SEEKING KNOWLEDGE

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Makhachkala 2005
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Seeking Knowledge (translation from Russian). – 204 p.

The selected proceedings, at which the authors worked last seven years, are presented in the book. For the first time it has gathered works, which range covers the scientific and technological projects of a global scale, which base on 101 inventions, the concrete suggestions on a reform of the present unjust international system of the protection of the intellectual property, the search and analysis of reasons of the backlog of the Islamic world in science and engineering, the discovery of a new scientific signs in the Sacred Qur'an.

The authors have discovered a new page in understanding of the contained in the Qur'an information about the structure of a matter and the Universe, have applied the new methodology in a search of scientific information and have opened the layer of new concepts in this Sacred Book. Undoubtedly, these discoveries of the scientists-muslims will exert a great influence on the understanding of the nature of a universe by the science.

The found and deciphered by the authors information in the Qur'an about the "Heaven", the "Earth", the "Heavens", the "balance" of the "Heaven", the fundamental "bricks" – protons, neutrons, electrons – will permit to hope that it will be necessarily found the answer to the main, exciting lucid minds of mankind for the thousands years question on the nature and the structure of the world surrounding us. The authors have given their variant of answer in this book.

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ISBN: 5-7865-0080-3 (English)
ISBN: 5-94434-052-5 (Russian)
Published by “Jupiter” publishing house
Makhachkala, Republic of Dagestan, Russian Federation
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FROM THE AUTHORS

Seeking knowledge is a duty for every Muslim.
Prophet Muhammad (peace and blessings be upon him)

There has come XXI century. Here already almost for one and a half thousand years the Islam has been preaching on the planet winning hearts and minds of people. High moral norms, rules of a public life and many other things, registered in the Sacred Qur’an, become irresistibly attractive and desired for people.

But at the same time the crisis phenomena in the Islamic world are observed for many centuries. Negative processes are watched in many spheres of a life of the Islamic states, but especially they were shown in the big lag of the abstract and applied science, in a level of development of engineering and education. And moreover the Islamic civilization was the centre of a world scientific and technological idea in VIII–XIII centuries and people came to Baghdad and Cordoba for knowledge from all Europe. It is sad, but it is necessary to recognize that the way on which the Islamic world has been developing for the last centuries deviated from the way which was bequeathed to the Ummah by Prophet Muhammad (peace and blessings be upon him).

One of the main reasons of such state of affairs, to our way of thinking, consists in the following. Any state system in the course of time, because of the constantly going processes inside and outside of it, is exposed to erosion and destruction. And only that state which possesses the first class institutions and mechanisms of upbringing, education, the selection and promotion of the most highly moral, intellectually developed and qualified prepared people into the structure of the government up to the highest posts where the state decisions are made, has the best chance to resist to the challenges of time. Because such people by virtue of their intellect, education and experience can find the best ways and methods of solution of the state and social problems and their morality will not allow them to put personal or corporate interests above state ones. They by their
service to the society and the state will rally and inspire people being the standards of morals, honesty and personal modesty for people. Not for nothing great and wise Aristotle said: "...the governing of the clever people is the best".

Certainly, these rules of development and functioning concern to any administrative systems – state and public, religious and scientific, industrial and educational, and not just to a state system of the Islamic countries. But it should be twice insulting to Muslims as in the seventh century an arising Islamic state one of the first in the world showed the examples of the democratic election of the outstanding heads – the four just caliphs.

An indisputable historic fact is their highest moral, intellectual, business qualities, personal modesty and careful attitude to the state treasure. These qualities of the just caliphs were the powerful propaganda for the Islam and promoted so fast spread of religion in their times worldwide and prosperity of the Islamic state. But, unfortunately, these democratic procedures were shortly broken and could not develop into the state institutions and mechanism. Certainly, there were objective and subjective reasons for it, but the fact remains the fact – to the beginning of XXI century we observe the significant lag in the development of democratic institutions of the Islamic states.

The unsuccessful state of affairs in the Islamic world serves one of the causes for the Islam phobs to accuse the Islam as the religion and to name it as the reason of this backwardness. More often the aspiration to humiliate Islamic religion is done through the attempts of discredit of Prophet Muhammad (peace and blessings be upon him) after which, naturally, belittling of the value of the Sacred Qur'an and even denying its divine origin follow. Certainly, it is not necessary to convince us, Muslims, of a divine origin of the Qur'an and that Muhammad – the Prophet of the God, but for the minds of the fair people who for these and those reasons are not familiar with the Islam and constantly subjected to an anti-
Islamic propaganda, we think, it is deserved to fight. Those who are familiar with the history of the world religions, you see, it is well-known, that the Islam is the religion of the only God, the religion of the prophets of mankind from Adam, Abraham (Ibrahim), Moses (Musa), Jesus (Isa) (peace for them) to the “seal of the prophets” Muhammad (peace and blessings be upon him), and the Qur’an alongside with the Torah and the Bible is the Sacred Scripture.

Our work “The nuclear potential of the Qur’an” is applied, first of all, to the competent and educated people capable for understanding the analytical reasoning and logical deductions. We hope that it will testify the divine nature of the Sacred Qur’an so demonstratively that the readers will deeply think over what unites and who separates the believers in the Only God. In this work based scientifically on our hypothesis from a sphere of theoretical physics, the fundamental bases of the structure of a matter and the Universe are mentioned. In our opinion, the hypothesis finds the acknowledgement in the Sacred Qur’an. During work we could manage to find the new scientific signs in the Qur’an, to open the new layers of the conceptual apparatus which, as we believe, will help the scientists in their searches of the new discoveries.

We have included our scientific and technological projects in this book. These are the newest working outs, having no analogues in the world, which have humanistic basis and are directed on the solution of the problems of humanitarian, ecological and social character arising before the world community. All these projects were included in the catalogue “The Export Possibilities of Russia” by the Russian Academy of Sciences.

The problems, which we had faced at the patenting of our 101 inventions, became the reason for the working out of suggestions on creation of the new international system of the protection of the intellectual property based on the principle of justice and priority protection of the interests of the inventor and the developing countries all over the world.
Our Prophet Muhammad (peace and blessings be upon him) told very important words for us: “The nine tenth of the belief is a search of the fair (halal) earnings”. Appreciating them through the prism of the centuries, through the comparison of the dynamics of the development of the first centuries of the Islamic civilization with the reason past and the present time, we understand, that ninety percent of time Muslims, as the Prophet (peace and blessings be upon him) orders, should devoted to an active labour activity. And, first of all, to participate in the creation of the conditions for the development of the “transparent” economy, to study various sciences, to invent, to master new technologies, etc. Without it and XX century has shown it, the developed competitive economy will not be in the state and so the big opportunities for the worthy and fair earnings will not be. The way of fatalism and fanaticism on which the clericals directed the Islamic world many centuries ago turned to be deadlock. It is necessary to refuse it finally and unconditionally. “The search of fair earnings” – here is the clear way of use of freedom of choice given to the person by the Supreme Allah. It is a way of an active life position and a work for the good of the family and the state, a way of moral self-improvement and philanthropy, a way of development of education and knowledge.

Here we would like to note that unprecedented role which the Soviet Union has played in the receiving of education by the citizens.

Though the policy of the warlike atheism and persecution of religious figures will lie like blot of disgrace at the ideologists of organization of the communism, it would not be objective to deny the fact that a huge masses of plain men, including Muslims, at the Soviet power were able to get free education, about what they could not even to dream before.

A qualitative secondary and higher education, humanitarian and technical, which were given the citizens-muslims by the Soviet Union and which Russia gives today, allows to understand more widely the realities of the today’s world, to be more adapted to them, to see
the prospect of the scientific and technological progress for the development of the states better than many of our coreligionists from the countries of the Islamic world.

We have an opportunity to compare what our country has given us in sphere of education with a state of affairs in many Islamic states. Therefore we can approve, that the Russian Muslims have appeared to be more demanded by their country which has made highly skilled scientists, engineers, teachers, doctors of them, than Muslims in many countries of the Islamic world. And it is our objective advantage in the XXI century.

We are sure, that the role of the Russian Muslims will increase in the development of an Islamic civilization as a whole. As to the relations of our native land with the Islamic world we, the Russian Muslims must to do everything for strengthening of the mutual understanding and cooperation between our country and the Islamic states.

The base of these future relations will be those high spiritual and moral values which are common for Russia and the Islamic worlds. As in the past the Soviet Union was a stronghold justice and support of the Islamic world released from the colonial dependence, and Russia now and in the future should become the relative and close partner for it.

We deeply believe that in the XXI century the words of the Prophet Muhammad (peace and blessings be upon him) about the necessity of seeking knowledge are being actual as never before. The scientific-technological revolution stated in the second half of the XX century has obtained the permanent character. Not to fall finally behind from the economically developed countries and not to be on the side of the road of history, our country and the countries of Islamic civilization should make great efforts and create to favorable conditions for their citizens, that their "seeking knowledge", their wish and possibilities for the application of the received knowledge for the welfare of their countries would be that uniting idea, which would rally and put all of us on the front lines of the world civilization.
THE NUCLEAR POTENTIAL OF THE QUR'AN

THE STRUCTURE OF A MATTER AND THE UNIVERSE
THE PREFACE

...We raise the degrees of whomsoever We please, and above every one possessed of knowledge is the All-knowing one.
Qur'an, 12:76

Exactly 100 years has passed since in 1905 Albert Einstein published three well-known works which influence the modern physics till now. Celebrating this anniversary the International Union of Pure and Applied Physics has declare 2005 the World Year of Physics and has called people of all the world to note contribution of this major science and its influence on our daily life.

Responding to this appeal, we are publishing the work “The Nuclear Potential of the Qur'an”, which was completed in spring, 2005. We hope that it will make its contribution to the further development of physics.

In this work we have showed how such great achievements of physics like discovering of an electron, proton, neutron and the acknowledgement to our hypothesis of a structure of a matter and the Universe. We shall acquaint you with our searches of new scientific signs in the Sacred Qur'an, reveal our understanding of the words “Heaven”, “Earth”, “Heavens”, often used in Sacred Qur'an.

We wish to tell at once that the purpose of this work is not the aspiration to prove to the official physics the correctness of the theses of our hypothesis of a structure of a matter and the Universe and to obtain its recognition. We are well familiar with the traditions of the official physics and we know that only time will judge us. And even if some theses of our hypothesis are not true or can seem disputable, the most important for us is that, making a start
from the theses of a hypothesis, we could manage to decipher the new scientific signs in the Qur'an.

We understand what a huge responsibility we shoulder having undertaken the decoding of the "scientific" ayahs of the Qur'an. The belief in the Allah and His predetermination, the certain level of knowledge and the conviction in the correctness of our hypothesis about the structure of a matter and the Universe have allowed us to take up this responsibility.

The interpreters of the Qur'an mark that the same word used in the ayahs of the Sacred Qur'an can have multilevel meanings. Understanding of them depends on the level of knowledge of the world around at a certain stage of development of mankind. These items are important for our work as we try to reveal new meanings of the words and ayahs of the Sacred Qur'an.

It is no coincidence that the scientists – the experts of the Qur'an – persistently do not recommend to use the translations of the Qur'an in work on its interpretation. It has developed special requirements to those who takes responsibility on translating and comment of the Qur'an. And these requirements are right and proved because the history knows many examples of the illiterate and irresponsible translation of the Qur'an from Arabian language into different language of the world.

For these reasons we, not knowing the Arabian language and consequently being compelled to work with its translations, have concerned to the selection of translation of the Qur'an with the big care and attention. During work we compared the translations of the Qur'an into Russian language made by G. S. Sablukov, I. J. Krachkovsky, I. V. Porokhova, M.-N. O. Osmanov, E. R. Kuliyev and came to an interesting conclusion that for the analysis of the ayahs of the Qur'an containing the scientific information, the most suitable is the closest to the original literal translation. Only such translation, without literary art and tactical explanations, gives the scientist the opportunity to read and understand correctly the ayahs and to com-
pare his scientific conclusions to their conformity or discrepancy of the information put in the words of the ayahs.

We found such kind of a translation in the translation (actually a draft copy of the translation) made by academician I. J. Krachkovsky. With all its lacks and discrepancies his scrupulously literal translation of the "scientific" ayahs interested for us gives us the possibility to see them under quite different corner of sight. His understanding of this Great Book, as "an ocean of science, which has not limits", was evidence of Krachkovsky's gravity of approach to the translation of the Qur'an. Therefore I. J. Krachkovsky's translation is used in our work.

The other not less important component of our research was the work with such modern tafsirs as "The value and the sense of the Qur'an. In four volumes" (publishing house "SKD Bavaria and Handel Gmbh", 1993; Saurimo Ltd., 2002), "Al-Muntakhab fi Tafsir Al Qur'an Al-Karim. The interpretation of the Sacred Qur'an in Russian" (Kazan, 2001). The inestimable help in our work was rendered with the books of Maurice Bucaille and Harun Yahya. We are sincerely grateful to the Muslim theologians for their advises and consultations.

And only having convinced that our decoding and interpretation of the "scientific" ayahs has no analogues, we have dared to present this work. Its results give us the confidence that the scientific hypothesis which even hasn't received any recognition in the scientific circles yet, but found the acknowledgement in the Qur'an, is true and in due course it will certainly become the scientific theory and the scientific fact, it will encourage the scientists to conduct the search of the modern high-level scientific knowledge in the Qur'an. Under such corner we investigate our hypothesis about the structure of a matter and the Universe.

Starting our researches we have proceeded from the assumption that if even the discoveries which are far from the universal scale discoveries such as the unmixture of waters of the seas and
oceans (55:19-20), the stabilizing importance of the mountains on the Earth (78:7), protective functions of an atmosphere (21:32) are mentioned several times in the Sacred Qur’an, it means that in its “scientific” ayahs it must be the information about the basis of bases of the world surrounding us – the structure of a matter and the Universe which is the information of the most important laws of a universe, which the Supreme Allah has established for the material part of our world. It was necessary only to find the key to decode these “scientific” ayahs.
Space: emptiness or a field?

A hundred years has already passed since the official physics “decided” that a space of the Universe is an emptiness (penetrated in all directions by any kinds of beaming from any kinds of origin) in which the heavenly bodies move. And according to our hypothesis the space of the Universe is filled with the field form of a matter – on our terminology “the first-born field”. That is what we will try to prove now.

And it is He Who has created the night and the day and the Sun and the Moon – all of them floating through space

It is not permitted to the Sun to catch up the Moon, nor can the night outstrip the day: each floats along in orbit
At first sight the use of the verbs “float” ("sabaha" in Arabian) is not absolutely clear in these ayahs. In the Arabian language the verb “sabaha” means inertial movement and has few meanings, one of which is “to float”. The interpreters of the Qur'an translate this verb in this meaning.

Why does Supreme Allah in the Qur'an use the verb “float” in relation to the movement of the heavenly bodies, instead of the verb “fly” for example, which would be more natural, as these bodies move in the heaven? As there can be no casual words in the Sacred Qur'an, the preference of the use of one verb to another can be explained only by difference of meanings and interpretation of these verbs used by the people of that time.

In comparison with the verb “to fly”, the verb “to float” for people then and now means movement more ordered, stable, predicted. In fact the movement goes on in water, in much more dense medium than air where birds can do all rotations, sharply change direction and speed of movement.

The last century gas also opened other reason of the use of the verb “to float” in these ayahs which intelligibly writes Maurice Bu­caille about (The Bible, the Qur'an and a Science. Ansar Foundation, Moscow: 2001. P. 225). The science has established that the movement of the Moon, the Sun and other heavenly bodies has inertial character in the space. But in fact the verb “sabaha”, meant this kind of movement, describes the movement of the Moon and the Sun in the Sacred Qur'an.

Our hypothesis of “the firs-born field” gives the possibility to look under another corner at the meaning of the verb “to float” in these ayahs of the Qur'an. As the Moon and the Sun “float”, it means, that there is a medium in which they “float”. That is the heavenly bodies “float” not in the empty space but in the space filled with a material substance, the medium named “the first-born field” in our hypothesis.

Thus the verb “sabaha” shows, that the heavenly bodies, first, move stably and predictably as the ships float in water, secondly, in-
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erially on the orbits without braking and acceleration, and, thirdly, in the medium in which it is possible "to float" as fishes in water and which can serve them as support at this "floating" as water to fishes and ships to float.

The "Heaven" is a matter!

In acknowledgement that the "Heaven" ("alssamau") in the Qur'an is material object, we wish to adduce the following proofs.

The Supreme Allah in the Qur'an points out the act of creation of the "Heaven" (50:6; 51:47; 79:27–28):

Do they not look at the Heaven above them? How We have made it and adorned it, and there are no splits in it?

50:6

And We have made the Heaven with hands and We are expanding it

51:47

20
(27) Are you more difficult to create or the Heaven? He built it (28) raised its vault and established it

79:27–28

Applying such term as “build” in relation to creation of the “Heaven”, the Supreme Allah tells us about the nature of the “Heaven” as a certain majestic construction, which “difficulty” of creation is not comparable with the creation of the mankind.

In many ayahs of the Sacred Qur’an the “Heaven” is characterized as follows:

- it has no “splits” (50:6, p. 22):
- it has “gates” (7:40; 15:14):

... لا تُفتحُ لَهُمُ أُبُوَابُ السَّمَاةِ ...  

... the gates of the Heaven will not be opened for them ...

7:40  

وَلَوْ فَتَحْنَا عَلَيْهِمْ بَابًا مِنَ السَّمَاةِ ...  

And if We opened to them a gate of the Heaven ...

15:14  

- it “possesses return” (86:11):

وَالسَّمَاةِ دَاتِ الرَّجُعِ  

By the Heaven which possesses return

86:11  

- it can “fall upon the earth” (22:65):
... and He holds the Heaven from falling on the Earth unliess by His permission ...

22:65

- it can be "rolled up" (21:104):

\[\text{يَوْمَ نَطْوِي} \text{ السَّمَاءَ ...} \]

That Day We will roll up the Heaven ...

21:104

- it can "rend" (25:25; 55:37; 69:16; 84:1):

\[\text{وَيَوْمَ تَشْقِيقُ السَّمَاءَ ...} \]

And that Day the Heaven shall be rent asunder ...

25:25

\[\text{فَإِذَا أَنْشَقَت} \text{ السَّمَاءُ ...} \]

And when the Heaven is rent ...

55:37

\[\text{وَانْشَقَّت} \text{ السَّمَاءُ ...} \]

And the Heaven is rent ...

69:16
Let's give one more example. The verb "to rend" is used in relation to the visible material objects - the Earth and the Moon - in the expressions "the Earth will be rent" (50:44), "the Moon is rent" (54:1):

When the Heaven is rent
84:1

That Day when the Earth shall be rent asunder ...
50:44

The hour has drawn near, and the Moon has been rent
54:1

At the same time the verb "to rend" is used in relation to the "Heaven" ("alssamau") (25:25; 55:37; 69:16; 84:1, p. 24–25).

It becomes clear, that if the "Heaven" treats to action to which the Earth and the Moons treat, it is quite logical to consider that the "Heaven" is a material object itself, not an empty space.

These conclusions about the presence of the medium and its material properties completely correspond to our hypothesis about "the first-born field" and its properties. We came to a firm belief that exactly the term the "Heaven" ("alssamau") used in the Qur'an designates this medium - the "first-born field" in which the moving of the heavenly bodies goes on.
The uniqueness of the “Heaven”

Now, having established, that the “Heaven” is “the first-born field”, we start to understand the new sense of the ayah:

وَالسَّمَاءَ بَنَٰی‌نَا بِایْدٍ وَإِنَا لَمُوسَعُونَ

And We have made the Heaven with hands
and We are expanding it
51:47

The Supreme Allah has created and expands “the first-born field” with the space objects “floating” in it, but not a set of space objects and the empty space between them. So the expansion of the Universe is not just a repulsion of the galaxies, but, first of all, the expansion of “the first born field” of the Universe. And at this expansion proceeding billions of years “the first born field” keeps its integrity and homogeneity.

أَفۡلَمْ يَنظُورُوا إِلَی السَّمَاءِ فَوَقَهُمْ كَيۡفَ بَنَٰی‌نَا وَزِی‌نَا‌هَا وَمَا لَهَا مِنَ فِروجٍ

Do they not look at the Heaven above them? How We have made it and adorned it, and there are no splits in it?
50:6

Isn’t it a great miracle? If it wasn’t, we would observe not a magnificent order in the Universe, but the Universe chaos. If the field had splits, emptinesses, the heavenly bodies passing through them would change their orbits. And we see the surprising stability of their movement for the reason that “there are no splits in it”.

24
The nature of gravitation and inertial movement

According to our hypothesis the appearance of the force of gravitation is the result of the interaction of both kinds of matter – a "first-born field" and a substance. Let's imagine, that the volume of a space filled with the "first-born field" starts to occupy the substance, a heavenly body, for instance. This body "splits", "moves apart", and displace "the first-born field", that breaks it initial, quite, stationary condition, disturb it, bends it power lines. But as "the first-born field" possesses the "elasticity", it aspires with the certain force to come back into the initial undisturbed condition. The size of this "force of return" depends on a parity between masses and volumes which the substance and the field occupy in the unit of the space volume. The more the mass of the substance is introduced, the more the field is
disturbed, the more the power lines of “the first-born field” are bent, and the more strongly it counteract to the substance in its aspiration to come back into initial undisturbed condition. It counteracts more strongly near the body (where “the first-born field” is more disturbed) and weakens at removal from it (where “the first-born field” is less disturbed). Everything on Earth is pressed to it by this force and gets the weight, and we name it gravity. Thus \textbf{force of gravitation is a force with which the disturbed “first-born field” counteracts the substance which has caused this disturbance.}

The other unique property which “the first-born field” possesses, according to our hypothesis, is an ability not to brake neither elementary particles, nor heavenly bodies in their process of moving. It goes on owing to that \textit{“the first-born field”, showing resistance to the body moving in it, simultaneously with the same force pushes this body out of this area of “the first-born field” in a direction of its movement.} In such interaction of “the first-born field” and the substance the nature of inertial moved is covered.

This one of the most important properties of “the first-born field” – the “Heaven”. Owing to this property, everything in our Universe can move and develop. Whether an elementary particle received its initial speed at its birth, whether a heavenly body “floating” in the space for billions of years – any of objects of movement will not be braked by a field. Therefore we have and we can observe dynamically expanding Universe with billions and billions of star systems. That is, each point of a power line of “the first-born field”, each local area at its disturbance under the influence of the substance, being the integral component of “the first-born field” of the Universe and taking the certain place in it, aspires to return to its initial place and its undisturbed condition.

So it is spoken about the nature of gravitation and inertial movement in the Sacred Qur’an:
(11) By the Heaven which possesses return
(12) By the Earth which possesses splitting
(13) This is indeed the decisive word
(14) And it is not a jest
86:11–14

Truly these are the great ayahs of the Sacred Qur'an! This is the unique place in the Qur'an in which the Supreme Allah, emphasizing the importance of the property of “return” at the “Heaven” (“alssama’u”) and the property of “splitting” at the “Earth” (“al-ardu”), not only swears by them as the possessors of these properties, but also, that is unprecedented for the Qur'an, emphasizes the importance of the oaths twice (!): “This is indeed the decisive word, and it is not a jest” (86:13-14). Here, as we think, the Supreme Allah shows the key, predominating position of these two ayahs (86:11-12) in understanding the system of universe and its development.

