through thin sheets of metal and quartz. One more factor (the first factor is a change of activity of radioactive elements) as it seems to us, confirming existence giperplazmon, consists in the following (briefly was already spoken about it): if a quartz tube to replace on metal the effect disappears. Apparently, metal reflects the electromagnetic field proceeding from plasma which destabilizes an external environment giperplazmon, and it speaks about its special structure. (Metal walls of the container nevertheless pass radiation). Quantum of a hyperfield, apparently, are, most likely, field particles which do not carry an electric charge and are described Klein - Gordon by equation. This is assumption. To make other assumption we cannot yet or we are not solved, as we have no experimental data.

We have assumed, that there is any field of the unknown physical nature generated by internal structure of a giperplazmon. How it to find out? We have decided to investigate it on unicells, but competently put experiment could not. Completely casually we have found out, that this field influences nucleus of radioactive elements. Experts on nuclear physics to our idea have considered with doubt and we take advantaged services of radio chemists (professor Betenekov N., etc.), Which had necessary isotopes and the equipment allowing with big accuracy to trace the change, occurring with isotopes. Appeared, that at isotopes ^{85}Sr , and ^{106}Ru there was a reduction of activity by 20 % with a mistake of experiment of 1 %. Even earlier the service of standardization of radioactive isotopes has come to a similar conclusion for an isotope ^{90}Sr . Therefore detection of influence on radioactive elements should be counted only casual phenomenon, but the fact of existence of such phenomenon of doubt does not cause.

Especially, we have started research of process from its display on an aerofilm placed in a package of a dark lightproof paper. Density darkening films in cells of the drawn dark paper, on which it was placed ^{90}Sr (taken from a dosimeter as a reference source for work of the last) had density darkening on 46 % less at the included generator. It is in the beginning of experiments. At the end of experiments, approximately in week, distinction in darkening disappeared. I.e. the effect similar to effect of saturation was observed. But thus final decrease in activity reached maximal for the given capacity of a field of value. With chain nuclear reactions we did not carry out experiments, for the lack of access to such objects. We have gone on other way. In result we of the produced

principles us had been created the trial generator which has turned in the fused metal through 20 with so heat removal has been designed for smaller energy.

Experiences with the radioactive elements, causing chain reactions were not carried out, since we did not have access to such elements.

ВОЗМОЖНО ЛИ ИЗМЕНИТЬ ПЕРИОД ПОЛУРАСПАДА РАДИОАКТИВНЫХ ЭЛЕМЕНТОВ?

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В работе рассматривается структура нового образования, которое названо гиперплазмомом, а излучаемое им поле – гиперполем. Это гиперполе способно изменять период полураспада радиоактивных элементов, а возможно структуру ядра радиоактивного элемента. Высказана гипотеза о наличии неизвестной силы, которая объединяет частица в ядро гиперплазмона.

В ранней работе введено понятие гиперплазмона для объяснения эффектов, наблюдаемых в низкотемпературной химически активной фторуглеродной плазме. Природа наблюдавшегося явления имеет для физики, по-видимому, фундаментальный характер, т.к. приводит к изменению периода полураспада радиоактивных элементов. Правда, пока эффект обнаружен на трех изотопах из 6, на которых проводились испытания. Так ^{137}Cs , ^{144}Ce , ^{32}P на облучение гиперполем не отреагировал. Возможно, была мала мощность дозы облучения гиперполем, возможно существование какие-то другие факторы, о которых мы либо не знаем, либо знаем, но не придаем им значения.

Эта работа имеет начало в 1976 году, когда в журнале «Успехи физических наук» были опубликованы две статьи такого патриарха квантовой физики, как Heisenberg W. В своих статьях он писал: чтобы понять кризис современной физики, нужно вернуться к истокам века, ибо там была сделана ошибка. Мы были очень удивлены, так как считали, что физика «на подъеме». Единственное слабое место физики – она не могла объяснить происхождение жизни. Но вскоре мы эту тему забыли. В 1981 году в центральной печати я публикую статью, посвященную аномалии в спектре одной из молекул фторуглеродной плазмы – свободного радикала C_2 . В этой статье приведен график зависимости интенсивности вращательных линий от вращательной энергии, наблюдаемой в аргоне, который имел хорошую линейную зависимость в отличие от аналогичного графика, выполненного в атмосфере газа CF_4 . Через 3 месяца я усомнился в результатах своей работы и решил повторить эксперимент. Однако нам понадобилось почти 1.5 года, чтобы научиться воспроизводить эксперимент стабильно.

На первый взгляд дело выглядело так, что при строго определенных условиях эксперимента во фто-

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