Lidia V. Fesenkova, Aleksandr V. Pancratov  
Institute of Philosophy, RAS

NOOSPHERIC MODE OF THINKING AND MODERN PHILOSOPHY OF NATURE

We consider philosophy of nature as a conceptual system describing and explaining the world. Philosophy of nature realizes the man’s striving for overcoming the chaos of the variety of information, coming from various branches of sciences with their own principles, notions and specific manner of the treatment of the world. Philosophy of nature is composed of this variety of pieces of knowledge which lost their professional specific features, and assumes the function of the world outlook to give a general representation of the world and its universal laws, in order to render the world more understandable. This desire has an archetypical character. Beginning from Thales, we see the striving for explaining the world by means of a single principle. The recent philosophy of nature gives a single view of the world. It realizes the mission to create a united set to master and to understand the array of the most essential representations: natural selection, Big Bang, ancient history (with its pyramids, antique myths) etc.

Now we have not one, but a number of relatively complete models of the world which we agreed to name “philosophies of nature”. They can be divided into two main groups: the first is directed to science, the second gives an occult look on the world. The first designs the pattern of the world based on scientific facts, assimilated by mass mentality. The second creates another vision of the world, another representation of the nature of man, of his origin and history. Here are Shambalah, Atlantis, mahatmas, soul reincarnations etc.

Nevertheless, these two groups of model world representations remain within the single category net. The system of the worldview categories limits the variety and gives some unification for all ontological representations of nature. For example, for the contemporary man the evolutionary vision of the world is inherent, whatever views he would hold. Recently the world is grasped as a process, as a formation—it is a common conviction, despite the fact, that it takes various concrete forms and is expressed differently in various doctrines. We can say that the idea of evolutionism serves as a foundation of the current philosophy of nature (in all its versions—from scientific to occult).

The present ecological situation encourages the creation of new models of civilization. One of the most popular is the notion of noosphere. It is well inscribed in the evolitional vision of contemporary culture. Moreover, it indicates a way out of ecologic crisis, which hits the mankind. This (noospheric) civilization model can be justly called the modern philosophy of nature.

But how did the notion of noosphere emerge? In the texts of the author of this model, Vladimir I. Vernadsky, there is no strict definition, but the essence of this notion is clear. In the notes for his “book of life” [1] Vernadsky christened the biosphere, transformed by the intellectual activity of man, by the name “noosphere”, that is, the sphere of intellect. F.T. Yanshina gives the following definition: noosphere is “such a phase of the evolution of biosphere of the Earth, in which (as a result of the victory of collective human intellect), the
man and united human society, on the one hand, and the environment, transformed reasonably by men, on the other hand, will begin to develop in concert" [2, p. 210]. This definition exactly expressed Vernadsky’s idea: noosphere is the phase of the evolution of Earth. But what does it mean—the victory of human intellect, even more-collective intellect; what does it mean—transformed man and reasonably transformed environment? To understand this, it is necessary to restore the history of coming to the life of the term “noosphere”.

This term was firstly introduced in 1927 by the French philosopher Édouard Le Roy, who referred to the similarity of his view with that of Pierre Teilhard de Chardin. Vernadsky began to use this word a bit later. The idea of Le Roy stated that noosphere was the phase of evolution of the Earth, when in the course of evolution the Homo sapiens came to the scene (hominization). The views of Teilhard de Chardin differed from that of Le Roy. He held the opinion that the arising of the intellect was not a natural process, but has a religious source.

Vernadsky, staying always within the limits of science, did not arouse the problem of the origin of human intellect. He was conscious of the fact that man appeared in the course of the multiphase evolution of nature. The initiating principle was presented by the physician from Florence, Francesco Redi. He was the first who pronounced in the XVII century the phrase: “all living only from living”. But how did the primordial living being arise? For Vernadsky the anabiosis was evident, within the limits of observations of a naturalist. According to him, the existence of the biosphere, its directed and cyclic movement, is determined by life and living substance. In the course of the evolution of biosphere man arises inevitably with his mind. There cannot be any fortuity, it was the Vernadsky’s categorical affirmation. The evolution of biosphere is going on as governed by a certain law. The man with his intellect is the inevitable regular result of this evolution. The meaning of this name “noosphere” reflects just this achievement of the purposive evolution of nature—the arising of man with his intellect. But we are not able to understand this process scientifically. Vernadsky writes: “It is evident that a certain direction in the paleontological evolution of organized living beings exists. The arising in the biosphere of intellect, consciousness, guiding will—all these man’s unique properties—cannot be occasional. But we are not able to explain this phenomenon scientifically, that is, it is impossible to connect it with the recent scientific world structure, supported by analogies and axioms”.