In our opinion the ayahs 11 and 12 tell about the unique interaction of two kinds of a matter – “the first-born field” and the substance (the “Heaven” (“alssama’u”) and the “Earth” (“al-ardu”)). The “Earth”, being in the certain local area of the “Heaven”, displaces (“splits”, “moves apart”) its part from this area and with this disturbs the “Heaven”. And the “Heaven”, in turn, aspires to the initial undis-
turbed condition (to "return"), and as though presses to the "Earth" from different directions.

The reason of the connection and the sequence of the ayahs 11 and 12 becomes clear. If the "Heaven" did not possess the property of "return" (property of returning to the initial undisturbed condition), there would be no sense in the "Earth" with its property of "splitting" the "Heaven". It has become clear, that under the term the "Earth" the substance is meant, but about it and the process of "splitting", its mechanisms and levels, we will tell in the following chapter.

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THE "HEAVEN" ("alssamau") in a number of ayahs of the Qur'an is a real material substance, the form of matter in the form of field, which we called "the first-born field". It is a field that occupies all the volume of the Universe and continues to expand not forming neither emptinesses, no breaks in itself. In this field other form of a matter - a substance (stars, planets, molecules, atoms etc.) - "floats". The "Heaven's" unique properties provide inertial movement of a substance and gravitation. Owing to these properties our Universe exists.
**THE “EARTH” OF THE QUR’AN**

**What “possesses splitting”?**

Atoms and molecules consist of positively charged nucleuses and negatively charged electrons, the nucleuses consist of positively charged protons and having no charge neutrons. Protons and neutrons (their general name is nucleons) in turn consist of quarks of different types. But quarks in a free condition not only haven’t been found yet, but, most likely, according to theoretical calculations can not be in such condition. Therefore protons, neutrons and electrons can be considered as the basic “bricks” of our universe and the cardinal “suspected” on a rank of the “Earth” in the ayahs of the Qur’an. Now, having defined with the circle of search, we will return to the analysis of the ayahs 11, 12 of the surah 86:

(11) By the Heaven which possesses return
(12) By the Earth which possesses splitting

86:11–12

As we have already noted in the previous chapter, the Supreme Allah specifies the major role of these two ayahs for understanding the system of a universe and its development, and we could assume that the “Heaven” and the “Earth” in the Qur’an are two kinds of a matter – a field and a substance accordingly.

What is the “Earth” (“al-ardū”) which possesses an ability of splitting the “Heaven” (“alssama’u”)?
According to our hypothesis of a structure of a matter, "the possessor of splitting" is a nucleus of atom, as 99,998% of mass of an atom are concentrated in it. The enormous excess of density of a nucleus over "density" of the field gives the possibility to "split" this field and move through it.

We considered, that in the Sacred Qur'an there hardly will be the whole two terms designating protons and neutrons for the reason that these particles have been already known to a science for a long time, and are not found in the Qur'an till now. And we have quickly come to opinion, that the nucleus of an atom is that initial "brick" of a universe – the "Earth" ("al-ardu") of the Qur'an. But we have soon understood that not everything is so simple here. Analysing the ayahs 9 and 10 of the surah 41, the discrepancies have arisen, which does not allow us to affirm in our initial assumption.

(9) قُلُ أَتَنَكُمْ لَتَكْفُرُونَ بِالَّذِي خَلَقْ
الأَرْضَ فِي يَوْمَيْنِ وَتَجْعَلُونَ لَهُ أَنْدَادًا
ذَلِكَ رَبُّ الْعَالَمِينَ
وَجَعَلَ فِيهَا رَوَاسِيَ مِنْ فِوْقَهَا ...

(10) Say: "Do you reject Him Who created the Earth in two days, and make others equal to Him? That is the Lord of all the worlds"

(10) He placed on it the firmly embedded above it ..."

41:9–10
At the analysis of the 10-th ayah there have been a question at once. If the nucleus of an atom is the “Earth” (“al-ardu”), what is “the firmly embedded above it” (“rawasiya min fawqiha”) then? It turns out, that according to the scientific data there is nothing on the nucleus of an atom, but from the ayah it is possible to understand and assume that there is something is “the firmly embedded” (“rawasi”) on the nucleus. As according to the scientific information these “the firmly embedded” can not be on the nucleus of an atom, but according to the ayah they are present, it is left to assume that these “the firmly embedded” settle down inside the nucleus, and they are its component.

Thus, our assumption, that the “Earth” in this ayah designates the nucleus of an atom has not proved to be true. The “Earth” had to “move” in the nucleus and become a component of a nucleus alongside with “the firmly embedded”, and as inside the nucleus of atoms there only protons and neutrons it is left to find out which of these nucleons are the “Earth” and which are “the firmly embedded”. It is visible from the ayah, that “the firmly embedded” nucleons were attached to already initially available “Earth”. It means that the “Earth” was initial.

It is known, that the nucleus of an atom of the first chemical element in the Universe hydrogen consists of the only proton. When to a nucleus of hydrogen – to a proton, having spent great energy on overcoming the forces of repulsion, two neutrons and one proton join, the nucleus of an atom of helium, the second chemical element in the Universe is
formed. All the following nucleuses of atoms of the chemical elements are formed due to increase in quantity of protons and neutrons in the nucleus. As we see, the science unequivocally points out on a proton as an initial "inhabitant" of a nucleus, and a neutron as an "adjoined" to it. We needed to draw a conclusion, that *in these ayahs protons under the word “Earth” ("al-ardu") and neutrons under the words “the firmly embedded” (“rawasi”) are ciphered!*

**The proton “Earth”!**

The science established long time ago the first-birth of a proton, its determinant importance in formation of the physical world. It is a basic "brick" of a universe, widespread in enormous quantities in the volume of the Universe:

\[\text{We have spread out the Earth ...} \]

15:19

(47) And We have made the Heaven with hands and We are expanding it

(48) And We have spread out the Earth and how well have We ordered it

51:47–48

The science has established, that right at the beginning of the development of the Universe there were only nucleuses of hydro-
gen—protons. They spread over in all the volume of the expanding Universe and formed stars and planets. And this expansion of the Universe and then the spreading of protons have been proceeding already for more than 10 billion years.

And here is the importance of a proton and its major properties which are told about in other ayahs of the Qur’an:

أَمَنَّ جَعَلَ الْأَرْضَ قَرْارًا... 

Or, Who has made the Earth firm ... 27:61

وَالْأَرْضِ ذَا الْصَّدْعَ 

By the Earth which possesses splitting 86:12

لَخَلْقِ السَّمَاءَاتِ وَالْأَرْضِ أَكْبَرُ مِنْ خَلْقِ النَّاسِ وَلَكِنَّ أَكْثَرَ النَّاسِ لَا يَعْلَمُونَ 

The creation of the Heavens and the Earth is certainly greater than the creation of mankind, but most people do not know 40:57

Proton is so “firm”, strong, stable, and term of its life is so long that the science hasn’t determined it yet. Its such hardness and longevity allow a proton to carry out its main applicability—“possessing splitting” to move in “the first-born field” beyond all bounds long, to form an atom of hydrogen and to be a basis of forming other chemical elements and substances. So it is a reliable basis of a great variety of substance in our Universe.
The difficulties connected with the creation of protons are so great, that the Supreme Allah puts them above the difficulties which were accompanied with the creation of mankind. And the man considers himself the most complex Divine creation.

"The firmly embedded" neutron!

Neutron in the nucleus of an atom is "firmly embedded" because it has no charge and does not react to a positive charge of a proton. According to our hypothesis the stable strong interaction can be between protons and neutrons and between neutrons, but not between protons. That is the neutron as though divides protons shielding their same charges, and acts in a role of basis which protons are linked with.

Knowing, that nucleus interaction, available between neutrons and protons in the nucleus, is more than a hundred times stronger than forces of electric repulsion between protons, we can understand why the Supreme Allah defined neutrons in the nucleus of an atom as "the firmly embedded" ("rawasi"), emphasizing their leading role in achievement of stability of the nucleus.

وَجَعَلَ فِيهَا رَوْاَسِيَ مِنْ فَوْقِهَا ...  

He placed on it the firmly embedded above it ... 41:10

An additional acknowledgement of neutrons' role in a strengthening of stability of the nucleus is the words "above it" in this ayah. According to our hypothesis of a structure of the nucleus, considering the spherical form of nucleons, the maximal stability of the nucleus can be reached only by the even and dense distribution of protons on all the surface of the nucleus. It can be reached only by settling down
neutrons between protons in the nucleus of an atom, being in the strong nucleus interaction, and neutrons are settled down between two protons nearer the centre of the nucleus of an atom. And the fact of excess of the quantity of neutrons in the nucleus above the quantity of protons as far as growing of the atomic weight of the elements is explained as the following. According to our assumption about the compulsory spreading of all the protons on the surface of the nucleus of an atom, with the increasing of the quantity of nucleons in the nucleus and reaching the certain quantity, the nucleus takes a ball-shaped form as though “being blown” and inside this conventional “ball”-nucleus the “empty” space is formed. To make this nucleus stable this “empty” space must be full with the correspondent quantity of neutrons. Inside the nucleus they play the role which is analogical with the role that steel fittings play in ferro-concrete that is the role of powerful, “firmly embedded” framework. In the heavy nucleuses the quantity of neutrons can exceed the quantity of protons in 1,5 times. So, for instance, there 146 neutrons on 92 protons in the nucleus of uranium-238. “Unpaired” 54 neutrons are settled down inside the nucleus, providing its stability, according to our hypothesis.

Thus we came to a conclusion that protons and neutrons in the nucleus of an atom take the strictly certain, the most optimal position for providing stability of the nucleus. The acknowledgement of this fact we can see in the following ayah:

\[
\text{... وَخَلَقَ كُلُّ شَيْءٍ فَقَدْرَهُ تَقْدِيرًا}
\]

... He created all things and ordered them in due proportions

25:2

One more acknowledgement that neutron is “firmly embedded” (“rawasi”) we find in the ayah 19 of the surah 15:
And We have spread out the Earth, and have cast therein the firmly embedded, and produced therein all kinds of things by weight

15:19

This ayah precisely determines the mechanism of formation of nucleuses of atoms. It is known, that the formation of nucleuses of atoms of all chemical elements occurred at the early stage of the appearance of the Universe at the highest temperatures, speeds and pressures. Such huge expenses of energy that for clearness is enough to tell, that all energy of our Solar system will not suffice on formation even one atom of iron. And a word “have cast”, used in relation to a neutron, precisely reflects that huge effort, so, that huge energy was required to a neutron “to be linked” to a proton in strong nucleus interaction and become “firmly embedded” since this moment.

“Lamp” - electron!

The success in definition of a proton and neutron has given us confidence that we will definitely find an electron as well. Glory to Allah, we have found it in the following ayahs:

... وَرَزَّنَا السَّمَاءَ الدُّنْيَا بِمَصَابِيحٍ وَحَفْظًا ...

... and We have adorned the lowest heaven with lamps and for protection ...

41:12
And We have adorned the lowest
heaven with lamps ...

67:5

On our hypothesis of a structure of a matter, the nucleus of an atom at interaction with "the first-born field" forms a "mini-field" around itself - "the lowest heaven" ("alssamaul alddunya") in which electrons-"lamps" rotate on their orbits. To prove it we had to decode the meaning of the word "Heavens" ("alssamawatu") in the Qur'an. How it has turned out, we will show in the following chapter and for now we will try to find out other acknowledgements to our statement, that "lamp" ("misbahun") is an electron.

Let's begin with the name. Naming a certain object as a "lamp", we mean the following properties inherent in this object. First, this object is a real physical object with its physical and technical characteristics (a form, a size, a design, a way of reception of light, service life, etc.). Secondly, it possesses an ability to shine that is to be a light source (an oil lampion, a kerosine lamp, an electric lamp, etc.). Thirdly, the lamp can be in condition when it does not radiate light (it is not on), and in condition when it radiates light (it is on). Fourthly, the lamp can change capacity of light radiated by it.

An electron in an atom possesses all above-named properties. The science has established that electron, an elementary physical particle with the established size, mass, charge, at transition in external orbits of an atom from one level onto another radiates visible for a human eye light, depending on the "degree of disturbance" can radiate light of various capacity, and in the stationary "normal level" condition electron does not radiate.

Now, after the conducted comparative analysis of qualities and properties of a lamp and an electron, the reasons why the
Supreme Allah in a number of ayahs named electrons as “lamps” are evident and clear.

In the surah 41 the transition from the 3-rd person (“... Who created ...”) in ayah 9 at the description of the “Earth” to the 1-st person (“... We have adorned ...”) in ayah 12 at the description of the “lamps” attracts attention. In our opinion, here there is an intentional opposition of the “Earth”-protons to the “lamps”-electrons. Everything is so. The science in the 20-th century established that protons and electrons possess identical, but opposite on a sign charges.

Other proof of that “lamps” (“masabeehu”) in this ayah (41:12) are electrons the analysis of the expression “and for protection”. As we know, protection is exposed on border of a protected object, as though outlining the borders of everything that belongs to an object. According to the representation of the modern science the external electronic cover is a border of an atom. The same expression “for protection” in this ayah characterizes the stability

\[ \text{“Earth” - proton} \]

\[ \text{“Lamp” - electron} \]

**Opposed to each other in the Qur’an**

“Earth” and “lamp”
Atom of helium

Scheme of helium's atom in light of deciphered terminology of "scientific" ayahs of the Qur'an
which negatively charged electrons provide to atom, counterbalancing a positive charge of the nucleus of an atom and making it electrically neutral. It is one more acknowledgement that "lamps" ("masabeehu") in the "the lowest heaven" ("alssamau alddunya") are electrons on the orbits in an atom.

***

THE "EARTH" ("al-ardu") in the ayahs of the Qur'an is one of kinds of matter – a substance (nucleuses of atoms, atoms, molecules, bodies, heavenly bodies, a planet the Earth, stars). In a number of ayahs the "Earth" is the protons, the first and main "bricks" of a universe. Owing to a number of their properties as "firm", stability, longevity, the movement, development and change of physical world of the Universe is provided.

"THE FIRMLY EMBEDDED" ("rawasi") in a number of ayahs of the Qur'an are neutrons. Their important role in the formation of the nucleuses of the chemical elements is proved. We have noted that both even distribution of neutrons inside the nucleus and their optimum distribution between protons as "shields" for the same charges of protons, promote the stability of the nucleus.

"LAMPS" ("masabeehu") in a number of ayahs of the Qur'an are electrons. We have managed to show that many known functions and properties which the Supreme Allah gave to the "lamps" correspond to the functions which electrons carry out in an atom.
THE "HEAVENS" OF THE QUR'AN

"Heaven" + "Earth" = "Heavens"!

First of all, it attracts attention that the Supreme Allah gives to "Heavens" ("alssamawatu") the high status comparable to the value of the "Heaven" (79:27) and the "Earth":

الَّذِي خَلَقَ السَّمَاوَاتِ وَالْأَرْضَ أَكْبَرُ مِنْ خَلْقٍ

The creation of the Heavens and the Earth
is certainly greater than the creation of mankind, but most people do not know
40:57

We have already stated that the "Heaven" is the "first-born field" of the Universe, and the "Earth" is the substance (protons, nucleuses of atoms, atoms, molecules, bodies, planets, stars). What is the "Heavens" then? Analyzing the ayahs of the Qur'an, we have come to a conclusion that the frequent joint, simultaneous use of the words "Heavens" and "Earth" is not casual so far. Before consideration of the ayahs we will acquaint the readers with some statements of our hypothesis of structure of a matter.

According to our hypothesis, the "first-born field" and the substance interact between each other. The substance displaces the field from the volume borrowed by it, and the field by virtue of the property of "elasticity" is exposed to "compression", "thickening". As a result of this unique interaction the area of "thickening", "densification" of raised concentration of the "first-born field" is formed around the substance. In the area of this "thick-
enining”, “densification”, “disturbance” of the field, its “intensity” characteristic if to draw the analogy with the electric, magnetic fields varies. In undisturbed condition “intensity” of the “first-born field” has its constant value, which increases at disturbance of the field. Depending on which substance and which quantity, the substance (an atom, a molecule, a heavenly body or a star) disturbs the field, the level of the “disturbance”, “intensity” of the field and its borders around the substance is defined in each concrete case.

The first level of interaction of the “first-born field” and the substance goes on at a level of the nucleuses of atoms of the chemical elements starting with hydrogen. Distinction of the nucleuses on weight and form influences the configuration and the level of “disturbance” of the field around them. In other words, each nucleus of an atom of the periodic system of Mendeleyev has its own “mini-field” around itself with its own level of “disturbance” in which electrons rotate on their orbits. And the external border of this “mini-field” is the border of an atom.

The second level of the interaction of the “first-born field” and the substance goes on at the level of the atoms of the chemical elements, which interacting between each other, form a great variety of molecules of new substances. “Mini-fields” of these molecules have their levels of “disturbance” and are the result of imposing of “mini-fields” of the atoms including in them.

At these two levels of scale the process of the formation of a great quantity and variety of the “building bricks” and their “mini-fields” which at the following levels of scale will provide a great variety of objects of the physical world – cells, bodies, comets, planets, stars with their own fields, comes to an end. And the dimensions of these fields are in strict dependence (according to our hypothesis) on the quantity and kinds of the substances forming these fields.
The result of our reasoning became the conviction that the “Heavens” (“alssamawatu”) in the Qur‘an are the fields which are formed around the substance.

Let’s address to the following ayahs of the Qur‘an in which it is spoken about the “Heavens”. But before we wish to note that in the opinion of the majority of the Arabian interpreters of the Sacred Qur‘an the Arabian word “seven”, used in the Qur‘an has, along with the numerical meaning, another meaning which is “a lot of”, “a number of”.

فَقَضَاهُنَّ سَبْعَ سَمَّاواَتٍ فِي يَوْمِيْنِ
وَأَوْحَىٰ فِي كُلِّ سَمَّاءٍ أَمْرَهَا وَزَينَاهَا
السَّمَّاءِ الدُّنْيَا بَمَصَائِيحٍ وَحَفْظًا ...

And He determined them [Heaven and Earth] as seven Heavens in two days, and imparted to each heaven its affair, and We have adorned the lowest heaven with lamps and for protection ...

41:12

اللَّهُ الَّذِي خَلَقَ سَبْعَ سَمَّاواَتِ
وَمِنَ الْأَرْضِ مِنْثَنِيْنَ ...

Allah is He Who has created seven Heavens and of the Earth the same number ...

65:12
Molecule of water $\text{H}_2\text{O}$

"Lowest heaven" - field of oxygen's atom

"Lowest heaven" - field of hydrogen's atom

"Heaven" - field of water's molecule

Scheme of formation of the "Heavens" by the example of a water molecule in light of deciphered terminology of "scientific" ayahs of the Qur'an
From the point of view of our hypothesis these ayahs are possibly understood as follows.

Every substance-“Earth” starting with a proton and finishing with a star, has only peculiar to each of them a “disturbed” field—“heaven”. How much substance-“Earth” (“al-arḍu”) is, so many fields-“Heavens” (“alssama wissen tu”) are (65:12)! And for the reason that the fields-“Heavens” can arise only at the interaction of the “first-born field”—“Heaven” and the substance-“Earth” (41:12), and the size of “disturbance” of the fields-“Heavens” depends on the kind, quantity and form of the substance-“Earth”.

And it is clear now to understand the expression the “lowest heaven” (“alssama wissen alddunya”), which in some of tafsirs is the “nearest heaven”. The “lowest heaven”, accordingly to our hypothesis, is a field of the first level of the interaction of the “first-born field” and the substance, that is the field around the nucleus of an atom. As many chemical elements with their isotopes, allotropes, isomers in the periodic system are, as many the “lowest heavens” are. Exactly the fields of the nucleuses of atoms—the “lowest heavens” are “adorned” with the electrons—“lamps” (“masabeehu”) (41:12).

Let’s cite one more ayah, confirming, as it seems to us, that a number of “Heavens” is a number of fields in the Universe:

الَّذِي خَلَقَ سَبْعَ سَمَائَاتٍ طَبَاقًا ...  

He Who has created the seven Heavens in layers ...

67:3

The fields—“Heavens” of atoms are placed in the fields—“Heavens” of molecules, those are in turn placed in the fields—“Heavens” of their combinations, and so on up to cells, bodies, planets and stars. It turns out, that the fields—“Heavens” of a various level are placed on an axis of scale as though one above another - “in layers”.

45
The "Balance" of the "Heaven"

The modern science explains the big variety of properties of atoms, molecules, substances by the structure of electron shell of an atom. At chemical reactions the external electron shells of atoms, but not the nucleuses of atoms, are exposed to change. Therefore it is considered that the arrangement of electrons on the energy sublevels of an atom is the reason of these or those properties of the chemical elements. The same explanations are applied concerning the understanding of the properties of various molecules in which formation the electrons of atoms participate directly.

In our opinion, the existing great variety of substances and their properties cannot be provided by so limited quantity of electrons which are present in the external orbits of an atom, and, besides, electrons are "standard" in their characteristics.

On our hypothesis, a source of the properties of an atom is the properties of the "first-born field" around the nucleus of an atom - a degree of its "disturbance" and the configuration of this "disturbed" field. These two characteristics in turn are derivative of weight, specific density and the form of the nucleus of an atom. In other words, with the change of weight, specific density and form of the nucleus of an atom the quantitative and qualitative characteristics of "disturbance" of the "first-born field" change.

The structure of the "first-born field" around the nucleuses of atoms and the sequence of change of its properties, for greater presentation, can be conditionally compared with the change of characteristics of the sound row of a grand piano, from the first up to the lost octave, and inside each octave with its sharps and flats. As the grand piano possesses its own range of adjustment of the sound row and the "first-born field" of the nucleus possesses its own range of change of "disturbance" and depending on weight, specific density and the form of the nucleus is "adjusted" in appropriate way and forms "mini-fields" of the nucleuses of atoms. Therefore each nucle-
us of an atom of a chemical element has its correspondent inherent form and “disturbance” of the “mini-field”.

At the formation of a molecule the fields of the atoms forming it are imposed, creating the general field of the following level with its characteristics; the electrons, common for a molecule, outline the borders of this field. The new general field of the molecule has already its own degree of “disturbance”, so the new properties. As the range of change (quantization) of the “disturbance” of the “first-born field” is huge, the reason of the enormous quantity and variety of properties of substances becomes clear.

Our hypothesis about the nature of properties of substances, as we think, proves to be true by the ayahs of the Qur’an.

فَقَضَاهُنَّ سَبْعَ سَمَائَاتٍ فِي يَوْمِينِ
وَأُوْحِي فِي كُلِّ سَمَاءٍ أُمَرَهَا وَزَينَهَا
السَّمَاءَ الْدُّنِيَا بِمَصَابِيحٍ وَحَفْظًا ...

And He determined them [Heaven and Earth] as seven Heavens in two days, and imparted to each heaven its affair, and We have adorned the lowest heaven with lamps and for protection ...