So, Le Roy proposed the term noosphere in 1927, Vernadsky made it in 1930, but this term came to the mass usage much later, only in the seventies. Why? F.T. Yanshina writes, that in the five-volumes posthumous edition of the Vernadsky’s works, under the editorship of academician A.P. Vinogradov, there was not at all any mention of noosphere. This main thought of Vernadsky was eliminated from this five-volume resulting edition. “He (academic A.P. Vinogradov) did not accept the idea of the evolution of biosphere and of its transformation into noosphere. His other followers and friends, even A.E. Fersman and K.A. Nenadkevich, apparently, did not accept it, too” [2, p. 102]. It is well understandable why. The edition was dedicated to the scientific works of Vernadsky, but the idea of noosphere was not referring to scientific ideas. Really, Le Roy and Teilhard de Chardin had not a (scientific) foundation for this idea. Vernadsky had such a foundation. It was connected with his biogeochemical principles, but the editors did not take it as sufficiently confirming.
The idea of noosphere returned back in the seventies, when the world ecological crisis evidently broke out. “The First international conference on environment and development, held in 1972, played an extremely important role in the revival of interest to the doctrine of biosphere” [2, p. 211]. In 1992 the term “stable evolution” arouse, repeating Vernadsky’s ideas. So the idea of noosphere returned. But with the return of the term there happened the receding from its first meaning, at least, from the meaning given to it by Le Roy and Teilhard de Chardin. The term “stable evolution” has a quite certain meaning—the intervening of man to management and governing of his environment. The “stable” is such an evolution in which man creates the balance of three factors: the possibilities of nature, needs of society and productivity of manufacture. Such an evolution reflects the activity of man, his management of interaction with nature. “Noosphere” is taken now as the condition of nature and society, when, as a result of man’s activity, the stable evolution is set.

What are the grounds of these representations? Vernadsky founds his doctrine in biogeochemical principles. It is the most important part of his teaching. It completed his “book of life” [1]. These fundamental principles were created by Vernadsky as the result of his whole doctrine of living and as a foundation of the idea of noosphere. But these principles are now not sufficiently known. Their contents are not a part of science, its critical analysis was not made, although the idea of noosphere, deduced from these principles became widely accepted. Why the basis of the idea of noosphere is not accepted? Let us consider this question.

Three biogeochemical principles deal with the main element of properties of living substance: with its biochemical energy. So, we have the problem to resolve: how to explore biogeochemical (BGC) energy. Scientific researches are based on measurements, but the problem is how to measure BGC-energy. At first, every scientific notion is to be supplied with the contents to render it measurable. For example, the temperature is connected with the points of boiling and melting of water; the heat with temperature; mass with acceleration of movement; the physical work with the change of volume, the pressure being fixed, etc. How is it possible to connect the BGC-energy with something that could be measured experimentally? Evidently, a new problem arises. The resolving of this problem would be the most important task of science. Let us remember that under question there is energy related to an abstract notion—to the living substance. This animate substance is not some singular concrete living being or species of organisms, it is the totality of all living organisms presented in biosphere. How is it possible to measure the energy of the totality of organisms? And, in general, can it be an object of measurements?

The path to resolve begins from the introducing of term “biogenic migration of the atoms of biosphere” instead of the term BGC-energy. Sometimes this notion is formulated in another way—biogenic migration of the atoms of the elements of biosphere. What it is: atoms of biosphere or atoms of chemical elements of biosphere? Vernadsky writes that to explain the process of interaction between the living and the inert, it is “convenient” to operate with the term “atoms of biosphere”; however, this term is not to be taken literally, it has nothing to do with atoms of biosphere, the talk is about metabolism in biosphere with two participants: living and inert substance. (In Vernadsky’s texts there are many unusual terms introduced for explaining his ideas.) So, the notion “biogenic migration” is introduced. How can we transfer it to a measurable notion? The biogenic migration of atoms
is an exchange of substances between the living and the inert, the consuming of food, air and light by the living. At the same time it is multiplying of the living as a result of consuming inert “atoms”. The multiplying of the living can be associated with such a value as the rate of some process. For example, human couple can reproduce descendants during 30 years—from 20 to 50, giving birth to not more then 30 children. These empirical data can be taken as indexes of biogenic migration. In such a way the average indexes of biogenic migration for all organisms can be obtained. But, inasmuch as the subject of investigations is the migration of atoms of biosphere, these indexes are to be connected with the indexes of biosphere. For that purpose Vernadsky introduced the idea of transferring from the rate of multiplying of organisms to the rate of covering by organisms of some area of biosphere. As result, the index was chosen: the rate of the covering of the length of Earth’s equator by the body of an organism, the organisms being formed up tightly side by side to each other along equator. For the measurement of energy the purely mechanical parameter is chosen: the dimension of body occupies some area of land. In such way the biogenic migration of the atoms of biosphere (of the atoms of chemical elements of biosphere) becomes an empiric value. So, the problem of experimental measurements of BGC-energy is resolved. Experimental parameters for this task are the average species rate of reproducing of the organism and its dimensions.