41:12

As it has been noted above, at the first two levels of the interaction of the “first-born field” - “Heaven” and the substance - “Earth” “mini-fields” - “Heavens” at atoms and molecules are formed. The Supreme Allah clearly specifies it to us in this ayah: “And He determined of them seven Heavens in two days” (41:12). And the expression “and imparted to each heaven its affair” (41:12) we understand like this. Allah allotted each of a set of the formed fields - “Heavens” with the
Nature of substances’ properties

(41:12) “... and [He] imparted to each heaven its affair ...

Scheme of formation of the water molecule with its “heavens” properties from oxygen and hydrogen atoms with their “lowest heavens” properties
The Nuclear Potential of the Qur’an

properties inherent only in it. And only after each “mini-field”-“the lowest heaven” of the nucleuses had received its properties (“its affairs”), it had corresponding quantity of electrons-“lamps”, and an atom was formed. Exactly in this ayah, in our opinion, the Supreme Allah specifies the reason of an enormous variety of properties of substances in the Universe!

Our assumption that the unique property of the “first-born field”-“Heaven” to be “adjusted” on the change of the characteristics of the nucleuses of atoms and molecules is the original cause of an existing variety of properties of bodies, proves to be true, as we think, in the following ayah of the Qur’an as well:

\[
\text{وَالسَّمَاءِ رَفَعَهَا وَوَضَعَ الْمِيزَانَ}
\]

And He has raised the Heaven and established the balance

55:7

In our opinion, the sequence of a mention of the words “Heaven” (“alssama\textsuperscript{u}”) and “balance” (“almeezanu”) is not by chance. It reflects the sequence and indissolubility between the formation of the “Heaven”-“first-born field” and the properties “measured” to it, and in the same time for each concrete case of the interaction with the substance-“Earth”. And each value of the “weight” of the substance has its corresponding field with the characteristics inherent only in it. And only through characteristics of these fields-“Heavens” we learn about the properties or the features of this or that substance.

Let’s consider an example. In science there is no conventional scientific theory about the structure of glass till now, there are only hypotheses among which the central place in taken by D. Mendeleev, A. Lebedev, Zakhariasen, Tamman. But none of the hypotheses give the precise answer to the nature of a transparency of glass. On our hypothesis the reason of a transparency of glass is that all
Balance of "HEAVEN"

"And He has raised the Heaven and established the balance" (55:7)

Scheme of interaction of the "Heaven" and the "Earth" with formation of the "Heavens"
structural units - oxides (for example, SiO₂, B₂O₃, P₂O₅) formed glass have intermolecular fields-“Heavens” which properties allow to pass the electromagnetic waves of an optical range, that is visible light. The acknowledgement of it is that even the most transparent glass without impurity with the increase of its thickness nevertheless gradually becomes opaque. The unique reason of this can be only the nucleuses of atoms of molecules of the fusion of the glass which represent themselves as an impassable barrier for the light rays.

**Four forces from the one “Heaven”**

Four kinds of interaction are known to science: gravitational (shown at the level of satellites, planets, stars, galaxies), electromagnetic (at the level of atoms, molecules, a man), strong (at the level of quarks and nucleons of the atom nucleuses) and weak (at the level of particles less than nucleons). Each of these interactions plays very important role in the Universe, and first of all, at its scale level.

For the latest decades many scientists have been working on the creation of the theory which would unite these four kinds of interaction. Nobody could manage it till now. **On our hypothesis all these four kinds of interaction are the display of the properties of the “first-born field”-“Heaven” (“alssama’u”) on different sites of an axis of scale** which have been cited above. Our confidence is based on that the Qur’an tells about the only unique “Heaven” and what is meant under “Heavens” we have already found it. If there were four different, independent, above named kinds of interaction, it would be noted in the Qur’an, or the word “Heaven” could be varied, or there would be words-synonyms of “Heaven”, but there is nothing like this in the Qur’an.

Let’s consider one of the displays of the properties of the “first-born field”-“Heaven” – a gravitational interaction, and show how depending on the weight of a heavenly body its form changes, and which role the “first-born field”-“Heaven” and its “balance” plays in this process.
Gravitational interaction of “Heaven” and “Earth”

Mimas, 390 km

Moon, 3476 km

Earth, 12756 km

Meteorite, 1 m

Fobos, 23 km

Amalthea, 260 km

Change of a form of space bodies depending on their masses
An interesting phenomenon is observed in the space. In the range of dimension of the space bodies from 300 up to 400 kilometers their transition from the chaotic form to the spherical is observed. The observations of satellites have shown that all bodies from meteorites (1m) right up to Jupiter's satellite Amalthea (260 km) have a confused asymmetric shape. But starting by Saturn's satellite Mimas (390 km) and finishing by the huge stars, heavenly bodies obtain a strictly spherical shape.

On our hypothesis, this phenomenon is explained in the following way. At the size of space bodies about 300-400 km the degree of a "disturbance" of the "first-born field"-"Heaven" reaches such value at which the amount of gravitational interaction between "first-born field" and space body-"Earth" begin to exceed the amount of electromagnetic interaction between fields-"Heavens" of the space motes which these bodies were formed from. That is, having reached the certain weight, the space body began to "disturb" the "first-born field" around itself in such degree that the force of the return pressure of the "first-born field" on the space body began to influence its process of formation. And change of the form began to go on due to the distribution and placing a new substance on the heavenly body in such a way that it led to smoothing of its surface and taking a spherical form as the steadiest to the external pressure form of a body. The further examples of how the Supreme Allah "imparted to each heaven its affair" (41:12), having established the "balance" (55:7) can be given, but it seems to be enough.

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THE "HEAVENS" ("alssamawatu") in a number of ayahs of the Qur'an are the "disturbed" fields which are formed around the "Earth"-substance at its interaction with the "Heaven"-"first-born field" of the Universe. The "Heavens" are available for all substances beginning with elementary...
particles and chemical elements and finishing with stars and galaxies. Owing to the enormous quantitative and qualitative variety of substances, there is a corresponding variety of sets of the “Heavens”-“fields”. Emphasizing the importance of the chemical elements and their “Heavens” in business of the formation of our world, the Supreme Allah specially designated each of these “Heavens” in the special manner, having named it “THE LOWEST HEAVEN” ("alssamau alldunya"). We have come to a conclusion that the physical and chemical properties of the substances are explained by the properties of the “Heavens” of atoms and molecules, and the properties of the “Heaven” are strictly established and individual for each case of the interaction with the “Earth” because the “BALANCE” (“almeezanu”) – a measuring instrument of the “disturbance” of the “first-born field”-“Heaven” is established. On the basis of analysis of the “scientific” ayahs of the Qur’an we have come to conclusion about common nature of all four kinds of interaction, which are the display of the properties of the “first-born field”-“Heaven” on different sites of an axis of scale.
THE BEGINNING AND THE END OF THE UNIVERSE

The cooling “Heaven”

In the XX century the science established that the Universe expands. On the basis of this discovery the Big Bang theory was created. According to this theory, in the period of 10-20 billions years ago the Universe came into existence. The matter of the Universe at the initial stage of its creation was uniform and arose from a point of “zero volume”; it had enormous density and temperature. As a consequence of the “bang”, the matter of the Universe started to expand swiftly in all directions. This process was accompanied by the powerful emissions of radiations. As a result, much bigger and colder
Universe which can be observed now was formed. This is the accumulations of scattering galaxies and huge emptinesses of an outer space between and inside them. The western scientists discovered the uniformly distributed radiation in all the Universe. It is considered now to be the best direct proof, that the Universe was "hot" in the remote past. Under assumption of the scientists this radiation is an echo of the Big Bang. The temperature of this radiation on modern data is 2.73K or -270.42°C, that is a little more than the temperature of an absolute cold -273.15°C.

The modern interpreters of the Qur'an, comparing the ayahs about the creation of the Universe with the discoveries of the western scientists, have found in the Qur'an the corroborations of the expansion of the Universe (51:47), the Big Bang theory (6:101) and that the Universe was initially uniform (21:30) homogeneous "gaseous" mass (41:11), arisen from nothing (6:101). Thus they mark, that the Supreme Allah in the Qur'an speaks about six periods in the process of the creation of the Universe, and that some of the periods described in the Qur'an, concerning the creation of the "Heavens" and the "Earth", carried simultaneous, parallel in time character.

Our hypothesis has the difference of principle from the officially accepted theory. According to our hypothesis, there are two kinds of a matter in the Universe – the substance and the "first-born field", and there is no any space emptiness. At the certain stage of the expansion and development of the Universe from the initial uniform matter representing the field form with outlimited values of energy, temperature, density, by way of "condensation" the other kind of a matter – the substance was "isolated". Since that moment in the Universe there were two "characters" of its development – the substance and the "first-born field" with the residual values of energy, density, temperature. And all the further development of the Universe went through their interaction. In our opinion, the found space microwave radiation is a direct corroboration of the presence of the "first-born
field” - “Heaven” in the space of the Universe, and the temperature of radiation is today’s temperature of the “first-born field”, reflecting the level of its energy. As we think, our hypothesis finds the acknowledgement in the ayahs of the Sacred Qur’an.

The beginning ...

In the ayahs 9–12 of the surah 41 under the sign and symbolical name “Explained in Detail” the Supreme Allah describes the process of the creation of the Universe by Him from the beginning. In the previous chapters we have applied to these ayahs separately. Now, having armed with the new understanding of the words “Heaven”, “Earth”, “Heavens”, we can bring these ayahs together to show a complete picture of the process of the creation of the Universe. But before we will refer to the translations of the Arabian interpreters of the Sacred Qur’an of the words “days” and “then”. The word “days” has also other meanings – “very long periods”, “centuries”, “epochs”. And the word “then” has also meanings “except for that”, “moreover”, “besides”, that points out the parallelism, the simultaneity of the events describing in some of the ayahs of the Qur’an. It will help us with the correct understanding of the analyzing ayahs.

(9) قُلُواَ إِنَّكُمْ لَتَكْفُرُونَ بَالَّذِي خَلَقَ الأَرْضَ فِي يَوْمَيْنِ وَتَجْعَلُونَ لِهِ أُنْدَادًا ذَلِكَ رَبُّ الْعَالَمِينَ

(9) Say: “Do you reject Him Who created the Earth in two days, and make others equal to Him? That is the Lord of all the worlds
(10) He placed on it the firmly embedded above it and blessed it, and measured therein its sustenance in four days sharp, for all those who ask

(11) Then he turned to Heavens and they were smoke and said to them and to Earth: “Come willingly or unwillingly” They both said: “We come willingly”

(12) فِقَضَاهُنَّ سَبْعَ سَمَاءَاتِ فِي يَوْمِيْنِ
وابْحَى فِي كُلِّ سَمَاءٍ أَمْرُهَا وَزَيْنَاهَا
السَّمَاءُ الْدُنيَا بِمَصَابِيحٍ وَحَفْظًا
ذَلِكَ تَقْدِيرُ الْعَزِيزِ الْعَلِيمِ
(12) And He determined of them seven Heavens in two days, and imparted to each heaven its affair, and We have adorned the lowest heaven with lamps and for protection. That is the ordinance of the Mighty, the Knower”
41:9–12

Analyzing the ayah 11, we were involuntary convinced of the correctness of the strict requirements to the translations of the Qur’an. The translation of this ayah, made by I. J. Krachkovsky is not able to be understood and deciphered. But as we have been assured of the correctness of our hypothesis, we have decided to address for the consultations to the experts on the Arabian language and the Qur’an. After the work on this ayah it began to look like this (the changes are underlined):

Then he turned to Heaven and it was smoke and said to it and to Earth: “Come willingly or unwillingly”. They both said: “We come willingly”
41:11

In the previous chapter we have shown that the “Heavens” in the Qur’an are the fields formed at the interaction of the “Heaven” and the “Earth”. Therefore the formation of the “Heavens” could not be before the formation of the “Earth” at all. And this contradiction hasn’t made us agree with Krachkovsky’s translation. And in view of this new understanding of the differences of principle between the “Heaven” and the “Heavens”, the sense of this ayah in the specified translation becomes logically built in the general description of the process of the creation of the Universe.

Analyzing these ayahs we have come to a conclusion that they are logically interconnected with each other. But for the correct un-
derstanding of the sequence of the events, it was necessary to use a cross method at work on them. That made a general picture of the creation of the Universe described in the Qur'an.

Below there are the ayahs in which, alongside with the above-stated ayahs (41:9–12), in our opinion, the creation of the Universe is described.

In the beginning from nothing (2:117) the primary matter – the “Heaven”, which was “smoke” (41:11), was created.

He is Originator of the Heavens and Earth. When he decides on something, He just says to it: “Be!”, and it is

2:117

Then he turned to Heavens and they were smoke and said to them and to Earth: “Come willingly or unwillingly” They both said: “We come willingly”

41:11

To this “Heaven” the form of “vault” (79:28) – the spherical, ball-shaped form – was given.
(27) Are you more difficult to create or the Heaven? He built it
(28) raised its vault and established it
79:27–28

This “Heaven”-“smoke”, possessing a huge density and temperature, began to expand (51:47). And this process of expansion of a primary matter proceeded until that certain moment of this process of expansion, which was accompanied by dropping of density and temperature, when from the “Heaven”-“smoke” the independent kind of a matter – the substance-“Earth” – isolated (21:30; 51:48).

(47) And We have made the Heaven with hands and We are expanding it
(48) And We have spread out the Earth and how well have We ordered it
51:47–48
Have not those who disbelieve seen that the Heavens and the Earth were joined together, and We parted them ... 21:30

This process can be compared with the settling-out of crystals of salt from the fat salt solution at its cooling. As a result of the “settling-out” of the substance—“Earth” there was the repeated reduction of density and temperature of the “Heaven”. It was already been “clear” (13:2) “Heaven”, which we have named the “first-born field”.

اللهُ الَّذِي رَفَعَ السَّمَاوَاتِ بِغَيْرِ عَمَدٍ تُرَوْنَهَا...

Allah is He Who raised the Heavens without any pillars you can see ... 13:2

So two independent, being in a constant interaction kinds of matter – the field—“Heaven” and the substance—“Earth” (41:11) appeared in the Universe.

نُمَّ اسْتَوِى إِلَى السَّمَاوَاتِ وَهِيَ دُخَانٌ فَقَالَ لَهَا وَلِلْأَرْضِ أَتْبَعًا طَوْعًا أَوْ كَرِهَهَا قَالَتَا أَتْبَعْنَا طَائِعُينَ

Then he turned to Heavens and they were smoke and said to them and to Earth: “Come willingly or unwillingly” They both said: “We come willingly” 41:11
During division the “first-born field” and the substance received special properties owing to which there was a further expansion and development of the Universe (86:11–12). And at this expansion of the “first-born field”-“Heaven” did not lose and does not lose the integrity (50:6) and proves inertial movement of the substance-“Earth” in itself (51:7; 86:11–12).

(11) By the Heaven which possesses return
(12) By the Earth which possesses splitting
86:11–12

Do they not look at the Heaven above them? How We have made it and adorned it, and there are no splits in it?

50:6

By the Heaven which possesses the ways
51:7
During the first two periods of the expansion of the Universe protons (41:9; 15:19), neutrons (41:10; 15:19), nucleuses of atoms (41:10; 15:19) were created.

(9) قُلُّ أَنْتُمُ لَتَكْفُرُونَ بِالَّذِي خَلَقَ الْأَرْضَ فِي يَوْمَيْنَ وَتَجْعَلُونَ لَهُ أَنْدَادًا ذَلِكَ رَبُّ الْعَالَمِينَ

(9) Say: “Do you reject Him Who created the Earth in two days, and make others equal to Him? That is the Lord of all the worlds

(10) وَجَعَلَ فِيهَا رِوَاسِيّ مِنْ فَوْقَهَا وَبَارَكَ فِيهَا وَقَدَّرَ فِيهَا أَقْوَاتَهَا فِي أَرْبَعَةٍ أَيَامٍ سَوَاءً لِلسَّلَّامِينَ

(10) He placed on it the firmly embedded above it and blessed it, and measured therein its sustenance in four days sharp, for all those who ask

41:9–10

وَالْأَرْضَ مَدَّنَاهَا وَأَلْقَيْنَا فِيهَا رِوَاسِيّ وَأَنْبَتْنَا فِيهَا مِنْ كُلِّ شَيْءٍ مَّوْزُونٍ
Owing to the unique interaction of the "Heaven" and the "Earth" (86:11–12) around the nucleuses of atoms the "mini-fields" "the lowest heavens" (41:12) were formed. The process of creation of atoms of the chemical elements was completed by the connection of electrons to the nucleuses (41:12). It should be noted, that for the creation of the atoms of the chemical elements the huge amounts of energy were necessary, therefore their creation was accompanied by the explosion of the hugest stars. And the more nuclear weight of an element is, the more energy was necessary for its formation. At the interaction of the atoms (50:38) the compounds of them with their own fields-"Heavens" (41:12) started to be formed. All created substance (atoms, molecules, compounds, bodies, planets, stars) differed from each other on "weight" (15:19), and each of them possessed the fields-"Heavens" (41:12) which characterized the unique properties of each of these substances (41:12).

(11) By the Heaven which possesses return
(12) By the Earth which possesses splitting
86:11–12
And He determined of them seven Heavens in two days, and imparted to each heaven its affair, and We have adorned the lowest heaven with lamps and for protection. That is the ordinance of the Mighty, the Knower.

41:12

We created the Heavens and the Earth and all that is between them ...

50:38

The necessary condition of the origin of the variety of the properties of the substances was the presence of the unique mechanism at the "Heaven" – its "balance" (55:7) – a measuring instrument of the "disturbance" of the "first-born field" - "Heaven".

And He has raised the Heaven and established the balance

55:7
This “balance”, if it is possible to say, “weight” the substance-“Earth”, and according to the “weight” of this substance (15:19) formed the corresponding field-“heaven” around it with the properties inherent in it.

وَالْأَرْض مَدَّنَاهَا وَأَلْقَيْنَا فِيهَا رَوَاسِيَ 
وَأَنْبَثَنَا فِيهَا مِنْ كُلِّ شَيْءٍ مَّوْزُونٍ

And We have spread out the Earth, and have cast therein the firmly embedded, and produced therein all kinds of things by weight

15:19

Owing to the properties of the “Heaven”, its “balance” and its property to form the various fields-“Heavens” at the interaction with the substance-“Earth” four forces of interaction known to a science as weak, strong, electromagnetic and gravitational are formed and act in the Universe on the axis of scale from the elementary particles up to the galaxies.

The completion of these two periods, which would name “a space stage”, was the formation of our Solar system with the Sun (16:12) – the source of light and warmth, the Earth with its satellite the Moon (16:12), a set of chemical elements and their compounds necessary for the future life on the Earth.

وَسَخَّرَ لَكُمُ اللَّيْلَ وَالْكَيْدَاءَ وَالشَّمْسَ وَالْقَمْرَ ...

He has subjected to you the night and the day, the Sun and the Moon ...

16:12
During the following four periods (41:10) there was a consecutive creation of all necessary conditions for the beginnings of life on the planet the Earth. These are the formation of the rotating iron kernel of the Earth with its protective magnetic field which does not allow the space radiation to destroy all alive on the Earth, the formation of the seas and oceans, the rivers and lakes, the atmosphere with its 21%-s’ content of oxygen acceptable for a life of a climate, soil, the formation of the flora and fauna, etc. This all is the “sustenance” (41:10) which the Supreme Allah provided the vital function on the planet the Earth.

(10)

وَجَعَلَ فِيهَا رَوَاسِيَ مِنْ فَوْقُهَا

وَبَارَكَ فِيهَا وَقَدَّرَ فِيهَا أَقْوَانَهَا فِي

أَرْبَعَةٌ أَيَّامٌ سَوَاءً لِلسَّائِلِينَ

He placed on it the firmly embedded above it and blessed it, and measured therein its sustenance in four days sharp, for all those who ask 41:10

... and the end

There are various hypothesis of what will occur to the Universe further. According to some of them the Universe will reach the peak of expansion and will start to be compressed back up to the initial condition – a point. Other assumes that it will extend infinitely. There are also other versions.

On sew to our hypothesis the expansion of the Universe will proceed until that moment when the “temperature” of the “first-born
field” will fall up to such low value in aspiration to absolute zero, that the “first-born field”, not having enough “energy”, cannot serve as “a power skeleton” of the Universe any more and will start to collapse, losing the integrity. After this the process of destruction of the substance, starting with stars and finishing with elementary particles, will begin. And, we believe, it finds its acknowledgement in the Qur’an.

In the ayahs, containing the information on destruction of a universe, the fact that in the Qur’an the big accent that before this destruction the “Heaven” will “rend”, “open” is done, attracts attention. And this process of “ rending” is described in the following ayahs:

وَيَوْمَ تَشْقِقُ السَّمَاءُ ...  
And that Day the Heaven shall be rent asunder ...  
25:25

فَإِذَا أُنْشَقَتِ السَّمَاءُ ...  
And when the Heaven is rent ...  
55:37

وَأُنْشَقَتِ السَّمَاءُ ...  
And the Heaven is rent ...  
69:16

إِذَا السَّمَاءُ أُنْشَقَتُ ...  
When the Heaven is rent  
84:1
The Heaven shall be rent ...
73:18

When the Heaven is rent
82:1

Let's consider the following ayahs:

إذا السَّمَاءُ انْفَطَرَتُ

When the Heaven is rent asunder

(1)

وَإِذَا الأَرْضُ مُدَّتُ

And when the Earth is stretched out

(3)

وَأَلْقَتْ مَا فِيهَا وَتَخَلَّتُ

and cast out what is within it and emptied

(4)

(1) When the Heaven is rent asunder
(3) And when the Earth is stretched out
(4) and cast out what is within it and emptied
84:1,3-4

The process of destruction of such majestic integral design, as the “Heaven”-“first-born field”, will mark the beginning of the Doomsday. And as a result, the “Heaven” will lose the initial properties, what is also told in the Qur’an (21:104; 52:9; 55:37; 69:16; 70:8; 78:19; 81:11). The fundamental interaction of both kinds of a matter – the field (“Heaven”) and the substance (“Earth”) will be broken. Owing to destruction of the field, in all
volume of the Universe the substance—“Earth” will start to collapse (84:3–4).

In spite of the fact that some scientists try to time the end of a life of the Universe, only the Supreme Allah knows when it will occur:

وَعَنَّاهُ عَلَمُ السَّاعَةَ وَإِلَيْهِ تُرْجَعُونَ

... with Him is the knowledge of the Hour
and to Him you will be returned

43:85
THE CONCLUSION

We hope, it is possible to consider as the achievement of this work the successful experience of a check of scientific character of a hypothesis through the analysis of conformity of its statements to the ayahs of the Sacred Qur'an. And, for the first time in all history of methodology of search of scientific signs in the Qur'an by researchers, the Qur'an not only confirmed the statements of a hypothesis, but also forced to specify those its statements that mismatched the semantic meaning of the phenomena, described in the ayahs. At the same time the statements of a hypothesis helped to specify and understand correctly its translations and interpretations. That is, the Qur'an really showed the way to a science!

What other proofs of a divine origin of the Qur'an are still necessary to atheists and skeptics, if in the Sacred Scripture of Muslims granted in 7-th century the information on such outstanding achievements of physics as a discovery of an electron, proton and neutron made only in the 20-th century was written down?

We consider that as it was possible to find in the Sacred Qur'an these fundamental “bricks” of a universe, the answer to the main, exciting lucid minds of mankind for the thousands years question on the nature and the structure of the world surrounding us, will be found in it. We have given our variant on this answer in this work.

We express a hope, that the opened layer of the new concepts in the Sacred Qur'an will serve a starting point for the mutual work of the experts of the Qur'an and the scientists-researchers in a search of unraveling of the mysteries of a universe.

Our work at the decipherment of “scientific” ayahs of the Sacred Qur'an is continuing. And we have already got new results. At the end of the scheduled research it will be published a sepa-
rate book, devoted to discovery of new “scientific signs” in the Qur'an in the sphere of a structure of a matter and the Universe.

We thank the Supreme Allah for His mercy and knowledge which He granted us during our work. And if this work is useful to people, give food for thought and open hearts to a divine Word, we will consider that we have managed to make something useful on a way of service to the Islam.
INTELLECTUAL PROPERTY:

THE REFORM HAS RIPENED
Everybody knows that inventors and engineers are those, who we thank for all welfare our civilization possesses and can't live without. In the modern world the problems the inventors have to run into look like simple, though they are too difficult to be got over. We did go through them. It pushed us to think over and clear up the reasons of the problems and find the solution.

**Taking out a patent**

To take out a patent for any invention the author has to submit the national invention application inside his own country and if it is confirmed he gets the national patent within 2-3 following years. Along with it he gets protection from unauthorized use for the period of 20 years, if he only pays protective duty annually. To protect his invention from the use outside his country the author must submit the international application within one year from the day he submitted the national one. Then, before 30 months have passed the author has to start, so called, national patent phases in the countries he is interested in. Of course, it includes such expenditures as, for instance, attorneys, taxes and duties. All in all, it can come to $10 000 an invention.

Thus, to get patent protection for one invention in at least five developed countries (where the unauthorized use is most likely) the author has to spend much more than US $50 000. It is obvious that most inventors, not only in Russia but in most countries of the world, don't possess that big money and the inventions of intellectuals in these countries have no protection outside. So, after 30 months have passed anyone can use them free. Actually, this is why we gave up submitting applications for inventions.

Sometimes a developed country invites an inventor and gives him good conditions to realize his ideas. It mainly happens to
particular speciality workers because it is more profitable to have an inventor than to steal his inventions as sometimes it's impossible to make out a thing without the author's help. In the cases when an invention can be used without the author's participation it will be stolen and used with no consequences. In both former and latter cases the invention works for prosperity and image of another state. The inventor himself can move to some developed country but it would take him rather big sums of money and as we said earlier the number of those who could manage this is quite miserable. Even if he is able to go abroad whether he will get a job in his particular speciality is an open question.

There are a lot of countries in the world which don't keep innovation policy or it doesn't work efficiently. The inventors living in these countries have no chances to bring their ideas into life. It would be fair to say that the inventor's intellectual potential totally depends on the internal innovation policy of his country.

Haven't we come to conclusion that the inventor is to blame for he was born in a wrong place? By the way according to the existing international regulations the whole world may efficiently use his ideas with no following punishment. Trying to contribute into a science or some other sphere of life the inventor suffers twice: when his government doesn't take care of him, his life and his working conditions and when someone abroad steals his ideas and the inventor has no possibility to protect his rights.

Till this ill international system of protection of intellectual property exists, most engineers and scientists won't be able to realize their abilities and won't be paid adequately. Speaking the truth, it is a latent form of robbery: developed countries rob inventors from other countries and the latter ones themselves. It is clear that this strategy is initiated by the biggest world corporations. How can the western world speculate about human rights?
Colonial innovation

From the first sight this problem seems to be too specific and may concern to very particular circles of inventors and scientists. But when you think of why this patent system exists in the world you begin to understand that this problem can be sold on the level of global policy.

It's a fact that the prestige of a country depends on its economic power and, consequently, on its possibility to create deserved conditions for its citizens. This explains the authority of the USA, Japan, Western Europe countries. What makes the economic power of these countries? It appears that the biggest half of GNP growth in these countries is based on innovation technologies, i.e. they develop and reach the economic power thanks to the unbroken process of perfection in service and high technologies. It means that high technologies secure stable growth in economy and thus, the innovation policy like this helps to reduce social tension in the country. This is very wise and proper policy and it could seem there can't be any questions – every country itself choose its innovation policy and takes responsibility for possible mistakes. But there is just one snag! What feeds the unbroken process of perfection in service and high technologies in these countries? The answer is obvious: discoveries, inventions, know-how. And there are only three ways for them to appear: the use of the internal intellectual potential, brain import and industrial espionage or, in another word, stealing.

In fact, the leading powers of the world demonstrated their superiority over other countries in science and technics in the 19th and 20th centuries and they keep doing it. But having won the leader titles in high technologies these countries don't want to lose the positions even for all goods on earth. They use various economical and political tools to preserve the situation as it is. And one of the most efficient tools is the existing international patent system with its unnecessary complicacy and gigantic duties.
This system is favourable for such countries as the USA, Japan and Western Europe with their richest corporations which can pay the duties. Taking into account the role of the USA in the world scientific and technical progress and its image of world leader, its thirst for lasting monopoly of leadership, great resource of pressure on the world policy in any sphere you can easily guess that this system is first of all favourable for the USA. And they, sure, will be doing their best to preserve status quo in this matter. The existing system is also very beneficial for the legion of judicial firms which specialize on protection of copyrights getting fees for their services.

Actually, such patent system can be called colonial because both inventors from other countries and their countries themselves are deliberately put into unfavourable conditions. This system infringes upon human rights and acts against development of the whole human civilization because the necessity of the maximal support of scientific and technical progress is beyond all questions.

Stagnation policy

What are the results of such situation in the sphere of high technologies?

Not rich, the intellectual potential of the developing countries is used “on the legal basis” by the developed ones and turns into goods and services which are sold all over the world. Of course, the real author’s name is never mentioned anywhere. Excessive patent expenditures and too high income rates result in high prices of licensed products – all this is exported and becomes a heavy burden on shoulders of the majority of consumers. This is the reason for piracy to spread all over the world.

Due to such world turnover of intellectual property the economic power of the mentioned countries grows and their images of absolute leaders of scientific and technical progress
strengthen. Such image plays a very important role in the modern world because it allows from high tribune to accuse opposite countries for backwardness and to state that the developed ones reached prosperity thanks to their political and economical systems which bring progress to the humanity. As for the USA, it dares to interfere in the internal affairs of other countries sometimes using its mighty military machine.

This policy keeps the most of the rest countries in stagnation or slows their economical development, they cannot change their status of backward states, they are out of international respectability, and they deeper and deeper go down into economical and political dependence on the developed countries. It leads to social conflicts and growing economical inequality between rich and poor countries.

As we see this "sucking brains out" policy which protects interests of the rich countries is one of the main reasons of backwardness of the developing countries and hasn’t been properly appraised by the world community. A single word hasn’t been said about colonial character of this policy. More over, turning everything inside out some countries blame the developing ones for stagnation speculating about the "conflict between civilizations".

**The trump of islamophobia**

Judging by the modern political situation, the Islamic world countries have been appointed to be the main object for attacks. They are accused of backwardness, they are said to live in the Middle Age, to be unable to create and to produce anything new. For the sake of justice it is necessary to say, that the majority of islamic states gives occasions for such accusations. They are first of all countries conducting policy which has nothing common with the real islamic democracy. But when somebody tries to hide
the true reasons and states that the reason of this backwardness is Islam as a religion, which itself calls to give priority attention to knowledge, development of sciences and engineering, as no other religions do, it is considered by real muslims as barefaced provocation and disrespect to Islam and the Islamic civilization. You see accusation Islam of backwardness is one of the main trumps of constantly inflated islamophobia. But taking into account the fact that practically all scientific and technical achievements were adopted by Europe from Islamic countries as long ago as in the 10 – 15th centuries, such accusation looks simply ridiculous and absurd.

External pressure and stagnancy of internal regimes of many countries of the Islamic world, which do not hurry to reform, derivate protests and result in obvious opposition, sometimes armed, inside the countries and abroad.

But absence of modern scientific and technical base, underdeveloped innovation policy of the islamic countries and the rest "backward" world at all do not speak that in these countries there can not be competent people whose inventions would be in demand all over the world. Therefore it is simply necessary to create initial equal conditions for the inventors of the world, to break off dependence of the inventor on the level of development of science, engineering and internal innovation policy of the country he belongs to. And the first step in this direction should be radical reforming of the existing international legislation in the sphere of protection of intellectual property. And such task the UNO can only manage.

The reform has ripened

We reckon the UNO must develop such system of patent rules, which would stimulate and protect invention activity of the citizen of any country of the world and guarantee free and
convenient access to the invention for all those interested in its realization. For this purpose the UNO has to reform the existing or to found a new international organization on protection of the intellectual property. The new overnational and international system must meet the following basic requirements:

- safeguard the process of patenting of the inventions for the payment, really acceptable to every country;
- the patent, received by the inventor, in his country should automatically get the status of the international patent and become valid worldwide without any additional payments (!);
- presence of a preferential scale for stimulation of outstanding inventors;
- creation of common uniform computer base of patents with access from any country, which will give the information on the inventions, their authors and owners, about those who use the invention etc., various sort of statistics, for example, on countries, inventors and inventions;
- protection of economic interests of the inventor all over the world;
- deprivation of the legal and physical persons of an opportunity of unfair use and non-use of the redeemed patents on the inventions;
- assistance in realization of the patent all over the world and reception for such service a certain interest from the sale of the patent;
- presence of an effective scale of encouragements for the officials of this international organization for the job on realization of the patents, and also for detection and prevention of infringements of the rights of the intellectual property.

The money got from these kinds of activity will satisfy needs of the organization and will allow to make the process of patenting free-of-charge in future all over the world.
The second component of the program on stimulating the invention activity all over the world would be the creation of national and regional centres – technical parks at branches of the new international organization. The target international financial help and the help with technically competent staff at the first stage will allow national “brains” to realize themselves in their countries.

This reform will make national borders unable to impede the protection of the intellectual property. This will ensure incredible rise and optimization of invention activity and its maximal demand in the global economy.

What will it bring in practice? Any inventor, even from a most backward country, could safely declare his invention, not being afraid of stealing and receive appropriate payments for his inventions. One of the main points here is that it wouldn’t be necessary for him to leave his country. Not only license payments, but investments will also go to the country of his residing and work for its economy. Step by step such reforms will strengthen prestige of science and engineering in such countries and will give impulse to the development of an efficient innovation policy. The tendency of reduction of the break between advanced and developing countries will appear. It will have a positive effect on the interstate relations and will bring in much into insurance of the stability in the world.

If the system like this had been working at least since the middle of the 20th century, “the outflow of brains” would not have reached such a large scale and would not have resulted in the existing break in economy, science and engineering between countries. Therefore if the economically advanced countries really want to help the rest of the world and not just to accuse it of backwardness, they should initiate such reform. But all of us understand well that there are almost no hopes for it.

We think that Russia being a country of huge intellectual resources and losing more than other states do, because of the
existing international patent system, should act as an initiator of such reform and become the protection centre of interests of the less developed countries in this important matter. Such position of our country can also become attractive for the countries - members of the Organization of Islam Conference, which are most often accused of backwardness. The joint statement of Russia and the Organization of the Islam Conference in the UNO with offers on reforming the existing international system of protection of the intellectual property will not only increase chances of success, but will also ensure the further strategically necessary rapprochement between our country and countries of the Islamic world.
THE INTERVIEW TO THE
RUSSIAN ISLAMIC INDEPENDENT
INFORMATION INTERNET-CHANNEL
ISLAM.RU

Г. Халидов: Стать изобретателем мне было предназначено Аллахом.

Круг интересов Г.Ю. Халидова этим не ограничивается: у него имеются активные работы по экономике и организации производственных процессов и естественно науки, а после все работы по формированию теорий Анадыра. Пожалуй, заслуживает в этой связи особого уважения. Сам я не могу не вспомнить себя, но свои работы хочу сделать своей обязанностью. Как: Ю.Ю. Насколько ошибок и ошибок имеет священника, что и Гамед Халидов имеет свои обязанности в священном Коране.

Имеет значение большинство муслиман, истинно, несущихся за образовательные цели и суровые для кардинальных отклонений и научно-технических прогресса. Самое важное

18th of November, 2004
H. KHALIDOVO: IT WAS PREDETERMINED BY ALLAH FOR ME TO BECOME AN INVENTOR

Today we would like to introduce the unique scientist-inventor from Daghestan Hamid Yusupovich Khalidov to readers of Islam.Ru channel. Hamid Khalidov has achieved an outstanding success, having made for two-three years above 100(!) inventions in many fields of science and technology. Many of these inventions are unique. On the basis of these inventions more than 10 projects have been developed, which you can become acquainted with at the web-site http://www.dagtech.ru/.

That does not limit H.Y. Khalidov’s range of interests: he has large-scale works on economics and organisation of industrial production and agriculture, and his latest work is devoted to the theory of gravitation. An attempt to investigate this the most complicated scientific problem in itself inspires respect, but this case provokes a special interest. As Jaque-Yves Cousteau found in the Holy Qur’an confirmation of the results of his twenty-year work on exploring waters of the World Ocean, the same way Hamid Khalidov has found confirmation of his theory in Ayats of the Holy Qur’an.

Hamid Yusupovich is a godfearing Muslim, sincerely worrying about the present-day position of the Islamic community and especially about the cardinal lag in scientific and technological progress. As it seems to us, Hamid Khalidov himself can be attributed to those Muslim scientists, who make an important contribution to the development of modern science and technology, cutting the ground from under the feet of those, who blame Islam for the backwardness and negative influence on the development of humane civilization.

With pleasure we are introducing scientist’s answers to our readers and hope it is not his last interview on our channel.
— Dear Hamid Yusupovich, how did you become an inventor? How does a new idea appear? What is necessary to become an inventor? In your opinion, what is the role of inventing in the development of the world civilization?

— The way to become an inventor is both individual for every person and has some common features. To my mind, in the basis of inventory skills lies ability to think logically, associative thinking, knowledge of subject, range of interests and a desire to solve a given problem. Very strong desire!

In life routine we simply forget that everything that we use every day and can't manage without, this can be mobile phone, television set, Internet, computer, automobile, airplane etc, is the result of people's inventing, creative work. Just imagine how our civilization would look like without above-mentioned and many other inventions of the mankind.

After graduating from the radio-engineering faculty of the Daghestan State University with speciality of radio equipment engineer-technologist, I was appointed telecommunications engineer at the Internal Affairs Ministry of the Daghestan Republic. After some time of working I noticed that road collisions in night and evening time practically were not revealed. And this affected me as a professional. I started examining this problem. I found the solution and offered a new system for pursuit of the cars escaping from places of incident. Since then all my life wherever I worked I have been inventing and improving something.

Properly I started inventing 5-6 years ago. While being on business trip in Moscow at some meeting I became acquainted with Arab journalists and was introduced to them as an inventor. Half-jokingly, half-seriously they suggested me to solve the problem of supplying fresh water to the states of the Arabian Peninsula. When I returned home I started examination of this problem. In this way the technology of supplying water to the countries, where fresh water is in short
supply, was developed. The technology is based on transportation of bulky ice blocks by the means of ice-carrier ships. As a result this brought to the creation of a new class of ships - “transport trimarans” and receiving of patents for 54 inventions in shipbuilding industry.

Most of my patents are the result of my wish to solve specific important for the present day problems. The means of rescue of airplane and helicopter passengers were invented after an airplane crash that caused death of well-known journalist Artem Borovik. The postal system “Postphone” was invented after watching TV news showing the Great Britain’s Prime-Minister Tony Blair making a report in the Parliament about the reform in the postal industry of the Great Britain. The means of emergency evacuation of people from high-rise buildings was invented after the events of 11th September 2001 in New York. And in such a way every invention has its own prehistory.

Apparently, I was fated to become an inventor. I have realized this quite recently. You’ll see it. Not all Moslems know that number 19 is the number that has to do with the Qur’an. Many interesting things are connected with this number in the Holy Qur’an.

“The formula “Bismillahi rrahmani rrahim”, which opens all the Surahs of the Qur’an (except the ninth surah), in Arabic writing contains 19 letters. The total number of surahs in the Qur’an amounts to 114, the word “Allah” is mentioned 2698 times, His name “Ar-Rahman” - 57 times and “Ar-Rahim” - 114 times. General for all these numbers is that all of those are divisible by 19. First ayats of the Holy Qur’an sent down to the Prophet (let Allah bless Him and welcome) were the first five ayats of the surah “Al-Alak” (“The clot”). They contain only 19 words. The total number of ayats in this surah also amounts to 19. This surah is the nineteenth if to count from the end. The last heaven-sent surah of the Qur’an is the surah “Al-Nasr” (“The help”). It contains 19 words, its first ayat consists of 19 letters. The Qur’an contains a great many of other examples connected with the number 19” (“The divine miracles”, publisher “IHLAS”, Makhachkala, 2002, page 27).
And so, according to the Gregorian calendar date of my birth is 19th March 1949 (19.03.1949). One day I multiplied the day of birth (19) by the month of birth (3). I got the number 57. I was very surprised when I found out that from 99 glorious names of Allah, the 57th name of Allah is Al-Hamid. This name I was given at birth. And two years ago my son found in Internet the program for converting the Gregorian calendar into the Hijra calendar. By converting my date of birth into the Hijra calendar, we got 19.05.1368. 19 multiplied by 5 makes the number 95, which corresponds with the name of Allah - Al-Badi’, which is translated as “Inventing”, “Creator”. Besides, the year of birth 1368 turned out to be divisible by 19. I have got a passport in which the sum of number 38 is divisible by 19, have received taxpayer’s identification number and met the same sum of numbers.

For me these are the signs showing the correctness of the chosen way and in spite of any difficulties and temporary misfortunes, misunderstanding and absence of support, often hypocrisy and mockery, I have understood that I must follow this way and work for the public good. Thanks to the Most High Allah for all the knowledge that He has given me and for the signs that strengthened my spirit!

- *For the several last years you have developed over 10 projects on the basis of more than 100 your inventions. The majority of these projects, as we know, has a global character and for all this serves the humane purposes. What is the current situation with your projects? What difficulties have you faced during their implementation?*

- For the last 5 years we have acquainted the Russian and international community with our largest project for providing people with drinking water called “Alive Water”. This project was reported at the First World Engineers’ Convention in Hanover, demonstrated at the World Exhibition EXPO-2000 in Germany, participated in numerous international and Russian conferences and forums. The project was submitted to the UNESCO’s headquarters in Paris, to
the Government of the Russian Federation and to the Russian Academy of Sciences. Dozens of articles were published in Russian and foreign newspapers and magazines, the web-site has been launched in the Internet. Several broadcasts of the central television channels were devoted to this project. Thus, we have done everything that depended on us. Now everything depends on political leaders and large business.

Global character of the project, its scale, failures of the previous projects for transportation of ice explain the cautious approach to its implementation. The most difficult and vague technical problem in this project is new ships, transport trimarans - ice-carrier ships (ledovozes). There have not been before and today there are no such ships in the world. The ships consisting of three full value hulls with engines and rudders in each hull have never floated on the seas and oceans. Such design of a new class of ships we named “transport trimarans” 5 years ago.

The second project “Transport trimarans - transtrims” came up from an idea of ice-carrier ships. At the First Engineers’ Convention in Hanover in 2000 these ships were called “the ships of the third millennium”. The ships are urged to ensure high-speed and reliable delivery of people and cargoes through seas and oceans that will allow the ships to remain a competitive type of transport.

In spite of support from the Russian press and television, positive conclusions of state commissions of experts and institutes, active will of leading scientific and industrial organizations (Academician A.N. Kryilov Institute, Design Office “Rubin”, Institute for Arctic and Antarctic Region etc.) to participate in the project “Alive Water”, the Ministries of transport, economics, science and industry of the Russian Federation persistently sabotage our offers. The Ministry of Communications of the Russian Federation has taken the same narrow-minded stand regarding our project for creation of a new type of postal service (project “Postfon”). And this list of claims to the Russian and republican ministries can be continued.
Unlike our country, abroad they didn't confine with the applause at the First World Engineers' Convention (Hanover, Germany, June 19-21, 2000) in address of a new ship - transport trimaran, but have started intensive researches in this direction. In such a way, for example, already in 2002 one of the world's leading shipbuilding companies "Kvaerner Masa Marine" (by the way, in 2000 we sent to this company data concerning transport trimarans) by request of the USA developed the project called "Super-high-speed transport trimaran" and started testing of the working model of a transport trimaran (source: http://www.masamarine.com/innovation.html). Even the term "transport trimaran" has already been introduced into practice in international shipbuilding community. And it is far from being all. A program for building military, passenger and cargo transport trimarans has been created. But, it is not mentioned anywhere about the Russian authors of the inventions.

The same story occurred to our another project "APARC" intendend for rescue of passengers and cargoes. In 2000 we obtained patents for the devices and means of rescue of air passengers in case of emergency, and two years later we found many our ideas in a review of the American development works in the same subject. The only difference was that our offers were published in the journal "Airplane" (#5, 2001), and the American analogues of the same ideas - in the journal "Lomonosov" (#6, 2002), which reprinted an article from the American journal "New Scientist".

According to the available data, in autumn 2003 the Boeing company held a conference with the participation of its subdivisions all over the world with the subject "Ensuring of guaranteed rescue of air passengers in crashes", where our developed system "APARC" was discussed. Besides, in 2001 information about the system "APARC" also was sent to the Boeing's representative office in Moscow. But, as in the case with transport trimarans, we haven't got any answer from them.

Although it offends that foreign companies were first, who started implementation of our projects, I calm myself with the thought
that inventions we made, however, are requested and sooner or later will work for Russia.

This is what the newspaper “Moskovskiy komsomolets in Dagestan” (30.06.2004) wrote about our another project:

“By the way, speaking of the Design Office “Rubin”. They efficiently comprehended and implemented Khalidov’s idea of raising the atomic submarine “Kursk”. Those, who remember the raising of “Kursk” and are familiar with Khalidov’s invention, will see principal similarity of the technology offered by Khalidov with the technology that has been used to raise the submarine. But nobody even thanked Khalidov, not to mention a reward. But still it makes glad that at least one invention of our fellow countryman was applied”.

I’d like to add that the means of raising the “Kursk” was published in two weeks after the accident, and was submitted to the Design Office “Rubin” a week after the publication.

If the Russian State kept records of its lost profits and made to answer in full measure profile ministers and other responsible officials (even after their resignation) for the caused damage, then there wouldn’t be such irresponsibility, theft and corruptibility in the country.

— How do you estimate the role and importance of innovation policy in the Russian government’s economic course? What are the perspectives of performing the task of doubling gross domestic product and creating optimal conditions for developing innovative technologies, which has been set by the President of Russia?