As result, we have some data which enable us to compare the biochemical energies of various species of the living. Here are some data from the resulting table [1, p. 328]: plankton 170 days, insects 200, big seaweeds 2000, rats 2800, hens 6000, Indian elephant 376000. These numbers should be read in this way: they give the time in days which is needed for the organism to cover by its body, in the going of reproducing, all the length of equator. This conditional time is held as the index of biochemical energy of the species of the living substance. These indexes are the comparative ones: biochemical energy of plankton is the biggest, of elephant is the least. (In accordance with the peculiarities of biogeochemistry as a science, in these ciphers it should be understood: elephant is not any concrete animal, but an average statistic elephant).

The analysis of these numbers enables us to formulate biochemical principles. The first: “biogenic migration of atoms of the chemical elements in biosphere has the urge to go to its maximum manifestation”. The second: “in the course of the geologic process the evolution of the species gives rise to the creation of the various forms of life, stable in biosphere, and goes in a direction, which increases the biogenic migration of atoms of biosphere”.

The first principle is to be taken in this way: a certain uttermost (maximum) quantitative characteristic of reproducing is inherent to every species. The urge to reach this characteristic is the law of nature. This characteristic of multiplying is the index of biochemical energy, measured in the form of biogenic migration of atoms. Biogenic migration is a notion wider then multiplying, it includes the whole complex of processes, taking place between living and inert: the consuming of food and water, the consuming of sun light, of heat and air. But the multiplying sums up the whole complex of processes. The essence of the first principle consists in the fact that the living strives to make maximum offensive on the inert, on environment. In ecology emerged after Vernadsky this offensive of the living with respect to the inert is called “succession”. The first biochemical principle can be comprehended as the principle of life aggression.
Unlike the Darwin theory of natural selection which concerns the problems of the survival of organisms, in this new doctrine the survival of the environment or biosphere in total is the object of interest. The living is extremely aggressive towards the biosphere, and this aggression constitutes the law of nature. The first principle is the law of aggression towards the biosphere. It is a very important affirmation: if it is so, the extremely important question arises concerning the need to regulate the aggression of the living. The data of the rate of multiplying are an empiric material. But the idea of striving to the maximum does not have empiric characteristics. How is this idea founded? By some unknown reason, the idea of maximum aggression remained in the texts of Vernadsky without foundation.

So, the living is aggressive. But what about man? There are no characteristics of man’s biochemical energy. Here Vernadsky’s method, used before, associated with the covering of some area by the dimensions of body, turns out to be unacceptable. Vernadsky gives such an image: 1,5 of billions of men, the population of the Earth in the beginning of the twentieth century. If they were put side by side tightly, they would fill the area of one lake (The Boden Lake in Switzerland), but this “bunch produces enormous changing in the whole planet, which is caused not by biogenic migration (...) but by human intellect and labor, sharply separating Homo sapiens from all the living substance” [1, p. 286]. The man with his “human intellect and labor” has to take the first place, ahead of microbes, in Vernadsky’s table. So, the first biochemical principle is the law of aggression of the living towards the environment, the man being the most aggressive.

The second BGC-principle, as well as the second law of thermodynamic, puts into practice the directional character of evolution, and sets the criterion of this character. Thermodynamic, as is well known, claims that all processes in nature have directional character and that the criterion of directional character depends of the conditions of the going of processes; the most widespread criterion is one of the minimum of the free energy. The biogenic migration of atoms of biosphere has directional character, too. The criterion of this directional character is the following one: evolution goes in the direction of arising of a species with the biggest capacity for biogenic migration, that is, in the direction of the more aggressive species. Inasmuch as such species is man with his “human intellect and labor”, the law of nature guides the evolution to the favor of the man. Let us consider the foundation of this second principle.