— I think that the Russian government does not have innovation policy at all. First of all, the officials heading the economic sector are to blame for this. For example, due to the unprecedented high oil prices the government holds on the credit side more than 100 billion dollars in foreign banks at the interest rate of 2% annually (where this money works for the welfare of these countries), and this is not just incompetent policy, but antinational one.
The government explains such policy with fear of inflation. The inflation exists today anyway, and its main reason is the deficit of goods and services. It is clear for everyone, except for the government of the Russian Federation, that for the country it is much more promising to invest these large funds in the governmental and private scaled scientific, technical, industrial and innovative projects. In the first place it is necessary to ensure the economic growth by increasing output volume of competitive production for the internal and external markets. This will fill the internal market with goods and services, entail decrease in inflation rate, create new working places, wages, taxes etc. The money circulation can be regulated in compliance and concurrently with this productivity growth. There are a lot of other instruments for regulating inflation. For the practical lack of so long-promised foreign investments nothing remains for the state but to develop its own economy by itself, unless disgraceful for the great country strong dependence on jumping prices for oil and gas, economic stagnation and hardly controlled inflation suit us. The continuation of such economic policy will lead to the country's irrevocable economic degradation and to its despairing lag with all the ensuing consequences for the Russian state.

And what is the most surprising and incomprehensible that the government has been following such policy after February 24th 2004. At that time at the joint session of the Security Council and the State Council of the Russian Federation in discussing the state of affairs in the innovation sphere, the President Vladimir Putin has called the unclaimed science “a real threat to the national safety of Russia, a threat to finding ourselves on the roadside of the world technological development, with status of a feed donor for the developed countries”. At the same session Vladimir Putin in his speech has concentrated on the necessity of “the innovation breakthrough” for the up-to-date Russia as a real component of the country’s rapid modernization, as a way of raising the people’s living standards and the competitiveness of the economy.
And what are the principal terms of carrying out this innovation breakthrough? Obviously, it is necessary to create such goods and services, which will be in great demand all over the world, the goods and services that will anticipate time and cardinally differ in quality from possible foreign analogues, i.e. be the most competitive. And if there is an opportunity to produce the demanded goods and the services not having analogues in the world, then their realization will be provided on maximal scale and with maximal profits. The world experience shows that the world’s leading countries, where more than half of gross domestic product growth is provided by innovation technologies, are developing just owing to the continuous process of improvement of services and technologies.

Our government has probably its own special way of doubling the gross domestic product, known and followed by nobody so far. For me it is clear that this government will not implement the President’s instruction once again and will let him down before society.

I completely agree with those who demand to change the economic and social sectors of the Russian government, and to call up honest and incorruptible, effective and competent patriots, without dependence on their political views, in a new government. Only such people in these hard times for Russia are able to save the country and to help it to come out to new boundaries.

- Abroad they discuss intellectual property rights and their protection, rules of patenting, patent taxes. What problems have you come across in the process of patenting your inventions? How do you estimate the invention patenting system existing today?

- The problems arising today in the society concerning the intellectual property protection, even looking simple, are rather complicated and involved.

At the world level there are such relations, when rich countries (it is clear that by initiative of large corporations and companies) requ
uire from a foreign patent holder thousands of dollars for granting its national patent. According to the existing international rules, an invention can be used gratis in other countries, if a foreign inventor has not received a national patent for his invention in these countries. A lot of examples have been mentioned in press, when our Russian inventions and technologies have been implemented abroad and then sold in Russia under trademarks of foreign companies. And nobody could raise a claim against them.

And where can an inventor from Russia and even from an absolute majority of countries in the world get dozens of thousands of dollars to protect his invention in these countries? Isn’t this a latent form of robbery of the inventors from poor countries, and robbery of these very countries?

At the same time the rich countries follow the path of improving the conditions of inventing for their citizens. But in Russia, against the background of unprecedented decline in living standards, governments systematically have been raising the fee for granting a patent and have brought it from zero up to two and a half thousand rubles that in fact ruined inventing in Russia. Such “state policy” has resulted for the last 10 years in reduction of applications for inventions from 200,000 in 1990 to 16,000 in 2000. Maintaining this policy will finally deprive our country of scientific and technical base and opportunity of innovation breakthrough.

The world community shouldn’t forget that these are inventors and engineers, who stand at the beginning of all benefits of the present-day civilization, today nobody can do without them and the community should think about creating optimal conditions for their creative work.

But the present-day international legislation in the sphere of intellectual property protection and the attitude of rich countries not just infringe upon rights of an inventor as a person, but moreover, from the viewpoint of historically indisputable necessity of maximal support of scientific and technical progress, are directed against the development of the human civilization.
As I think, United Nations should work out such rules of patenting that will stimulate and protect inventive work of a citizen of any country in the world and guarantee free access to an invention of everybody, who is interested in its implementation. For this purpose the UN should establish and finance an international organization for intellectual property protection (in civil sphere) with its branches in countries and regions that will ensure free of charge patenting process, promote realization of a patent, protect inventor's interests all over the world and get a certain percent from sale of a patent for its work. Moreover, a patent obtained in one country should automatically gain a status of international patent and become valid all over the world without any payments. Also it is necessary to deprive juridical and physical persons of an opportunity of unfair using or not using the redeemed patents for inventions. And for the officials of this international organization there should be worked out an efficient scale of rewards for the work on realization of patents, licenses, and for disclosure and prevention of violation of intellectual property rights. Earnings from these forms of officials' activity will fully satisfy the organization's requirements and will allow making the patenting process free of charge in all countries, and will raise the officials' authority and prestige.

Such reform will help us to ensure the unprecedented development and optimization of the innovative work, its maximal necessity in the world economy and deletion of national borders in protection of intellectual property rights. It would be great if our country came out as an initiator of these proposals, but, frankly speaking, there is almost no hope for this.

I think that it would be reasonable to interest the Organization of Islamic Conference in the implementation of this proposal, which could be an initiator of this reform on the international scene. It would be a good thing to hold a broad discussion on conformity of this and other proposals in the sphere intellectual property protection with regulations of shariat and Islamic ethics. Prerequisites for
this purpose have been created already. The world is developing and integrating headily. And this case the common-to-all-mankind priorities and values must stand higher than private, corporate interests and interests of individual states.

- What, in your opinion, is the reason of scientific and technical lag of the majority of Islamic states? What is it necessary to undertake for the “breakthrough”?

- There are a lot of reasons here. In the first place, it is departure of most Muslim governors and elite (after times of righteous caliphs) from moral principles and way of living of Prophet Mohammed (let Allah bless Him and welcome). Besides, among the reasons there are internal religious contentions, which caused a split among the Moslems and formed various trends in Islam, and also civil wars, disturbances, revolutions etc. External factors were caused by numerous crusades, destruction of the main Islamic centers of science and culture - Baghdad and Cordoba, colonizer wars, wars between the Moslem states. In general, the 20th century may be also considered as lost for the progress of the most of Islamic states (concerning available potential opportunities).

First of all, I think it is necessary to concentrate on solving the problem of creating an economic union of Islamic states, which everybody has been speaking about for a long time. Multi-confessional Europe has set a good example to the whole world at this point. So the “moment of truth is coming” for leaders of Islamic states. The way they have to go is long and thorny, but recognition and gratitude of descendants will be their reward.

Spiritual unification of the Moslems is the second necessary and not less important prerequisite to successful development of the Moslem community. I share opinion of those, who consider that since it has turned out that various directions have been formed in Islam by deliberate or unconscious will of our ancestors, then it is necessary to determine the
common platform for all the Moslems. History has shown that mistakes and wrong beliefs of our ancestors cost their descendants so dear.

It seems to me that the necessity of beginning the process (intended for many years) of creating a religious center recognized by all trends in Islam has matured a long time ago. The main directions of its activity (along with the others) could be search and strengthening of the common platform for spiritual unification and conciliation of the Moslems, historical analysis of mistakes made by the Moslem community, those losses and damage that the community have been suffering, determination of the ways of development of the Moslem community under existing conditions.

It appears that one of the immediate and most important results of the activity of the center should become the elaboration of modern communication etiquette for the Moslem communes representing various trends of Islam. The religious and interethnic intolerance, dissension, oppressions, rudeness in communication etc. within the Moslem community must be condemned in the most categorical way. Realization of these tasks is impossible without the presence at this center of an advanced network of departments and branches in each Islamic state and in the countries with the Moslem communes. Certainly, the center needs strong support and sufficient financing from leaders of the Islamic states.

But all this unifying work in spiritual sphere should be conducted simultaneously with the maximal support of science and engineering development. Authority of a state in the up-to-date world is based on the level of its scientific and technical development, economic power and on possibility to ensure the worthy living conditions for its citizens. I am sure that the time is not far off, when Islamic states, relying on their own moral values and making use of all positive world experience of economic development, will manage to achieve prosperity for their citizens. All of us understand that it is a necessary (though not an only) prerequisite to the rise of the Islamic civilization authority in opinion of the rest of the world.
They may begin with creating a common for the state-members of the economic union scientific-educational program for the training and growth of specialists, establishing Islamic venture funds, financing advanced scientific and technical projects and technologies, instituting prestigious prizes and awards. All that can be done since there is enough money. But while this money is working in western banks for the development of western countries, I am not sure that these banks and countries will be glad to part from such money.

Science, scientists and education are mentioned in the Holy Qur'an more than 700 times in a different context. These mentions define that science is the only way for the faithful people, since ignorance is a companion of delusion and deviation from the righteous way. There are widely known statements of Prophet Mohammed (let Allah bless Him and welcome), emphasizing the importance of acquiring knowledge. “Anyone, who has left at request of knowledge, follows the way of Allah until he comes back”, “Learn science and learn it seriously, with dignity and in silence”, “Go even to China to obtain knowledge”. If to recall that China at that time was famous, first of all, for its scientific and technical development, it becomes clear what a vital importance Prophet Mohammed (let Allah bless Him and welcome) attached to the development of science. As you see, the formula of the “breakthrough” has been known since those distant times.

- What are you working on at the moment? What discoveries and new ideas does the spirit of enlightenment prepare?

- Twenty five years ago, when at the first time I read about UFO, I was amazed by their silent flight, abrupt changing of moving direction, instantaneous acceleration and braking. Having thought and coming to an opinion that these devices probably were not a falsification, but real objects, I asked myself the question: “What is a principle of their movement?” and have come to the conclusion that these devices use force of gravitation. A hypothesis of nature of gravitation,
completely contradicting the generally accepted opinion, has arisen on this basis. Since I was not educated as a physicist and there was no sense to argue with the official science, I decided to settle down and keep my theory till the better days. Only after twenty years, having seen at a book fare in Moscow how many Russian and foreign authors were writing about the nature of gravitation, I decided to return to my half-forgotten theory.

Having revived my knowledge in gravitation and having incidentally become familiar with views of present-day scientists on the development of the universe, I have found out that my point of view on the nature of gravitation differed from the modern hypotheses. I foresee far from being warm welcome, since along with a great quantity of “alternative” authors I don’t agree with the explanation of gravitation nature as Newton or Einstein described it.

Allow me to make a slight digression and express my view on the existing state of affairs in this field of the world science. The world physicists’ community long ago has turned into an all-sufficient system with the established hierarchy. Having plenty of advantages, this system has large imperfections. Snobbery and intellectual arrogance make this community practically unable to perceive fresh ideas originated not from the midst of them. For example, it was spent vast sums of money for searching mythical gravity waves and gravitons for the last fifty years in order to acknowledge the views of official physics on gravitation. Is this really a sufficient cause to estimate more self-critically the approaches to solving riddle of a gravitation nature? So, I think the official physics should occasionally arrange “open days” in order to exchange views, opinions and ideas in this or that topic.

By the way, I’d like to remind that Newton several times changed his views on the presence or absence of “ether” in the outer space. On Newton’s assertion that for the transfer of gravitation force is needed a medium (“ether”), his opponents objected that if there was such the medium, then even at its minimal density, the Earth for billions of years of its movement would has stopped. Being unable to answer
this question, Newton gave up the idea of “ether” and became a follower of idea of the vacuum in the cosmic space.

In order to explain the nature of gravitation force Einstein had to bring in the science use the concept of “curvature of space”. To tell the truth, up to this moment the word “space” always meant an abstract geometric volume, to which the scientist attached quite material properties. An amazing curve of thought: a non-material object (vacuum) obtains material property (curvature). But mathematicians have given perfect mathematical description, not worrying about physical nature of phenomena. Such an approach didn’t suit and doesn’t suit now many scientists, although for the objectivity it is necessary to admit that Einstein’s theory has raised the physics of those times to a new height and has opened new horizons in the understanding of the Universe structure. A key to the solution of these contradictions could be the understanding of nature of “ether” and explanation of reasons why the “ether” doesn’t impede the movement of celestial bodies in the Universe.

Let me familiarize the readers with some conclusions that I publish at the first time. And it is not by accident why I have chosen the readers of the Islamic Internet-channel Islam.ru for this purpose.

According to my hypothesis, the whole interstellar and interplanetary space of the Universe is filled with an original field, or rather with something that remained from it, when after the Big Explosion, at the certain stage of its expansion and cooling the elementary particles - substance “have fallen in sediment”. This process conditionally can be compared with the phenomenon of sedimentation during the cooling of saturated saline solution.

This field is homogeneous all over the Universe, and owing to its homogeneity it has neither breaches nor vacuum. The structure, properties and characteristics of this original field, created by the Most High Allah, are unique and only indirectly become apparent through the whole spectrum of physical and chemical phenomena.

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The one of its properties, showed in interaction with the substance, I would probably associate with such well-known physical properties as elasticity, intensity. Einstein attributed this physical property of the original field to the unfilled geometric space and called it "curvature of space". In my point of view, the term "disturbance of original field" would be more suitable. I'll try to explain it.

The force of gravitation is the result of interaction (interference) of two types of matter - original field and substance. For better understanding let's imagine that some volume of cosmic space is filled with one type of matter - the original field, and doesn't contain another type of matter - the substance. Such field is homogeneous throughout its volume, since this volume contains nothing except the field itself, while the condition of this field is characterised as being stable, not disturbed. Now let's imagine that another type of matter - the substance, for example, a celestial body is brought in this volume of cosmic space. This body displaces from its volume a certain part of the original field, i.e. breaks the initial, quiescent, stable condition of the original field, disturbs it and distorts its force lines. But, since the original field is "elastic", though with a certain force it tends to return into the initial, undisturbed condition. The amount of this force depends on the relation between volumes, which the substance and the field occupy in a unit of space volume. The greater mass of the substance is imported, the more disturbed is the field and more distorted are the force lines of the original field, and more counteracts it the substance in its tendency to return into the initial undisturbed condition. It counteracts more near the substance (where the original field is more disturbed) and abates when moving away from it (where the original field is less disturbed). Everything that is on the Earth is pressed by this force to the surface and gains weight, but we call this gravitation.

Thus, force of gravitation is the force, by which the disturbed original field counteracts the substance, which caused this disturbance.

And I was shocked when after our usual discussion of these questions my son Ullubiya showed me the Ayats of the Holy Qur'an, test-
ifying, as we are convinced, about the presence of material substance (medium) in the Universe, in which celestial bodies are floating. Maybe, we are not right in details, since we assume the great responsibility when interpreting the stated below Ayats of the Holy Qur'an, but we are sincere in our search for the truth, and let Allah forgive us!

It is generally acknowledged that Ayats of the Holy Qur'an have deep meaning. The Ayats are universal, they were actual 1400 years ago and they are vital nowadays. They were clear for nomads in distant past, and today their deep meaning is opened for us as a confirmation of modern scientific discoveries and inventions. That is why for my son and me, as we unconditionally admit the Sacred nature of the Qur'an, it is the sign that our theory is confirmed with Ayats of the Qur'an.

And it is He Who has created the night and the day and the Sun and the Moon – all of them floating through space.

21:33

It is not permitted to the Sun to catch up the Moon, nor can the night outstrip the day: each floats along in orbit.

36:40

We took notice of the verb “to float”. In the Arabic language the verb “sabaha” (“yasbahuna in text of two Ayats) means inertial movement and has various meanings. One of them is “to float”. Just in this meaning the verb was translated by Russian translators Kratchkovskiy, Osmanov, Shumovskiy, Porokhova.

Let's ask ourselves the question: “Why was exactly the verb “to float” used regarding the movement of celestial bodies in the Holy Qur'an, but not the verb “to fly”, for example”? We'll try to gain an understanding of it, and we ask you to be merciful to us.
At those ancient times contemporaries of the Prophet (peace and blessing be with him) knew only two types of movement without support on the ground, which in some kind they could compare with the movement of celestial bodies. These are flying of birds in the sky and floating of boats, ships and fish in water. The movement by land shouldn’t be taken into account, since practically it takes place with the support on the ground. At the first sight, since people during their lifetime see birds and celestial bodies moving in the sky, it should be more understandable for them to use the verb “to fly” when describing the motion of the Moon and the Sun, but the Most High uses the verb “to float”.

Since there can’t be any casual words in the Holy Qur’an, then using one verb in preference to another can be explained just with the difference in sense and interpreting of these verbs, apprehended by the people lived at that time.

The verb “to float” at that remote time, as well as nowadays, means the movement of objects in water. For example, the movement of a ship or fish in water. In comparison with the verb “to fly”, the verb “to float” then and now means for people the movement more ordered, stable and predictable. The movement takes place in water, in a much denser environment than air, in which birds can tumble, sharply change direction and rate of movement. As far as 1400 years ago people understood this difference in the characteristics of the movement in water and in air, since it didn’t contradict their observations, life experience and perception of the visual environment. They were able to perceive what the Most High Allah wanted to deliver to them using the verb “to float”, that is the stability and reliability of the world order established by Him.

Maurice Bucaille in his book “Bible, Qur’an and science” (publisher “Ansar Foundation”, Moscow, 2001, page 225) comprehensibly writes about another reason for using the verb “habaha” in these Ayats, which opened in the past century. The science have determined that the movement of the Moon, the Sun and other celestial bodies in
the cosmic space has inertial character, but exactly the verb “sabaha” meaning this kind of movement, describes in the Holy Qur’an the movement of the Moon and the Sun.

And now about the most interesting and the main thing for my son and me. Our theory of the original field allows us absolutely in another way to look at the sense of these Ayats of the Holy Qur’an and at the reasons of using the verb “sabaha” in them. The theory finds a direct confirmation of our conclusions. Since according to the Ayats, the Moon and the Sun “are floating” in the sky, then there is an environment, in which they “are floating” and on which they rest upon. In other words the celestial bodies “are floating” not in vacuum, but in the space filled with a material substance, what conforms to our theory of the original field. And this means that the original field, created by the Most High Allah for the “floating” of celestial bodies, must have the unique characteristics, which provide inertial movement for celestial bodies.

So, 1400 years later the verb “sabaha” permits to give a new look at secrets of the universe. To hide a key to the understanding of the structure of the Universe in just one word of the Holy Qur’an can be done only by the Most High Allah, and we only have to worship His Higher Intention.

We hope that we have found confirmation of our work also in other Ayats of the Holy Qur’an.

He created the heavens without any pillars that you can see...

31:10

Do they not look at the Heaven above them? How We have made it and adorned it, and there are no splits in it?

50:6
For me there is no need to look for better confirmation of the original field theory. Filling the whole geometric volume of the Universe, the original field is solid throughout its volume, serves as an invisible powered framework ("without any pillars that you can see"). It is homogeneous, since, by assuming the reverse, we would observe not the magnificent order typical for the Universe, but the Universal chaos. If the field had voids, then celestial bodies would change their speed when passing through them, and this would cause deorbit of these celestial bodies. But we can watch an amazing stability of their movement. That is why "there are no flaws in it".

But the official physics won't understand and explain the meaning and sense of these Ayats, since it denies that there is an environment in the cosmic space, which makes possible "floating" within it and which can serve as "pillar" for celestial bodies during their "floating" in the cosmic space. Obviously, it will take a long time before the official physics is going to make progress in this field of knowledge.

As for me, I have a strong doubt that the physics at all will ever succeed in the direct exploring of the nature of the original field. In the Holy Qur'an it is said: "He created the heavens without any pillars that you can see..." (31:10). There are no casual words in the Holy Qur'an, and the sense of each word can not change in the course of time, especially directly contrariwise. Then it is logical to assume that if in time of sending down the Holy Qur'an one couldn't see these supports (the original field) by his eyes, and he didn't have any observation and exploration equipment, then he also won't be able to see these "pillars" nowadays and in future, even being equipped with instruments. If it is said "without any pillars that you can see", then it is not possible to observe directly or explore these "pillars" using instruments. As scientists' calculations show, for penetrating in such depths of the substance structure, such energy consumption will be needed that in the foreseeable future this seems to be impossible. But
I think that it is a ban for all the time.

And because the original field doesn’t have material prehistory, and hence, its structure and characteristics are absolutely original and are of a kind the Most High Allah made them to be when creating the Universe out of nothing.

He is Originator of the Heavens and Earth. When he decides on something, He just says to it: “Be!”, and it is.

3:47

And from the created original field the rest of the world has arisen.

It was a pleasure for me to present some aspects of my theory of the original field for the judgement of the Islam.ru readers. Once more I ask to forgive my son and me for the courage, with which we started searching for the confirmation of our theory in the Holy Qur’an. We are looking forward for friendly discussion of disputable and incomprehensible places in our work.

– Do you have a dream?

– Yes, to perform Hajj and bring the first ship with ice for pilgrims to the Saudi Arabia.

To tell the truth, I have one more dream - the height. But this height I’d like to take on the board of my own UFO.

From the authors, 25th of June, 2005

P. S. In May, 2005 in the Internet we have found information about construction in USA by the above-mentioned ship-building company “Kvaerner Masa Marine” (KMM) the Multi-Mission Transport Trimaran (see fig.) under the name “High Speed Ro-Pax Trimaran for Commercial or Military Use”.

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Multi-Mission Transport Trimaran

The High Speed Ro-Pax Trimaran is 150m long and is capable of speeds up to 45 knots. It will be constructed from aluminum to create a light weight hull with a large deadweight capacity of up to 3500 tonnes. This enables the vessel to deliver a 1200 tonne cargo and 350 to 1000 passengers over 2,000 nautical miles at an average speed of over 40 knots.

The vessel is propelled by twin gas turbines driving waterjets in the center hull and 2 high speed diesels driving a single waterjet in each side hull. This versatile propulsion package is efficient at both high and moderate speeds.


P. P. S. On 6th of June, 2005 the Internet-channel Islam.ru inform that in Bahrain with approval of Chamber of Deputies it was decided to create organ main task of which is working-out of common platform for rapprochement of Muslim scientists, which present different trends of Islamic thought, and also creating the conditions for integration of intellectual men’s efforts for the benefit of development of the Muslim society.
The scheme of salvaging of the submarine "Kursk", which was delivered by H. Khalidov to CCB «Rubin» (Saint-Petersburg) in September, 2000. The scheme was published in newspaper "Novoye Delo" (Daghestan, Russia) in №34, 25th of August, 2000.
GLOBAL PROJECTS – FOR THE SERVICE OF MANKIND
The world around us is rapidly developing and integrating. The civilization has solved or is close to solving the most important common to all mankind problems. But development of the civilization has generated a great number of problems. Urgency of solving these problems has reached a critical point and has become obvious to the whole world community. In our projects, worked out in 1999-2001, we submit for your consideration the possible ways of solving some of these problems. We hope that it will be interesting for you to get acquainted with them. These are the following problems: providing mankind with fresh water, ensuring safety of passengers and freight when transporting by air and by sea, rescue of people from high-rise buildings, express and confidential mail service, universalization of keyboard functions for electronic devices.

As Muslims, we feel special content by presenting the project of supplying fresh water and cooled air to pilgrims performing Hajj.

It is necessary to note that the projects have successfully undergone scientific, technical and ecological examinations by experts’ commissions, were demonstrated at various international conferences and exhibitions, have received the world’s recognition. These projects are based on the latest inventions and are covered by patents.

We have a strong belief that the time has come for their practical realization. In this situation big statesmen and businessmen with world-scale thinking, capable of foreseeing the ways of development of science and technology and of all humane civilization, must say their word. Undoubtedly, the world has such leaders, and we are appealing to them to determine ways and modes of implementing the represented projects for the good of mankind.
Hamid and Ullubiya Khalidov have received patents on 101 inventions in the following fields of science and engineering: shipbuilding, aircraft construction, information technologies, extraction, transportation and utilization of ice, rescue of air passengers and freight in air and on water, evacuation of people from high buildings etc.

The names and numbers of patents of some inventions are listed below.

## INVENTIONS

<table>
<thead>
<tr>
<th>Shipbuilding - 54 inventions</th>
<th>Patent</th>
</tr>
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<tbody>
<tr>
<td>Vessel - trimaran</td>
<td>No2156714</td>
</tr>
<tr>
<td>Transport trimaran - ledovoz (ice-carrier ship)</td>
<td>No2145562</td>
</tr>
<tr>
<td>Mode of loading and unloading of ice blocks directly from water into ledovoz</td>
<td>No2144883</td>
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<td>Mode of transportation of ice blocks by ledovozes</td>
<td>No2145561</td>
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<tr>
<td>Floating system - barcon</td>
<td>No2149122</td>
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<tr>
<td>Transport trimarans - transtrims</td>
<td>No2233226</td>
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<tr>
<td>Modes of loading and unloading on transport trimaran</td>
<td>No2163210</td>
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<td>Mode of maneuvering and braking of transport trimaran</td>
<td>No2227104</td>
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<tr>
<td>Transport trimaran on hydrofoils</td>
<td>No2177423</td>
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<td>Transport trimaran on adjustable inter-hull hydrofoils</td>
<td>No2177424</td>
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<tr>
<td>Mode of obtaining and regulating lifting force by using hydrofoils of transport trimaran</td>
<td>No2177427</td>
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<tr>
<td>Ice-breaker trimaran</td>
<td>No2171196</td>
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<tr>
<td>River transtrims and transtrims “river-sea”</td>
<td>No2237592</td>
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<tr>
<td>Trimaran-aircraft-carrier “Tsunami”</td>
<td>No2201378</td>
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<tr>
<td>Very maneuvering high-speed submarine “Piranha”</td>
<td>No2202492</td>
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<tr>
<td>Mode of salvaging of sunk submarine by transport trimaran</td>
<td>No2203830</td>
</tr>
<tr>
<td>Device for rescue of the crew of a submarine</td>
<td>No2203832</td>
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# Global projects - for the service of mankind

## Extraction and utilization of ice - 6 inventions

<table>
<thead>
<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Mode of extracting bulky ice blocks from glacier and iceberg massifs</td>
<td>N2148758</td>
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<tr>
<td>Ice-cutters for vertical sinking</td>
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<tr>
<td>Ice-cutter for horizontal sinking</td>
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<tr>
<td>Facility and mode of obtaining fresh water and cooled air from ice</td>
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## Aviation - 21 inventions

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<tr>
<td>Aircrafts</td>
<td>N2156209</td>
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<td>Modes of emergency evacuation of air passengers from an aircraft</td>
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<td>Facilities and modes of rescuing aircraft</td>
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<td>Helicopters</td>
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<td>Facilities and modes of rescuing helicopters</td>
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<td>N2201381</td>
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<td>Aircraft passenger autonomous rescue capsule (APARC)</td>
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## Information technologies - 7 inventions

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<tr>
<td>Automatic postal devices for mail sending and receiving</td>
<td>N2195079</td>
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<tr>
<td>Modes of high-speed confidential forwarding of mail</td>
<td>N2209522</td>
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## Computer technologies - 3 inventions

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<tr>
<th>Description</th>
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<tr>
<td>Hyperfunctional display-key, keyboard of electronic devices and mode of output and change of symbols on display-keys</td>
<td>N2214619</td>
</tr>
</tbody>
</table>
For the last years Hamid Khalidov’s projects were on repeated occasions introduced and discussed at the international and Russian forums, conferences and exhibitions.

List of some of them is adduced below.

**CONFERENCES**

Economic Forum "Daghestan: new regional possibilities" (Makhachkala)  
*Report “The newest transport and information Technologies”*  
26-27.05

First Congress of Engineers of Russia (Moscow)  
*Report “Global Projects - for the mankind service”*  
26-28.11 2003

Russian Scientific-Practical Conference  
"Transport strategy of Russia" (Novosibirsk)  
*Report “Transport trimarans. Aircrafts with APARC system, modes of air passengers rescue”*  
12-13.05 2003

Fifth Saint-Petersburg’s International Economic Forum  
*Report “Latest transport and information technologies – strategic factor of Russia’s development”*  
12-16.06 2001

International Scientific Conference  
"Russia’s Great Lakes" (Nizhniy Novgorod)  
*Report “Project “Alive Water” and global climate”*  
16-19.05 2001

Second International Euro-Asian Conference on Transport "TRANSTECH’2000" (Saint-Petersburg)  
*Report “Development of sea shipping – transport Trimarans”*  
12-13.09 2000

First World Engineers’ Convention  
(Hanover, Germany)  
19-21.06 2000

Fourth Saint-Petersburg’s International Economic Forum  
*Report “Ways of development of sea shipping – conception of transport trimarans”*  
13-17.06 2000
Global projects – for the service of mankind

Appearance of Hamid Khalidov at the I World Engineer Convention

EXHIBITIONS

International Aero Salon
"DUBAI'2003" (UAE) 07-11.12.2003

Fifth International Aerospace Salon
"MAKS-2001" (Zhukovskiy, Russia) 15-21.08.2001

"HI-TECH’2000" (Saint-Petersburg) 13-16.06.2000

International Exhibition “EXPO-2000”
Russian Exposition (Hanover, Germany) 01.06-30.10.2000

International Salon of Industrial Property
“ARCHIMEDES-2000” (Moscow) 29.03-02.04.2000
HAJJ: PROVIDING PALMERS WITH WATER AND COOLNESS

There is one more very important problem, which the government and business circles of Saudi Arabia have been trying to solve for many years with the help of international scientific institutions. The question is about creating a favorable microclimate in places of palmers’ accommodation and traveling during Hajj. Though a great number of projects have been considered, the answer has not been found. We offer our original way.

Imagine that from the ice-receiving plants allocated in Jeddah, along the isolated underground pipes by means of compressor stations, the thawed water and cooled air are fed to Mecca’s environs, where via a distributive system they get into palmers’ tents and premises. Also using suspending constructions, palmers’ routes to the sacred places can be cooled down; ice and cool air can be used for cooling down meat of the sacrificed animals (before shipment to a place of destination). The calculations show that 1-2 ice-carrier ships (ledovozes) of fifty thousand tons displacement will be required for this purpose in Hajj time. In any other time of year the cooled air and water can be used for household purposes of cities and settlements of Saudi Arabia.

It seems that such solution of the problem of providing with water and creation of favourable microclimate for palmers meet the requirements for profitability and fundamental character of the approach.
The scheme of cool air and drinking water supply of palmers during Hajj
TRANSPORT TRIMARANS – TRANSTRIMS

Truly, ... in the ships that speed through the sea with what is useful for man ... - signs to people of sense!
Qur'an, 2:164

As is known, the nautical term “trimaran” as a rule means a sports vessel, which has two floats attached to its sides to make it more stable on water. The design of the offered “transport trimaran” radically differs from the early known constructions. Instead of side floats are placed the side hulls of an appropriate displacement tonnage, equipped with high-capacity marine engines.

From this moment the nautical term “transport vessel – trimaran” implies a principally new sea transport vessel, navigation features of which have changed as follows: the vessel becomes practically unsinkable; buoyancy, maneuverability, controllability and course-keeping qualities of the vessel at wide speed range are improved; the vessel is able to slew practically on a spot; inertial distance is reduced etc.

For centuries people have been considering vessel just as a ship, which can transport cargo or passengers on condition that its bottom is waterproof. If its bottom is not hermetic, the incoming water will sink the ship. The design of the transport trimaran – transtrim radically broadens our past conception of a vessel and its capabilities.

These are the trimarans able to load and unload sole loaded floatation systems weighing many thousand tons – barcons, using locking method and through the opening fore and stern hold leaves, through the opening bottom leaves of the hold. The constructions have been worked out, where the transtrim’s central transport hull is detached and placed for unloading, and the so-formed “temporary” catamaran at the near-by quay is connected to a similar already loaded hull, and then the trimaran departs to a port of destination. Another design
Global projects – for the service of mankind

Transport trimaran – transtrim
Transport trimaran – transtrim
Loading of a barcon into the transport trimaran through the opening bow leaves of the central hull

presents a trimaran, the middle transport hull of which is made of two separate parts. The smaller part with the engine is connected with the side hulls. And the bigger part is the transport hull, which is attached to the smaller part. There will be various designs of the detachable middle hull. But all of these designs will provide an opportunity to perform loading and unloading all along the area of the upper deck, but not through deck hatches as in existing constructions of ships (i.e. the deck will be a removable or a sliding etc.).

So becomes possible simultaneous and parallel work of optimum handling machinery over the open sections of the trimaran transport hull. At the same time there will be an opportunity for building all types of containers for various purposes (to fit design of the transport hull).

The barcons of every type will allow reducing of handling operations to one-step stowage of a barcon inside the vessel.
Barcons’ loading of different construction in a port
Global projects – for the service of mankind

Transport trimaran with the detaching part of central hull

Transport trimaran with the detaching central hull
Transport trimarans – "transtrims" – will fundamentally change structure of seaports. The territory of seaports will be considerably reduced, since the need in cargo transhipment will decrease sharply. Most of cargo will be unloaded directly off the wheels (of motor vehicle or railway transport) into the barcons and detachable hulls of the transtrims moored at a quay. All this will have a beneficial effect on the competitiveness of sea cargo transportation.

Applying inter-hull hydrofoils in the transport trimarans will allow adjusting the draught of the vessel, and will add to its ability to pass through shallow water and earlier inaccessible sea canals. Transport trimarans of "river" and "river-sea" type have good prospects in reviving inland water transportation. The destruction of the shoreline with the waves formed by the ship hull and screw propeller is one of the main problems impeding the growth of speed of river transportation. Applying the river transport trimarans solves this problem, since the obtained engineering solutions solve it. And the detachable transport hull or its part saves the vessel from idle time.

As it is seen from the above-stated, the sea cargo transportation by transport trimarans will become more profitable compared with the cargo transportation by ordinary ships. In case of intensive construction of transport trimarans, sea transport will successfully compete with other types of transport in the 21st century.
SUBMARINE TRIMARAN
"SEA-HORSE"

For underwater traveling we offer the submarine trimaran. There are no analogues of this vessel in the world. The submarine trimaran consists of the three hulls; each hull is equipped with marine engine. At that the central hull is set above the plane that connects the side hulls, and the screw propellers are placed in such a way that forms vertices of a conditional triangle. Between the hulls are installed inter-hull hydrofoils-rudders built with adjustable angle of attack.

By adjusting propulsive force of engines and attack angle of inter-hull hydrofoils-rudders, such an arrangement of hulls, screw propellers and inter-hull hydrofoils-rudders allow the submarine trimaran to qualitatively improve its maneuverability in any direction and from the very start.
Submarine trimaran in above water position

Manoeuvre of submarine trimaran
Maneuverability of the submarine trimaran in water can be compared with the maneuverability of an airplane in flight, and its speed and reliability considerably surpass single-hull submarines. Such trimaran will give a unique opportunity for undersea traveling, which guests of the hotel “Arabic Tower” will be able to start without leaving the hotel. This submarine makes possible following and observing undersea fauna.

The analogous design is very perspective for building rescue and sport submarine trimarans, for scientific research and various underwater works. Depending on purpose, submarine trimarans can be single-seater, two-seater and multi-seater.
TRANSTRIM – SALVAGE VESSEL

Transport trimarans with the opening bottom of the middle hull can rescue and raise sunken ships, submarines and other objects from the bottom of the sea. Occasional accidents with submarines serve as a grievous confirmation of the necessity of building transtrimsalvage vessels. Depressurization of the bottom always caused the ship wreck. But for the transport trimaran depressurization of the middle hull is provided constructively. The side hulls will ensure the transtrim-salvage vessel not only buoyancy, but also maneuverability, since they are equipped with marine engines. Such a trimaran-salvage vessel while staying afloat above a wrecked submarine will lower its tackle and fix on the submarine, then pull it up from the sea floor and pull it into the middle hull. The huge trimaran-salvage vessel of 100-150 thousand tons displacement is definitely capable of raising such a burden.

Scheme of salvaging of a submarine by transport trimaran
Global projects – for the service of mankind

Loading of a submarine through the opening leaves of bottom of the central hull of transport trimaran

Transtrims-salvage vessels can become a basis of global system for rescuing people and cargo on water. 10-15 vessels of such type located evenly in all oceans of the world will become an effective instrument of rescue service at seas and oceans.
In the sphere of air passengers’ conveyance are offered inventions and technologies ensuring a new qualitative level of safety and rescue of passengers in case of an airplane crash.

The work on increase of flight safety of is being carried out all over the world. But still airplanes crash for this or that reason, causing losses of life. From the beginning of time of air passengers’ conveyance, a passenger has been a passive participant of flight and entrusted his life to the crew and airplane. The offered system of air passengers rescue breaks this direct interrelation and gives both air passengers and airplanes’ crew an opportunity not to share the fate of a disabled airplane.

An aircraft passenger autonomous rescue capsule (APARC), as a part of passenger salon, is embedded in a fuselage. A passenger
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APARC in sectional view

Arrangement of ECC in the fuselage
saloon may consist of several capsules. In places of attaching wings to a fuselage, along the fuselage and round the fuselage between its fore part and the pilot cabin, capsules and the rear part of the fuselage, are embedded devices -- elongated cumulative charges (ECC), blasting of which (using electric detonator) will execute almost instantaneous exploding cutting of the fuselage and its skin. This will lead to the detachment of the rescue capsules with the sitting inside passengers from the airplane. Then with the help of the parachute braking system the rescue capsules perform soft landing. This is the last individual-group border of protection and rescue of passengers, coming into operation when the crew and airplane have lost ability to cope with an emergency situation.

Creating universal computer programs at “artificial intelligence” level on the basis of high-capacity airborne electronic computer systems, able to evaluate situation independently or jointly with the crew, to give recommendations to pilots, to inform ground services
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Parachute of drawing and extinction of horizontal speed of APARC

Main parachute of APARC
Response of self-braking system of APARC

Landing and splashing down of APARC and cockpit
and if necessary to make independent decision about disintegration of the airplane and further evacuation, will reduce to zero chances of terrorists and hijackers to achieve their objective.

The absolute autonomy and capability within one second to release a parachute, having started active self-braking, allow to rescue passengers even at extremely low altitudes during take-off and landing. Made of durable, heat-resistant and light composite materials, the capsule can rescue passengers from fire and smoke, can amortize a hit, stay afloat in water. After landing (or splashing down) of the capsule, will be activated all-necessary emergency communication and signaling facilities, means for life support. Today and tomorrow the most important for an air passenger will be guarantees of saving his life. If some airplanes will be able to do this better than others, then this will ensure strong demand for these airplanes and their high competitive strength. Especially taking into account that an expected rise in the cost will not exceed 7-8 % of an airplane production cost.
RESCUE OF HELICOPTERS

The problem of rescuing helicopters is very urgent and topical. Statistics shows that rescue of helicopter passengers and crew, in case of emergency, at a height of several dozens of meters is practically impossible.

We have worked out and patented several modes of rescue of helicopter, its passengers and crew in emergency situation. They are based on using of a parachute-braking system. Let us view one of these modes.

Blades of helicopter propeller form the main obstacle in using a parachute when rescuing helicopter. This obstacle can be overcome in the following way.

In the fuselage, at base stand of external part of drive shaft in main propeller are placed elongated cumulative charges (ECC), which cause instantaneous, in fractions of a second, separation of the
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Arrangement of ECC under propeller

Response of ECC: detachment of propeller
Forced outlet of parachute by mini-rocket

Phase of soft landing
Response of self-braking system of at landing

propeller from the fuselage. The parachute system is set in the upper part of the fuselage.

In case of emergency situation, at pilot's or airborne computer command is engaged an optimal helicopter rescue program corresponding to the given specific emergency conditions. The common operations for all rescue programs will be: separation of propeller with blades, directly following compulsory parachute ejection, engaging of self-braking mode at helicopter landing (ditching).
Is it possible to nearly double traffic capacity of the existing underground lines, at that ensuring more conveniences for passengers, whose quantity is steadily increasing every year? We are answering this question in the affirmative manner and submitting for consideration two solutions.

In the first variant it is supposed to extend the height of the underground tunnel by one and a half-two meters and running of
double-deck coaches at least in rush hours. Boarding on these coaches can be performed from a two-storied platform or, for example, one can go up to the second deck from the central door. Of course, passengers traveling long distances will prefer to go up to the second deck. In order to minimize soil excavation, construction of the second deck can be provided with a minimal required height, only with sitting places. For deep line tunnels increase in height can be carried out practically without problems, and for shallow line stations and tunnels will be needed every inch of height.

The second variant supposes separating the tunnel on two parts – two floors after extending tunnel height. On the lower floor will be running an ordinary subway train, and the upper floor will contain an underpass for high-speed locomotives or several coaches with 3-4 stops on the underground line. In our opinion, using a string transport providing a speed of 300-400 kilometers an hour in the upper floor will have great prospects.

Using bearings of 10-30 meters high, starting from an airport up to terminal stations in outlying districts, and then as though diving under the ground into the upper floor of subway tunnel, the string transport (imagine an elongated minibus of streamlined form) as an underground taxi can take people to a downtown or to an airport in just few minutes. High-speed underground taxis have great prospects in large cities as the only means of high-speed transportation. Combination and alternation of using of an underground taxi and mini-trains of some mini-carriages between airports and a city will solve a problem of fast delivery of airpassengers to a place of destination.

Without doubt, when building new subway lines an optimal solution will be construction of tunnels, height of which will allow passing of double-deck coaches and one (or more) underpass for high-speed underground taxis.

That is our vision of the future underground.
EMERGENCY EVACUATION FROM HIGH-RISE BUILDINGS.

After the events of September 11, 2001, in New York and the fire in the Ostankino television tower in Moscow the problem of emergency evacuation of people from towers and high-rise buildings has become very urgent. Designers of skyscrapers admit that the only unsolved technical problem is a guaranteed evacuation of people in case of emergency.

The individual means of life-saving being developed now («inflatable shuttlecock», parachutes etc.) are not universal and do not solve the problem.

We offer to equip high-rise buildings by evacuation capsules through every 5 or 10 storey or part of storey. An evacuation capsule represents an autonomous room (compartment, capsule, cell etc.) embedded into the storey, organically blending with the interior of the storey of a sky-scraper or viewing platforms of television towers.

Depending on a concrete situation (for example, presence of the next buildings) the evacuation can occurs from one high-rise building into the next high-rise building or directly on a ground.
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Evacuation of people in the rescue capsule into the next building
Evacuation in the rescue capsule using parachute
Evacuation in the rescue capsule from viewing platforms of television tower
MAIL EXPRESS-SYSTEM «POSTFON»

In the 21st century, despite of the rapid growth of Internet and growth of electronic mail capacity, forwarding of paper mail via post offices still remains the basic mode of information transfer. Moreover, analyses of leading western companies show that paper mail is more comprehensible, customary and easily perceived for the majority of information consumers.

We offer the mail express-system "Postfon", which has no analogues and that provides the high-speed service of personal mail transfer and delivery (from 1 to 24 hours), preserving confidentiality and safety of post transfer.

Express-system "Postfon" includes:
• Automatic postal machine for mail forwarding;
• Automatic postal machine for mail receiving;
• Mail Internet-server supporting this express-system;
• Telecommunications network connecting automatic postal machines and mail Internet-server.

The postal system POSTFON works as follows: in order to send a letter, a sender inserts a sheet of paper with the information into a postal electronic box PEB, in which this information is scanned and is transferred in electronic mode. Then the information gets into a mail receiving post machine corresponding to the stated address, in which the electronic mail is automatically printed out on a sheet of paper, is enclosed in an envelope with a recipient's address on its front face and is extracted from the post machine. In case of arranging the mail receiving post machine in a post office, the sealed letter gets to a postman, after what he delivers the letter to a recipient.

When sending a letter, instead of postal electronic box one can use a computer connected to the Internet. In this case the text of the letter is typed on the computer keyboard.

A letter, a telegram, a greeting card etc. can be transferred within this system. For the convenience of clients postal machines can be
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Automatic postal machine for mail forwarding

Post Office

Automatic postal machine for mail receiving and ejection
GLOBAL EXPRESS-MAIL SYSTEM

Satellite

Server of post service

Fiber-optic network

Mobile phone

IP-phone

Computer

Postfon for receiving

Universal postfon

Postfon for sending

Delivery of correspondence

Sending of correspondence

Post Office
Global projects – for the service of mankind

POSTFON

Satellite

Fiber-optic network

Server of post service

Computer

IP-phone

Mobile phone

Postfon for sending

Universal postfon

Postfon for receiving

Sending of correspondence

Delivery of correspondence

Post Office
stationed in post offices and other public places. Constructively it is possible to combine coin-operated telephones with postal machines.

The mail system “Postfon” allows combining an advantage of ordinary post – information confidentiality when sending and receiving mail, – with an advantage of electronic mail – speed of mail delivery from a sender to an addressee. At that, postal costs of the “Postfon” are close to the existing postal prices.

The mail express-system “Postfon” solves one of the important state tasks by providing public security, since the letters will be opened and sealed in envelopes by automatic postal machines with strictly limited access.

Development prospects of the mail system “Postfon” are highly promising. In the course of time the postal electronic boxes and postal receiving machines will take place next to phone in institutions, banks, offices, houses, and as the phone in the 20th century will be placed in every corner of the planet in the 21st century.
KEY “CHAMELEON”

Progress in computing technology so far practically has not applied to the information input devices. Keyboard is one of the most “ancient” parts of the computer systems. From the time of its implementation to the present day it has undergone insignificant changes and remained invariable in principle. Numerous attempts to radically improve characteristics of the main computer device for alphanumeric input have not succeeded so far.

A disadvantage of modern keys of electronic devices is that they are size-limited and taking into account acceptable comfort for operator’s work carry a maximum of 3-4 symbols on the front-face area. This sets a limit on the growth of functional capabilities of keys in electronic devices.

We have worked out original solutions that allow breaking the dependence of the quantity of functions of a key upon the square of its front-face area carrying symbols. There is being offered an original design of a key and a computer keyboard on the whole, mobile phone and other electronic devices, which allows displaying any available alphabet, symbol etc. on a key.

In the upper part of a key head it is placed a liquid-crystalline mini-display with a screen, which represents the front-face area of the key head. The displays of the keys commutate with the keyboard controller independently of the location of the keys.