The first conception, that is, on directional character, or purposefulness, does not evoke any doubts; it is an empirical fact like an empirical fact in traditional science. The idea of purposefulness appeared in science because of the fact that the interaction between heat and labor was unequal, the labor transferred in the heat thoroughly, but heat “q” could not be transformed in labor “A” thoroughly, q > A. Here we have the same situation: the interaction of the living and the inert is unequal, unconvertible, the living tends to get more of inert—light, food—then to return; the living strives to grow, to multiply. Biogenic migration, the synonym of BGC-energy, is directed, inconvertible. This principle can be accepted as proved. But the idea of maximum remains unproved again.

The third BGC-principle is formulated in such a way: “during all geological period, from cryptozoa, the process of populating of the planet should go in a maximum possible rate for all the living substance, which existed in that époque [2].

102

http://rcin.org.pl/ifis
What is the general result? Biogenic migration, that is the “pressure” on the environment, the energy of living steadily strives to increase. The first and the second BGC-principles testify to it. The first affirms this in a historic context, the second—in a geologic one (according to Vernadsky). The aggression of living towards the inert increases steadily. Where does it lead the world to? Inevitably, the nature has to come to the condition when the living substance begins to exterminate the environment, the surrounding ambient. The ecologic crisis is inevitable. The nature, according to Vernadsky, is doomed to destruction. It will be ruined by the invasion of microorganisms. But as far as the maximum aggression belongs to man, this destruction is even more inevitable. In accordance with the logic of the laws, deducted by the scientist, the man is going inevitably to destroy the nature. And here the foundation for the idea of noosphere begins.

In the system of nature there is “organized conduct”, created by the living substance, but according to Vernadsky, we have the situation, in which the living substance, creating this organized conduct, contains the destruction of this organized conduct. How is it possible to overcome this contradiction?

It is resolved with the emerging of man—carrier of the intellect. But what is the intellect? Intellect is synonym of salvation, reservation, protection, welfare, in general of all good. *Homo sapiens*, having created the science, begins to save the nature. From here the idea of noosphere comes to life. It is brought as the mean of salvation, directed against aggressive laws of the life. For this, it is necessary to consolidate and to unite the whole mankind by means of scientific thought, which expresses totally the role of intellect. Vernadsky writes: “philosophical thought turned out to be unable to create a spiritual union which would bind the mankind in one whole. Religion intended to create it by a physical violence, without refusing of the murders organized in the form of bloody wars and mass executions (...) The state thought as well turned out weak (...) Just at that moment, in beginning of the twenties, the scientific thought—the force capable to create united mankind—appeared in real form (...) It is the force of geologic character, prepared by billions of years of the history of life in biosphere. It emerged at first time in the history of mankind in the new form: on the one hand in the form of logic necessity and logic indisputability of its main achievements, and on the other hand in the form of universal force with the embracing of the whole biosphere, of the whole mankind. As a result, the new phase of organization of scientific thought appeared in the form of noosphere. At the first time the scientific thought emerged as a force, which creates noosphere, with the character of spontaneous process” [3, p. 51]. And something else: “now we see a new geologic evolutionary change of biosphere. We enter into noosphere (...) But for us the fact of the great importance is that the ideals of our democracy go in concert with the spontaneous geologic process, with the natural laws, in correspondence with the noosphere” [4, p. 288].

The essence of the idea of noosphere is very clear in Vernadsky’s views about the autotrophic character of man [5 and 4]. The word combination “autotrophic” and “man” seems impossible, the man is naturally heterotrophic living being. But noospheric man will become autotrophic one. The meaning of the autotrophy is special: it is “social autotrophy”, according to Vernadsky. It means that man will synthesize food for himself, by usage of sun energy, as green plants. Only in that sense man will become autotrophic. He will liberate the vegetable kingdom from the danger of extermination. An unseen revolution of nature will
be held, the world will be transformed. The existing order of life, where autotrophy and heterotrophy are bound in one by natural world regulation, is going to change. Vernadsky was not embarrassed by his own thought expressed in the same article, “if they [autotrophers] did not serve as food to others organisms, in a few months they would have become extremely numerous and would have filled the world ocean, all its water” [3, p. 295]. (By the way, let us remember the works of the production of synthetic food, developed in the Academy of Sciences in the seventies by academician A.N. Nesmeyanov. That campaign was well financed but very soon closed).