Now the keys can display any symbols of an appropriate size, available in the software of a mobile phone, personal computer, laptop, pocket PC, consumer electronics etc.

The offered keyboard has following advantages: choosing alphabet and keyboard layout; individual setup of keyboard, for example, by changing location of letters, numbers, functions, their colors; choosing keyboard layout necessary for more efficient work with appropriate programs and applications etc.
Keyboard “Chameleon” with use of display of “creeping line” above a zone of keys F1–F12 and chosen for work the Russian alphabet, which is glowed on display-keys of alphabet zone.
The offered keys will increase the efficiency of work with software of mobile phones, because of the continuous growth of quantity of functions being used. Thus, for example, it will be possible to load a larger quantity of alphabets of the world’s languages in a mobile phone that will make it even more versatile. Besides, the work with SMS-messages will become handier.
THE “ALIVE WATER” PROJECT
NEW TECHNOLOGIES OF DRINKING WATER AND COOL AIR OBTAINING FROM THE HIGH-LATITUDE ICE
The Project "Alive Water" bears a global character, since it is aimed at the supplying population of water-requiring regions and areas of the Earth with high-quality drinking water. In the way, suggested below, the Project "Alive Water" is considered as a regional one on the example of its implementation in the countries of the Arabian Peninsula as a region strongly needing high-quality drinking water.

**Summary of the Project**

The purpose of the suggested Project "Alive Water" is an enhancement of the environmental situation in the Arabian Peninsula; a creation of the favourable microclimate in its cities and settlements, in the places of accommodation and movement of pilgrims during Hadjj; an improvement of people’s health by delivering and supplying the population of the countries of the Arabian Peninsula with ecologically pure, thawed fresh water received from ice, which is delivered from Antarctic Continent.

The formulated purposes can be achieved by solving of organizational, scientific and engineering problems of delivering ice from Antarctic Continent to the Arabian Peninsula and keeping the competitiveness of the water received from this ice.

The Author of the Project has elaborated principally new scientific and theoretical approaches to solving of problems of environmental protection and supplying the Region with fresh water, and accordingly new technologies having the world priority and patent protected.

The main stages of the offered technologies on extraction, delivering and utilization of ice are: extraction of ice-blocks weighing many thousand tons from an iceberg or a glacier with ice-cutters; hauling down of the ice-blocks into water; loading from water into
a hold of a vessel of an original design – trimaran-ledovoz; transport of ice and its unloading in a port of destination into a special ice-receiving plant, where the sun and the incoming hot outside air cause ice to thaw, transforming it into the thawed water. The air, which is cooled down, can be used for industrial and household purposes.

In order to avoid the deadheading (empty voyages) of the trimarans-ledovozes, on the way back they are loaded with the accompanying cargo, which is stowed in a new floating system of an original design – barcon, which are placed and transported in the hold of the trimaran-ledovoz. The barcons are used for the transportation of all kind of cargoes – oil, liquefied gas, containers, free-flowing freights, timber etc.

The Author has invented and patented the designs of trimarans-ledovozes, the methods of loading-unloading of ice-blocks, the methods of transportation of ice-blocks by trimarans-ledovozes, the designs of ice-cutters – devices for the extraction of ice-blocks, the methods of extracting ice-blocks from an iceberg, the plants and the methods of fresh water and cool air obtaining from ice, the floating system barcon. The Author has made PCT-Applications for the inventions.

The found engineering solutions provide minimum costs at each technological stage that as a result ensure a very low cost price (one-two US cents for a litre) of the obtained “alive” thawed water, which is competitive with the cost price of the water received at nuclear and thermal water-desalinating plants.

Successful solution of the technical problems on delivery of ice allows to start the implementation of the large-scale environmental Project, aimed at the principal improvement of population’s health in the Region, the microclimate softening and enhancement of the Region’s environmental system.

The Project envisages that the countries of the Arabian Peninsula, having built a fleet of 40-50 trimarans-ledovozes of 50-100 thou-
sand tons displacement each for transporting millions of tons of ice, will start delivering it to the situated at the coast ice-receiving plants for its further processing.

Full-scale implementation of the Project will allow today to give up building new nuclear and thermal water-desalinating plants in the Region. Undoubtedly, this will positively affect the environmental safety of the Region, where dozens, and in the nearest future hundreds of millions of tons of the thawing ice, absorbing a lot of heat from the atmosphere during the thawing process, will stabilize the climate and improve the ecology of the Arabian Region. This will serve as an impressive example to the rest of the world.

One of the main results of implementation of the given Project will be the population’s health improvement in the countries of the Peninsula, since the thawed water is truly curative, “alive” water from the medical point of view. According to the UNESCO data, 80% of humane diseases relate to the poor quality drinking water, therefore

Trimaran-ledovoz of a stern loading
the realization of this policy as early as in few years will result in the total improvement of health of the inhabitants of the Arabian Peninsula. Thus one of the main postulates of medicine will be carried out – prophylaxis of diseases is the best remedy for their treatment.

The Project envisages that excess of the thawed water will be broadly used in the agriculture, since it is known that the thawed water, for example, considerably raises egg-laying qualities of hens, at that all eggs are of a first-rate quality, and the productivity of vegetables increases by two-three times. All this can not be said regarding the desalinated “lifeless” water. The unoccupied water resources received at the water-desalinating plants can be directed to creation of green zones and oases all over the Peninsula.

In opinion of specialists, the author of the Project has solved the problem of supplying the pilgrims’ tents and routes of their movement to the sacred places during Hadjj time with fresh water and cool air. It is stipulated that from the ice-receiving plants situated in the port of Jeddah by the isolated underground pipes with the help of compressor stations the cool air and the thawed water are fed to Mecca’s environs, where via a distributive system they get into pilgrims’ tents and premises.

The cool air by the suspending constructions will be fed to the pilgrims’ routes to the sacred places. All the necessary computations on using of ice for cooling of the meat of the sacrificed animals (before shipment to a place of destination) were also made. Such solution of the problem meets the requirements of fundamentality and profitability of the approach.

**Introduction**

In the official magazine “Our Planet” of the United Nations Environment Programme (volume 11, number 1, 2000) it is pointed out:

“Humanity's use of freshwater soared sixfold over the last century, and continues to rise. Demand is expected to increase by over a third
over the next 25 years – and to almost double for drinking water. And yet it is getting scarcer. Already one-third of the world’s people live in countries, where water is in short supply; by 2025 two-thirds of them will do so. About one in every five people on Earth now lacks safe drinking water.

Some 2 billion hectares of arable and grazing land worldwide – an area larger than the United States and Mexico combined – have been moderately or severely degraded, reducing its ability to produce food. Desertification costs the world 42 billion US dollars a year in lost income and soil erosion puts the livelihoods of nearly a billion people at risk.

Aquifers of underground water, built up over millennia, are being exploited faster than they can be replenished; every year 160 billion tons of water are being “mined” in this way in China, India, North Africa, Saudi Arabia and the United States alone. Meanwhile international tensions over shared rivers are rising, threatening water wars”.

The situation on the Arabian Peninsula is even more severe. Countries of the Arabian Peninsula and Middle East are situated in one of the most droughty parts of the planet, where the water reserves form only 0.7% of the world reserves, and the renewable water resources do not exceed 1% of the world potential. Correspondingly, the water resources per capita form in average 1,5 thousand cubic metres per year against 13 thousand cubic metres in average per capita of the rest of the world. Such situation is expected not only as an economic crisis in the Region, but as an impending environmental catastrophe. For these countries the problem of water balance long ago became a problem of live support, an annually growing priority of the national safety.

For several decades already the world science has persistently been searching for ways of supplying the water-requiring regions and countries with fresh water, but something cardinal able to stop the impending catastrophe has not been offered. Although there are nuclear and solar sea-water desalinating plants, systems obtaining fresh
water by the means of atmospheric precipitation, various adsorbing systems, none of these ways either separately, or all together is able to solve this global problem.

Because of absence of competitive projects of supplying the water-requiring countries with fresh water, in 1970 the World Bank for Reconstruction and Development took a decision about the concentrated financial investing into the seawater desalinating technology as the main way of providing the water-requiring countries with both drinking and industrial water.

Science have estimated that two-thirds of fresh water are concentrated in glaciers of high latitudes of the planet. During a rather long period of time various projects on delivery of ice from Antarctic Continent, Greenland have been arising. The question, as a rule, was about a practically unrealizable propulsion of icebergs by vessels and about unprofitable transportation of quick-thawing ice-crumbs by tankers. None of this numerous projects has been realized so far, although it is clear that solving the problems of ice delivery at a competitive price would become the best way of supplying people with water – thawed water.

Since long ago the thawed water has been called “alive” water. Its health-giving abilities have been described in many scientific works, and the gustatory sense of beverages on its basis is exceptionally high. Doesn’t that fact that the Queen of England Elizabeth I in the 16th century nominated a prize of ten thousand pounds sterling to anyone, who will find the cheap way of obtaining of the thawed water, tell about the understanding of its usefulness for men’s health. The absence in the thawed water of any heavy particles, its ability, in contradistinction to usual one, to actively percolate through membrane into cells, renovating and purifying them, its ability to preserve its structure and molecular connections inherent in ice for a long period of time – that is the secret of the “alive” water. After having got into an organism, this water does not require the organism’s energy for its restructuring in order to be digested. This water
The “Alive Water” Project

is particularly valuable and indispensable for the elderly people with their weakened exchange processes and tendency of the organism’s dehydration. It facilitates the activity of all internal organs in human body, improves blood structure. After six months of its utilization it completely removes all the wastes and toxins out of cells, ameliorates the functioning of cardiovascular and nervous systems, head and spinal cord, normalizes muscles’ activity, improves both general state of health and capability for work. Scientists-gerontologists all over the world agree about the fact that the thawed water’s utilization by high-landers saves them from many diseases that affect people, who live on plain lands, and besides, provides their longevity. The obtained thawed water can be mineralized at customer’s will or according to the requirements made on this or that kinds of drinks. This can be achieved easily and cheaply.

Establishment of priorities

- the discovery of new scientific and theoretical approaches to solution of environmental protection problems of the Arabian Peninsula;
- the discovery of engineering and technical solutions allowing to organize extraction and transportation of ice from Antarctic Continent to the Arabian Peninsula, while keeping high competitiveness of the cost price of the water received from ice;
- the improvement of the environmental situation and safety in the Region;
- the recovery of people, creation of new working places, maintenance and improvement of the populations’ living standards in the countries, where the depletion of the oil resources is expected.

Formulation of objectives and strategies

The objective of the Project is supplying of the population of the countries of the Arabian Peninsula and pilgrims during Hadjj with
the ecologically pure, thawed, fresh water received from ice of Antarctic Continent, and using of fresh water for enhancement of ecosystem in the Region.

The strategy of the Project is carrying out of the necessary complex scientific, technical and engineering research and development, construction of trimarans-ledovozes, coastal infrastructure, ice-cutting and other necessary equipment.

Technologies of ice-block's extraction, loading, transportation, unloading and utilization

From all available water resources on the Earth, only 2.5% is fresh, at that 2/3 of it is located in the form of ice in Antarctic Continent, Greenland, Alaska. As we can see, there is no other source in the world able to meet the growing need in fresh water, and the projects of propulsion of icebergs have been discussed for a long period of time. But so far they have not been realized because of the technical complexities, while the gathering and transportation of quick-thawing ice-crumbs turned to be unprofitable.

The Author of the Project has become sure that ice should be obtained one or another way in places of its location and in solid and liquid state should be delivered to consumers by sea. It was necessary to decide what – ice or water – should be loaded and transported. It is obvious that there are three ways of delivery of ice, provided by today's level of technical development:

- in the form of water, that requires great power inputs on melting of ice and unacceptable terms of loading;
- in the form of fine ice pieces, here the power inputs are lesser, but the terms of loading and capital outlays for the various extracting and handling equipment considerably grow, while reduces the loading capacity of a hold;
- in the form of bulky cut blocks of ice, weighing dozens and hundreds of tons, in this case the power inputs continue to decrease, but
grow the terms of loading of a ship, and an amount of work of towboats and crane equipment increases in hundreds and thousands of times.

But it turned out that all the above-mentioned ways too much increase the cost price of delivering of ice and water, making it non-competitive.

The analysis and calculations carried out by the Author showed that in order to keep the Project profitable, it is necessary to extract ice-blocks weighing several thousand tons from an iceberg and deliver to a place of destination in the form of ice, at that the transportation on multi-thousand distances from Antarctic Continent to the Arabian Peninsula should be carried out by ships with more than 40 thousand tons displacement, and at the same time the loading should take only one-two days. But the modern level of engineering in a sphere of cargo handling technologies and mechanisms does not allow to operate with such weights and dimensions, and the area of extraction (Antarctic Continent, Greenland) is not really suitable for the large stationary constructions and mechanisms. Moreover, the today’s fleet is not acquainted with a design of ships able to take aboard and carry out transportation of such huge ice-blocks. It was necessary to find answers to many questions: how and using what equipment can ice be extracted? what form and size should the ice-blocks be made of? how must be carried out loading and unloading and what kind of vessels may transport ice? how should the delivered ice be utilized to the best advantage? what will be the cost of each technological stage and the total cost price of one litre of obtained water? and the most important, how will the extraction and exportation of millions of tons of ice affect the environmental situation in Antarctic Continent, as well as the importation of ice in such amounts affect the environmental situation on the Arabian Peninsula?

The work carried out by the Author has resulted in the essentially new, innovative engineering and technical solutions embodied in dozens of inventions in various spheres of science and technics, and which allow to solve the problem of delivery of ice at a competitive
cost price to countries of the Arabian Peninsula, at that will promote an increase of environmental safety in the Region.

Let us see brief description of the technology.

In general outline the work on extraction and loading of ice-blocks is carried out in the following way.

The expedition’s main base with all the necessary repair and subsidiary services, helicopter and aircraft fleet, special machinery, towboats and another essential for work equipment and tackle is based, for example, on the island of Kerguelen. A brigade of ice-getters with the necessary equipment, tools and fuel reserves takes off from the island and lands on a chosen iceberg of a certain size, with a flat surface high enough from the sea surface, examined for the purpose of steadiness and durability.

The first stage is extraction of ice blocks. In practice, the extraction technology lies in a thermal effect on ice of an ice-cutter of an original design, which by smelting the ice underneath, sinks on cables or bars into the body of the iceberg at the predetermined extent. Having set the necessary configuration and computer program of the ice-cutter, we cut out an ice block of the required form and size.

The last technological operation before hauling down-sliding the ice-block into water is undercutting of the bottom of the ice-block that will be executed with a special bottom ice-cutter.

The slid into the sea ice-block is towed to a trimaran-ledovoz.

The next stage is loading of the ice block on the trimaran-ledovoz. The trimaran-ledovoz is a new kind of vessels designed for the transportation of large-sized cargoes, loading of which is carried out directly from the water surface into the hold. Let us describe one of this vessels and its loading technology.

The middle hull of the trimaran-ledovoz is intended for loading of ice-blocks. The side hulls of the trimaran-ledovoz are built with an appropriate displacement and being supplied with engines, make the trimaran exceptionally steady and maneuverable that is very important when loading ice, and provide an opportunity to gather
the cruising speed of over 20 knots/hour in loaded condition. Such
the speed is necessary for the optimal turnover of the vessels and
profitability of transportation.

The trimaran-ledovoz, by maneuvering with the help of both sc­
rew propellers, runs on an ice block with its stern opened and as if
“swallows” it. Initially the ice-block gets into the receiving compart­
ment. Then the stern closes and water is pumped into the receiving
compartment. When the water lifts the ice-block up to the level of
the hold, the ice-block is pulled into the transit compartment. The
partition separating the transit compartment from the receiving one
closes, and the rest of the water is pumped out from the receiving co­
mpartment back into the sea. After that the partition separating the
transit compartment from the hold opens allowing to shift the ice­
block inside the trimaran-ledovoz. Then the partition returns to its
previous position. This procedure is repeated until the hold is filled.

It was developed another constructions of vessels and ways of ice
blocks loading through opened bow and bottom leaves of central hull
of a trimaran-ledovoz.

The transportation stage begins. The transportation by sea of
ice-blocks weighing many thousand tons has its own particularities.
Owing to the huge size of the hold of the trimaran-ledovoz, specifics
of loading and transportation of ice, the body of the hold is made
twofold for ensuring of the rigidity of the construction, heat-insu­
lation and for solving of other important problems arising during
transportation of ice. The vessel is supplied with a refrigerator powe­
ful enough for icing of ice-blocks to the walls of the hold in order to
prevent shifting of the ice-blocks in the hold during transportation.
The vessel’s heat equipment will defrost the bottom and the side walls
of the hold before unloading of the ice-blocks.

The unloading is the final stage. A block of ice, unloaded from
the trimaran-ledovoz into water in a port of destination, is hauled up
to a quay of a special design by the means of high-capacity winches
fixed at the coast.
Work of ice-cutters: a vertical drivage
Work of ice-cutters: a horizontal (bottom) drivage
Helicopter takes a tow-line to towboat
Towboat pulls out an ice block from iceberg.
The pulled out of water ice-block gets into a special chute, by which it is routed to a situated near the coast special ice-receiving plant with the transparent top. By regulating the access of the sunlight and inflow of hot outside air, at the output we will get the necessary for bottling amount of cold water and cool air required by a city. The calculations have shown that 50 thousand tons of ice when thawing (depending on its own temperature), for example, can cool off by 20 degrees from 170 million to one billion cubic metres of hot air.

In order to avoid deadheading (empty voyages) of the returning back after delivery of ice trimarans-ledovozes, the Author has offered to use a so called barcon (derivative from words "barge" and "container"). The barcon is built constructively in the form of a mini-barge and is stowed for transportation inside the hold of the trimaran-ledovoz. It is intended for transportation of all kinds of cargoes, depending on its constructional execution. These cargoes could be oil, liquefied gas, containers, bulk cargo etc. The loading and unloading of barcons on the trimaran-ledovoz directly from water into the hold and vice versa is performed the same way as the loading and unloading of an ice-block.

The special attention, when building trimarans-ledovozes, should be drawn to environmental safety of their marine engines in order to except a possibility of pollution of the both Antarctic and Arctic seas.

Total costs on realization of Project “Alive Water” for countries of the Arabian Peninsula amount to about 3,2 billion US dollars. The Project is compensated after delivering the half-yearly need in both ice and water at the cost of 20 US cent for a litre of water.

It should be noted that neither formally, nor in fact the Project affects decisions of the Convention of the UN for Antarctic Continent of 1956, since it is proposed to extract ice from icebergs far from the coast, while ice is yet water, but not mineral resources of the Continent that have been prohibited for mining according to the Convention.
The “Alive Water” Project

Now, after the recognition of both importance and reality of the Project to the solution of problems of environmental protection and supplying the Region with fresh water, it is necessary to solve financial problems of the design and technological stage, after which it is expected to finance building of fleet of trimarans-ledovozes, necessary coastal infrastructure and other costs stipulated in the Project.

Estimate of the economic effect

In order to prove the prospects of the chosen way, it is necessary to have an opportunity of its realization in one or several countries requiring the water and capable of bearing certain financial expenses. The main water consumer on the Arabian Peninsula is the Kingdom of Saudi Arabia – the most powerful and dynamically developing country of the region.

Its rapidly growing population has exceeded 20 million. Having accepted the above-mentioned norm for one person, we’ll receive the annual water requirement of the country – this counts for 18 million 250 thousand tons, that corresponds to 20 million tons of ice.

So, what will be the cost of this project? What will be the cost price of a litre-bottle of this water? It proves to be very low. So low that after realization of the Saudi Arabia’s one year need in the drinking water at the relatively low price of 20 cents for a litre-bottle, the net profit will already form more than three billion dollars.

Let us illustrate our calculations.

Today the cost of building of a modern tanker of 50 thousand tons displacement forms about 30-60 million US dollars. Taking into account the peculiarities of a trimaran-ledovoz’s design, the approximate cost of its construction will amount to 100 million USD. Since it has got an opportunity of obtaining credit bearing no interest in the Arabian countries, then having taken it for 20 years, we should pay out 5 million USD annually. Assuming a vessel to make 10 trips
Trimaran-ledovoz of a stern loading
The "Alive Water" Project

Trimaran-ledovoz of a bow loading
Unloading of trimaran-ledovoz in a port

Ice blocks in an ice-receiving plant
The "Alive Water" Project

An incoming hot air from without into ice-receiving plant and formed thawed water and cooled air at the outlet

The scheme of cool air and drinking water supply of palmers during Hajj
Lading of a barcon and its loading into trimaran of a stern loading
Lading of a barcon and its loading into trimaran of a bow loading
for ice every year, we’ll receive 0.5 million USD from each trip as the sum of deductions on account of the credit repayment. More 0.5 million USD of deductions from each trip we’ll schedule on costs of exploitation, salary etc.

The total costs of one trip will form:

$$0.5\text{ million USD} + 0.5\text{ million USD} = 1\text{ million USD}.$$ 

The cost price of one litre of the thawed water will form:

$$1\text{ million USD} : 50\text{ thousand tons of water} = 0.02\text{ USD per litre.}$$

The cost of 50 thousand tons of the delivered water will make:

$$50\text{ million litres} \times 0.2\text{ USD} = 10\text{ million USD}.$$ 

The profit from one trip will amount to:

$$10\text{ million USD} - 1\text{ million USD} = 9\text{ million USD}.$$ 

In order to make 10 trips annually, it is necessary to go to the Antarctic Continent and come back in one month. The distance from the Antarctic Continent to the Saudi Arabia and back forms about 22 thousand km.

In a day the trimaran-ledovoz will cover about 22 thousand km: 30 days = 750 km. Its speed will be not less than 750 km : 24 hours = 32 km/h = 17.1 knots/h. The trimaran-ledovoz’s cruising speed of 17 and more knots per hour will ensure the vessels’ high turn-over and optimization of a ratio between the quantity of vessels and continuity of the technological succession of ice deliveries.

For the delivery of an annual requirement for 20 million tons of ice it is needed:

$$20\text{ million tons} : 50\text{ thousand tons} = 400\text{ trips.}$$

Then, for one year it will be amounted to:

$$9\text{ million USD} \times 400\text{ trips} = 3.6\text{ billion USD of profit.}$$

In addition to these profits, the transportation of the passing cargoes on the way back will also bring large incomes. Depending on the cargo, freight, distance the return journey with the barcons onboard can bring from several millions up to several dozens of million dollars. But in this case it will be necessary to increase the quantity of vessels. With the increasing in their quantity the capa-
bility of transportation of the passing (and not really) cargoes on return journeys to the Antarctic Continent will grow. Let's define a minimum payment for a trip with the barcons as 3 million USD. Then for one year we'll get:

3 million USD \times 400 \text{ trips} = 1,2 \text{ billion USD.}

Altogether, for one year the ice-shipping fleet serving the Saudi Arabia can bring at the minimum 5 billion US dollars of profit.

The participation in water sale of wholesale and retail will also considerably increase the amount of profit, and hence the project's profitability.

Per day will be loaded-unloaded:

400 рейсов : 365 дней = 1–2 судна.

400 trips : 365 days = 1-2 vessels.

Taking into account various kinds of delays on the way it is necessary to envisage doubled-tripled through-put of the coast infrastructure.