So, the autotrophic character of man, according to Vernadsky, has a certain meaning. Man only synthesizes food, being himself physiologically without change. But the natural world net of autotrophy and heterotrophy will be broken, the whole world order will change. With all this, Vernadsky steadily believed in the idea of autotrophic character of man. He claimed: “there is question about the synthesis of food for man independently of surrounding living nature. When man resolves this problem by means of a mental process, he will be converted into autotrophic organism with social labor” [1, p. 249]. These Vernadsky’s views were commented by his biographer: “With the synthesis of food directly from sun energy, without intermediate agents, the mankind will liken herself to the green plants. The first autotrophic animals in the history of the Earth will arise. It will give rise to unheard—of geologic upheaval, to the new geologic era in the history of the planet” [6, p. 354]. The text of Vernadsky: “geochemistry puts the question: how can human mind change natural processes? How and why does the human thought influence on their flow?” [6, p. 355]. As we can see, Vernadsky considered the problem how and why human intellect is able to change natural processes. He did not doubt about possibility of this result. “The consequences (...) of geologic upheaval caused by autotrophy will be great”—Vernadsky writes. His biographer is going on: “it will not be the mankind, it will be another rational being” [6, p. 355]. Vernadsky’s followers accept his ideas and affirm that he confirms the project of Nicolay F. Fiodorov (1828–1903) who anticipated the idea of Vernadsky about autotrophic man; Fiodorov asserted: “it is necessary that man (...) would apply the force of mind (...) to his organs, to improve them, to develop, to transform them radically (for example, to make man capable to fly on his own)” [4, p. 9]. The same ideas of the man feeding by sun light were put by K.E. Tsiolkovsky.

Reassuring all what was written above: Vernadsky sees the law of nature as consisting in the striving of the species to the increment of biogenic metabolism or, what is the same, of biochemical energy. But it gives rise to the instability of nature. The evolution of the species is directed to the increasing of pressure on environment. As a result, our world is doomed to ecologic destruction. But actually its death is impossible: instability and tendency to crisis contradict its tendency to organization. According Vernadsky, these disastrous consequences of action of natural forces are to be overcome by the action of the natural forces themselves. A very fine double mechanism is set into nature—the instability and tendency to crisis is inherent to nature, but the capability to overcome this instability and tendency to crisis is inherent to nature as well. This capability of nature consists in the character of evolution directed to the arising of intellect and science. The intellect is known to be good, constructive, protective but not destructive, according to Vernadsky.
This optimism is based on the idea of tendency of nature to organization. The nature itself is not capable to keep organization. Because of this, the nature creates the man with his intellect and science in order to save itself. And man realizes this destination. So, the man’s intellect, will and reason result INSERTED IN THE SYSTEM OF NATURE. Without them nature is doomed to destruction. According to Vernadsky, the human intellect is an element of natural tendency to organization. But now it is not man’s, but superman’s intellect, capable to transform not only nature, but to transform as well the man, to unite the whole mankind and create the ideal society—noosphere, where the harmony of social activity of man and nature will be realized. So, the idea of noosphere results from the whole “philosophy of nature” of Vernadsky, being the necessary completion of all his vision of nature as an organized integral entity.

Such are the roots of noospheric mode of thinking which creates today the numerous civilization models in which the human intellect turns out to be a necessary element. The main feature of the noospheric mode of thinking is the belief that the consciousness is capable of changing natural processes to positive constructive direction, to guide these processes. The intellect of man has capacity for a reasonable organization of nature on the planetary scale.

The contemporary followers of Vernadsky’s ideas: N.N. Moiseev, E.V. Girusov, A.D. Ursul, V.A. Los’, E.S. Demidenko and others stake on the man’s intellect in the processes of noospherogenesis. All projects of the overcoming of ecologic crisis and models of the future society (futurological models of the noosphere or numerous principles of stable evolution) necessitate the high moral and emotional characteristics. The doctrine of limitless creative power of the man’s thought is the keystone of the recent models of civilization, directed to the exit from the ecologic blind-alley.