Although the given calculations are just approximate (with the obviously undervalued profitability), but are sufficient enough to become a starting-point for the developing of the full-scaled initial designing and feasibility report of the given project. Such high profitability of the project is stipulated by the following factors:

1) the absence of payments for ice as for a raw material;
2) the relative cheapness of the ice stockpiling method;
3) the relative cheapness of loading-unloading works;
4) transportation of ice by the means of the cheapest type of transport – by the sea;
5) the melting of the ice at the expense of the Sun and warm air in the port of destination;
6) unnecessity of any technological processes of treatment of the water formed after the thawing of ice, since the received water is a final and ecologically pure ready-to-use product.

Here it doesn't contain any calculations over the possible utilization of the trimaran-ledovoz as a tourist cruiser, but they will cert-
mainly have a huge potential. The arrangement of the equipment and trimming of the trimaran's side hulls as of the tourist cruiser will increase the project’s profitability.

Results achieved

Author of the Project Hamid Yusupovich Khalidov for the last three years has carried out a huge scientific and research work. There all reasons to assert that this great creative and intellectual work has resulted in solving of set tasks. The found by the Author brilliant engineering solutions allowed to create new technologies of receiving ice, water and cool air, to minimize costs at each stage of the technical chain and to obtain of the competitive cost price – 1-2 US cents for a litre of the received water that will make possible the implementation of the Project and will bring the following results:

• positive impact on climate and ecology of the Arabian Peninsula;
• it will allow to give up building new nuclear and thermal water-desalinating plants, that will have a favorable effect upon environmental safety of the Region;
• supplying of pilgrims' tents and routes of their movement to the sacred places during Hadjj time with fresh thawed water and cool air, and storage of the sacrificed animals' meat using ice before shipment to a place of destination;
• curative effect on the population of countries of the Arabian Peninsula because of consuming the high-quality, “alive”, from a medical point of view, water;
• prospects of improvement in women’ and children’ health and maternity protection;
• unlimited supplying of industrial and household needs of the population and economics with cheap ice;
• increase in crop capacity of cereals and forage crops and increase in prolificacy of domestic animals and poultry, improvement of both quality and productivity of lands;
The "Alive Water" Project

- environmentally safe technologies of obtaining, delivery and utilization of ice for receiving of water;
- competitive cost price of the thawed water received from ice;
- fast pay-back of the Project;
- opportunity of utilization of the thawed water in wide-range soft drinks production;
- creation of working places during building and operating of the coastal infrastructure, trimarans-ledovozes, barcons, ice-receiving plants, factories for packaging production and bottling of the thawed water etc.;
- versatility of trimarans-ledovozes in the transportation of both ice and cargoes stowed in barcons and reduction of loading-unloading time;
- opportunity for countries of the Arabian Peninsula to export both ice and water to the regions and countries suffering the scarcity of own water resources;
- prospects of maintaining and improving of living standards of the population of countries of the Arabian Peninsula after the depletion of oil reserves;
- using of practically inexhaustible and constantly renewable resources of water - the glaciers of Antarctic Continent, Greenland and Alaska.

Project "Alive Water" was reported and approved at numerous scientific and economic councils, conferences, forums (The International Scientific Conference dedicated to the 275th anniversary of the Russian Academy of Sciences (RAS) and 50th anniversary of the Daghestan Scientific Centre RAS, 21 May 1999, Makhachkala, Russia; The Saint-Petersburg's Economic Forum 2000, 13-17 June 2000, Saint-Petersburg, Russia; The First World Engineers' Convention, 19-21 June 2000, Hanover, Germany; The Second International Euro-Asian Conference on Transport, 12-13 September 2000, Saint-Petersburg, Russia; etc.). A computer film describing the technologies of the Project was being constantly demonstrated on television screens of the
Russian Exposition as one of Russia's leading scientific projects presented at the World Exhibition EXPO-2000 was being held in Hanover from 1 June till 30 October 2000.

Project has already been supported by the Russian Academy of Sciences, Ministry of Transport of the RF, Ministry of Science and Technologies of the Russian Federation. Resolution №36 from 17 February 1999 of the State Expertise of the Ministry of Science and Technologies of the Russian Federation, where it was pointed at "the importance and prestige for the Russian Federation to appear an initiator of such global scale Project, and also at the obvious interest of our country in obtaining of billion dollar (US dollars) orders for the building of special vessels and equipment...", has become a clear recognition of significance of the Project.

Owing to uniqueness of the Project, there are no its analogues or analogues of its engineering and technical solutions.

**Sustainability**

There are no reasons for ecologists to worry about the probable consequences for the nature of Antarctic Continent, Greenland, Alaska, because of ice delivery. If to accept for the 40-million population of the Arabian Peninsula a daily water and food consumption as 2,5 litres, then they will need one billion tons of ice annually. This makes just 0,04 cubic kilometre of ice. For comparison: just one shelf glacier Emery in Antarctic Continent contains more than 10 thousand cubic kilometres of ice. Each summer more than 5 thousand large icebergs and ice-floes thawing and dissolving in ocean water. Their amounts are so large that practically cannot be estimated. According to scientists' data, in the North and South Poles of the Earth about 2 billion tons of precipitates fall annually. The ice reserves do not decrease due to constantly ongoing water circulation processes in the nature.

So on one side we have an infinitely small, in comparison with total ice reserves, piece of ice, and on the other – the health and life
of millions of people and the environmental safety of the Arabian Peninsula.

The full-scale implementation of the Project will allow:
- to economize and regulate underground water resources of the Arabian Peninsula and to promote their renovation;
- to economize the utilization of partial oil and gas resources used for generation of electrical energy, which in its turn is used for the industrial and household air conditioning, obtaining of water at water-desalinating plants, obtaining of ice for industrial purposes;
- to avoid the pollution of the air, water and soil with the organic fuel combustion products and not to burn oxygen in the atmosphere to the amount of both saved oil and gas;
- to prevent, in combination with up-to-date technologies of land cultivation, from ongoing processes of land degradation and desertification;
- to have a favourable impact upon irreplaceable natural resources of the ecosystem of the Arabian Peninsula.

Lessons learned

Project “Alive Water” solves the problem of supplying the population and economics of countries of the Arabian Peninsula with water, cool air and ice at a reasonable competitive cost price.

The implementation of the Project in a very favourable way will affect the ecology of the environment, underground water resources, will save hydrocarbon fuel of the Region and can serve as a starting and an example for its expansion on the world scale.

Project “Alive Water”, regardless of its large scale and uniqueness, is feasible and is necessary for countries of the Arabian Peninsula today and for the future. In case of its approval and support by the countries of the Arabian Peninsula, their governments as early as in the nearest future could start its implementation. The Project of the XXI century, meeting the national interests, aimed at commercial succe-
ss, technically workable and ecologically irreproachable. The Project, implementation of which will introduce the countries of the Arabian Peninsula to the whole world as states using its financial power for the welfare of their people and technical progress.

This Project becomes especially promising and topical if to be considered from a viewpoint of realization of the Program “Life after oil”. In 10-20 years the oil exporting countries of the Arabian Peninsula could become the largest carriers and suppliers of the thawed water to all water-requiring countries and regions of the world. According to the UN’s data, in the nearest 25-30 years several billion people will suffer water shortage, whose needs will require more than two thousand trimarans-ledovozes. This will give the countries of the Arabian Peninsula an opportunity to maintain the achieved, owing to oil export, living standards of the population and successfully develop in the XXI century. Thus, step by step, year after year the Arabian Peninsula will turn into a blossoming garden for the welfare of its inhabitants and millions of pilgrims all over the world.

Globalization of the Project

Project “Alive Water” is versatile and applicable for any region of the world, located in torrid zone of the Earth as well as in moderate latitudes. The expansion and implementation of the Project on the world scale will positively influence upon stabilization of the world’s climate and ecology, retarding negative processes (the growing greenhouse effect, excess expenditure of the atmospheric oxygen over its reproduction etc.) occurring today in the world.

For countries and regions located in moderate latitudes, where summer temperatures are not very high, and, hence, there is no need in cool air, it is not necessary to build specialized ice-receiving plants. The ice will be utilized immediately after cutting ice-blocks into the smaller-sized chunks and/or ice crumbs.
The Project envisages the allocation of plants producing soft drinks on the basis of the thawed water in tropical and subtropical zones on islands and continents (taking into account sunny days and high temperatures), that will allow to create the world network on production and sale of beverages on the basis of the thawed water received from ice. For example, a trimaran-ledovoz loaded with ice in Antarctic Continent unloads this ice at an ice-receiving plant located in Jeddah. Then the vessel having loaded a finished produce (beverages), transports this produce to South Africa. From there the trimaran-ledovoz returns to Antarctic Continent to get ice and so forth.

Except the above-mentioned advantages of the given Project, there is one more very important, though not the least argument in favour of its expansion on the world scale. About ten billion tons of standard fuel was combusted all over the world in 1995. In 2000 the fuel consumption on the planet doubled. With all this, forests on the planet, even providing that they won't be cut down and will only be planted, will hardly be able to maintain such indispensable for life oxygen concentration in the atmosphere. Today the annual over-expenditure of oxygen over its reproduction has reached 10 billion tons (as is known, decrease in oxygen allowance in the atmosphere from the required 20-21% to 17-18% provokes an oxygen deficiency, asphyxia and death).

Therefore, choosing the strategy of supplying 3-4 billion people in the nearest 20-30 years with water (according to the forecasts of the United Nations' experts) should be considered very carefully, having reckoned up all possible ecological consequences.

The implementation of this Project will become an active and practical policy on putting into practice of decisions of the Kyoto Protocol. The Project shows the solution of the given problem that allows to give up building a great number of water-desalinating plants working on both nuclear and organic fuel, which will no longer excrete a huge amount of heat and carbon dioxide into the atmosphere, enhancing the greenhouse effect and burning such indispensable atmosp-
pheric oxygen. And millions and millions of tons of ice exported from the high latitudes and caused to thaw in tropics, will bring its positive effect in the improvement of climate on the Earth and retarding of negative environmental changes occurring in the world.

We are sure that in the person of medical science and ecological organizations we will take a comprehension and firm support in our undertaking. We rely on all possible support of UNO and UNESCO. The project must be realized under the patronage of these authoritative international organizations and at their active participation. Furthermore, all questions related to Antarctica are regulated by conventions and agreements of UNO.

The Project shows the way and opportunity to break this formed vicious circle, when for supplying of people with water, cool air and ice, it is necessary to burn irreplaceable hydrocarbon, nuclear fuel and atmospheric oxygen, worsening the environment, climate and causing desertification and dehydration, then for supplying of greater number of water-requiring people - to burn greater amount of fuel and atmospheric oxygen and so forth, heading to the environmental catastrophe threatening life on the Earth.
FROM THE EDITOR-IN-CHIEF

One day they asked I. Newton: “How did you become so great?” He answered: “Very easy. I got up on the shoulders of the giants and went further”.

But one day A. Einstein knocked the door and announced: “Everybody knows that is impossible. But one ignoramus, who is not aware of it, comes and makes a discovery”. But physicists didn’t accept A. Einstein’s theory at first, they rejected it as a radical one. It has passed the stages of inertness of human thinking. The first stage – it can not be, because it can be never. The second stage – there is something in this. The third stage – it is common knowledge long ago.

And nowadays we are observing the unique phenomenon again, when the hypothesis, which can change our ideas of the building of the Universe, mechanisms of functioning and developing in time and space. But in the present case you can not say that the “ignoramus” has come. S. Marshak said once: “Pile the logs for the fire with patience – the heaven fire will fall down from above”.

Hamid and Ullubiy Khalidov “pile the logs for the fire with patience”. In the period of 1999-2001 they declared and patented 101 inventions in more than twenty different spheres of science and technics, introduced new terms and statements. And for all this Hamid Khalidov didn’t have any scientific institution or collective except his son Ullubiy, his helper and co-author. It is really an outstanding intellectual result, which doesn’t have any analogues in the world and will be appreciated so far.

In this book, not big in its size, the authors presented the works of the highest intellectual level, absolute newness and great variety. No any compilations and diffuse generalization of somebody else’s works – only their own thoughts and conclusions. It is precisely this fact that distinguishes this book from number of others appeared lately. That is why this book with a clear
conscience I can say repeating the classic: “it is tight for words, it is wide for thoughts”.

In the present case his (H. Khalidov’s) mental outlook, particular cast of mind and the most important his ability of modeling the most complicated schemes and views in mind and lead them to the plain and intelligible models gather together. This is that kind of mind, which A. Einstein told about: “Imagination is more important than knowledge”. In unison to A. Einstein A.S. Pushkin earlier wrote simply: “Knowledge of genius needs imagination of genius”. That is not the only thing – all the inventions and projects of the father and son of human orientation for the welfare of man. In the proper way H. Khalidov has being occupied with invention and working out of scientific and technical projects for the latest five or six years, you know, and that is not for status or posts (though it won’t hurt), but as the former editor-in-chief of the Dagestan weekly newspaper “Novoye Delo” Oleg Sanayev wrote: “It is a need of the great intellect and kind heart to create for the good of people and the country”.

And the Most High has endowed them with His Grace – “... the heaven fire has fallen down from above”. They have addressed to the Undoubted Book – the Qur’an and have seen that which other men have not noted. They have managed to raise up above the literal perception of the studied ayahs of the Qur’an which in their opinion include the information of the building of a matter and the Universe, to look behind the curtain of the first perception and comprehend the Divine scientific character put in them. The closest associate of the Prophet Muhammad (peace be upon him and blessing), the fourth just caliph Ali once not without particular reason: “There are four levels at the least in every ayah of the Qur’an – literal, semantic, the Mystery and the Divine Providence”. The first three ones are accessible for the Man, but not for everyone, the Divine Providence is in hands of
the Most High. The Khalidovs have managed to rise up (by the mercy of Allah) above "... human, too human" (Nitse) and to see the Mystery.

Actually, they have been speaking for a long time about rather short scientific activity of H. Khalidov, they say he has been conducting the work which should be made by research institutes, and that the results of his researches can make a few doctor's and candidate dissertations in various directions of science and engineering. It is necessary to say, that the occurrence of the scientist-muslim in our republic of such a level will promote the growth of authority of Russia and Dagestan among islamic states and all over the world.

Such editions, as "Transport of Russia" (№28, 2001) and "The Northern Caucasus" (№7, 2003) highly estimating human contents of Hamid Khalidov's projects on supplying people with water, the water and air transportation safety, improvement and reduction of prices for the communication means, called H. Khalidov the future winner of the Nobel Prize. But it only becomes clear now, how far these inventions have outstripped the time. The same can be said about their new work "The Nuclear Potential of the Qur'an", which contents several discoveries in the field of theoretical physics and chemistry, each of which is worthy of this high award. This reliance is based, first of all, on conformity of a hypothesis of H. Khalidov of the information contained in the Sacred Qur'an. And for those who do not recognize the createdness of the Universe and the Divine nature of the Qur'an, the proof is the contents of the hypothesis, the logic of reasoning and conclusions and explanations of some phenomena which can not be explained by official physics.

The paradox (recollect A. S. Pushkin - "... And genius - the friend of paradoxes") is that not being a physicist H. Khalidov could understand fundamental problems of theoretical physics and build the strictly logical and argued hypothesis, find answers to the questions on the nature of gravitation and inertial movement.
But this hypothesis would have remained simply hypothesis, if the confirmation to its statements had not been found in the Sacred Qur’an and other Sacred Books. Besides, this hypothesis allows to explain many ayahs of the Qur’an, which till now haven’t been logically interpreted and explained.

For the people who believe in One God this hypothesis is one more reminding of greatness of the Word of Allah (the Most High, Uniform God), for those looking for, it is the beacon, to which it is possible to stick in searches of conclusive and clear true, for the world scientific community – proof of depth and scientific character of the Divine Book – the Qur’an.

*Academician of IAS,*

*Professor Magomed Eldarov*

P. S. I already hear the voice of inertial human thinking – “... human, too human” – and where is the mathematical description of the hypothesis, and where is this, and where is that? So, describe, oppose, debate. For it is said: “After the prophets – halims (i. e. scientists)”. But on the other hand, who of the physicists can guarantee, that everything is exclusively true in physics itself?

**Undoubted is that it is Him Who knows!**
ABOUT THE AUTHORS

Hamid Khalidov

Hamid Yusupovich Khalidov was born on the 19th of March, 1949 in Buynaksk, the Republic of Daghestan, Russia. In 1966 he finished school #1 in Buynaksk, in 1971 he graduated from the radio engineering faculty and in 1980 he graduated (by correspondence) from the faculty of the Daghestan State University.

His working way he began in 1971 as an engineer of communication, an inspector of an analytical department of a staff of the Ministry of Internal Affairs of Daghestan. He worked as the first secretary of the committee of Komsomol (Young Communist League) in Kizilyurt, the deputy director of a factory of "Separator" in Makhachkala, the chief expert of a department of industry of the Council of Ministers of Daghestan, the chairman of the foreign economic association attached to the Council of Ministers of Daghestan, the deputy head of the administration of Lenin's district of Makhachkala. Since 2000 Hamid Khalidov has been the counselor of the Chairman of the Daghestan scientific centre of the Academy of sciences of Russia.

From 1999 to 2001 he made 101 inventions in more than twenty directions of modern technics, and on the basis of them eleven scientific and technical projects were worked out. The projects were widely published in the foreign, Russian and Daghestan mass media (more than 200 publications), shown on Russian and foreign television, reported on eleven international and Russian conferences, demonstrated on six international and Russian fairs.

Let us enumerate some of the fields of his inventions:

- water-supply, ecology, climate;
- providing drinking water to the regions and countries, which are in short supply ("Alive Water" project);
- providing pilgrims going on Hajj with drinking water and cooled air;
• extraction of ice – smelting of ice blocks of thousands of tons from the massifs of icebergs and glaciers in the high latitudes of the Earth; creation of special devices – ice-receivers;
• industrial processing of ice – receiving of drinking water and cooled air; designing of special devices – ice-receivers;
• shipbuilding:
  – designing of special ships – ice-carrier ships, shipment and transportation of ice blocks by them;
  – designing of new types of ships – transport trimarans – transtrims;
  – ways of realization of loading and unloading works by transport trimarans;
  – barcons – floating devices, combining characteristics of barge and container;
  – ice-breakers and new ways of steering of ships through the ice;
  – transport trimarans on the underwater wings;
  – river transtrims;
  – transtrims of “River-Sea” class;
  – three-hulled tourist submarines;
  – evacuation of the crew of the submerged submarine;
  – salvaging of the submerged submarine;
• aviation:
  – aircraft construction – aircraft, rescue of passengers and crews of the planes, being wrecked;
  – helicopter construction – helicopter, rescue of passengers and crews of the helicopters, being wrecked;
  – APARC – an aircraft passenger autonomous rescue capsule (used both in a plane and in a helicopter);
  – parachute system of soft landing – devices and ways of self-braking of objects before landing;
• construction of high-rise buildings and structures – build-in devices and ways of emergent evacuation of people from sky-scrapers and TV towers;
- railway transport – unloading of frozen oil off tank wagons;
- metro-building – high-speed metro of tomorrow – two and more tier layer stations and underpasses;
- telecommunication – new secure express post of the 21st century – a mail to any place in few minutes;
- computer technologies – qualitative improvement of electronic devices used keyboard input of data.

In the Soviet period H. Khalidov wrote some works in the fields of industrial, rural economics, juridical sciences:

- disclosing of crimes concerned with the auto transport, hid from the place of crime (1973) – a new system of catching of auto transport, noticed on the place of crime was worked out; the component part of new system was new in principle card index of auto transport of the republic which helped to narrow the circle of catching of the searched cars quickly and effectively and disclose of the crime on “hot tracks”; the system was introduced in Daghestan and recommended for introduction in the country;

- rural economics (1977) – creation of effective agricultural production – a model of management, providing maximum productivity of labour of a farmer; the governing body of the country didn’t give the permission for conducting the experiment in spite of the support of the Daghestan government;

- raising the effectiveness in the fight with the delinquency and crimes of teenagers and young people (1978) – complex offers on the strengthening of the preventive fight with the juvenile delinquency main point of which was the transfer of the inspection on cases of minors to the nomenclature of the youth organization bodies of the republic; recommendations were accepted by the joint decision of the Central Committee of the Russian Youth Union and the Ministry of Internal affairs of the Soviet Union and introduced all over the country;

- ways and perspectives of development of the Soviet federalism (1980) – one of main result of work was the conclusion proved
that the principle of bilingualism, which was successfully established in the period of formation of the Soviet Union, must be remained dominating on the further stages of development of the country; it is worth to note that this conclusion was against the party Programme and official policy of the state in the sphere of national relations;

- **industrial economics** (1987) – a new method of price formation on new industrial production, bringing a category of “cost of effectiveness of consumer function (CECF)” into economic terminology; suggested method of price formation was included into “New state methods of price formation on new machine-building production” since 1989.

H. Khalidov bring the following new words-terms into scientific and technical terminology:

- **transport trimaran** - a transport vessel with a central hull and two side hulls, where engines and rudders are placed into each hull;
- **transtrim** (**transport trimaran**);
- **ledovoz** - a vessel-transport trimaran, carrying ice-blocks of thousands of tanks;
- **ice-receiving plant** - a device for industrial processing of ice-blocks with the purpose of getting drinking melted water and cooled air;
- **barcon** (**barge-container**) - a transport floating carrier using for transportation of different sorts of freight in transport trimarans;
- **postfon** - a device for speed and confidential sending of mails.

**Ullubiy Khalidov**

Ullubiy Hamidovich Khalidov was born on September, 2nd, 1977 in Makhachkala, the Republic of Daghestan, Russia. In 1994 he finished physical and mathematical class of the college #39 of Makhachkala with the gold medal, and in 1998 he graduated from the Daghestan State University of national economy with honours degree. From 1998 to 1999 he worked in the Representation of the
Ministry of Foreign Affairs of the Russian Federation in Makhachkala as a chief specialist. From 2001 to 2002 he passed the probation in Moscow State Institute of International Relations of the Russian Federation.

Since 1999 he has been working with his father. He is a co-author of 77 inventions and all the scientific and technical projects. He has more than ten publications in Russian magazines, newspapers, web-sites.

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On the 1st of September, 2005 at the presentation of the book "Seeking Knowledge" (in Russian) in the National Library of Daghestan Republic Hamid and Ullubiyl Khalidov were awarded with certificates and gold medals of "The 200th anniversary of Imam Shamil" by the International Committee of "Imam Sham's Fund" for "the creation of the foremost projects and inventions of the highest technology in different spheres of science and technics and the discovery of the fundamental scientific sense of the number of ayahs of the Holy Scripture – the Qur'an".
The authors of the book Hamid and Ullubiy Khalidovs consider the work "The Nuclear Potential of the Qur'an" the main their achievement. It is necessary to recognize that the finding by them in the Sacred Qur'an information about proton, neutron and electron is the great achievement of the scientists-muslims in discovering new scientific signs in the Qur'an.

It is symbolic that these discoveries are for the first time made by authors on the basis of the developed by them scientific hypothesis about the structure of a matter and the Universe, which, by their opinion, finds its confirmation in the Sacred Qur'an. They are sure that with the help of the Qur'an in the XXI century the scientists-physicists discovered many secrets of the structure of a matter and the Universe.