Such an approach guides to another blind alley—the one of unresolved logical contradictions. Really, we meet here the worldview paradox: in the most of recent models of civilization the man is taken in naturalistic way, as a result of natural selection, and is considered as the most perfect animal. His essence is not supposed to embrace something specific and distinct from the natural regulations. His anatomy and morphology predetermine rigidly all his functions. The man can act only as his structure determines to act. The spiritual sphere is cut away. The highest value settings (the true, the good, the beauty, the justice) are reduced to the purely natural processes. All typically human—selfhood, freedom, creativity, highest spiritual potentials—are viewed through the prism of action of biological laws. But at the same time it appears that just this spiritual sphere is the guarantor of the stability of the whole biosphere on planetary scale and, moreover, the condition of its existence. Without the world of the highest, spiritual values of man the survival of nature is impossible.

Just in the spirituality of man it is possible to find the roads to salvation from ecologic destruction. Thus, the spirituality is a foundation of all futurological models.

The spirit ensures the stability of the existence of matter. The ideal saves the material. As a result, conclusion contradicts the initial premise. Really, the building of the strategic model of survival is accompanied by a silent proposition of the presence of the man’s highest values. The man is intended to be capable to unite, to change his attitude to nature, to be just and good etc., since he possesses an enormous spiritual potentiality. Such an
initial set for the naturalistic understanding of man (inherent to natural scientific approach) is being substituted by romantic relation to him—relation, which has a utopian-sentimental character. The idea of noosphere genesis grows from the view of man as Demiurg, and not as a perfect animal. It is founded not on the biologic view of his nature, but on his spiritual characteristics. In other words, for creating the noosphere-like model, driving the world out of ecologic destruction, it is necessary to abandon the biologic image of man and put another one, not ensuing from the naturalistic doctrine of being, moreover, contradicting to it!

From where does this moral spiritual factor arise in models, inclined to the biologic and ecologic vision of the world? It does not ensue from representations of radioactive energy of the living substance (Vernadsky), and in no way is connected with the naturalistic vision of nature founding the contemporary scientific image of man. It arises apparently from nowhere. It is specific characteristic of not only representations of Vernadsky, but of all following elaborations of models of stable evolution, which, for their realization, necessarily suppose the arising of morally perfect man. Here we run into an ineradicable contradiction. Really, what on earth makes man grow spiritually perfected (if he is taken as a biologic being)? This request is more religious than scientific. Only religion, taking man as the image of God, proclaims the moral perfecting as a way to the salvation of the man and mankind.

So, the modern philosophy of nature, which founds recent biologic and ecologic principles, is built on the two alternative statements: on the one hand, on the negation of specific character of man, on the reducing of all his properties to biologic laws; on the other, on the implicitly intended spirituality of man and on his ability for spiritual growing. But the treatment of man as a carrier of spirituality and intellect, within the limits of contemporary models of civilization, is not justified. It is taken without any analysis, although has deep roots in the cultural tradition of mankind, ascending to gnosticism of the first centuries of our era and getting to blossom in Renaissance. Its genesis is related with the secularization of culture, which shifted the accent from God to man and attributed to the latter divine abilities. And the naturalistic comprehension of man has also its historic roots. It is brought from the Age of Enlightenment to our time and is applied to the ecologic problems of the XXI century.

The unresolved logical contradiction inherent to the contemporary strategic models of survival, which we ascertain, means that today it is impossible to grasp man as having exclusively biologic properties. Today, in the situation of ecologic crisis, the naturalistic comprehending of man “slips”. It requests revision and addition. Life itself imposes the necessity of new approaches to the problem in question and, first of all, it requests the REVISION OF THE IMAGE OF MAN assumed in the system of ecologic problems. The further work for the creation of civilization models consists in taking into account the necessity of the analysis of psychological sphere, in exploring the real properties of consciousness, its capability to percept new worldview paradigm, new values, in taking into account his psychological abilities for self-restraint in the name of general mission of salvation of mankind and planet.

Is man able to assimilate new values, to restrain himself and to oppress proper predatory instincts? Is he able to perfect himself, to oppress the evil in himself? Or is all this only an
illusion which serves to tranquilize man? Whether it is a shelter of the tremendous reality? The last is an object of the public consciousness and as well requests to be investigated. Recently these questions are central. The future of biosphere and mankind depends on the response to them.

So, all ecologic problems are focused on the question concerning the moral imperatives of the mankind. It means that philosophy is becoming the most requested discipline, as opposite to well extended opinion that it is unnecessary. Today we have to turn to ultimate philosophic questions, formulated by Kant: “what can I know?”, “what must I know?”, “what may I dare to hope on?” (as a consequence, “what I may not dare?”), “what is man?”.

– The recent situation shows that without a philosophical set of the problem of man the ecologic problem cannot be resolved.

**References (all items in Russian)**