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SECTION 1. PEDAGOGY, SPIRITUAL AND MORAL EDUCATION

UDC 17.022.1; 37.013.21

E.Kh. Lokshina, O.A. Bahrakh, V.G. Kuganov*

The main reasons for the desocialization of youth

(St. Petersburg State University of Economics, Russia)

The main reasons that negatively affect the spiritual development and spiritual culture of youth are considered; features and trends in the development of drug addiction in Russia, its rejuvenation; as well as a number of measures aimed at reducing drug addiction in the country.

Key words: youth, spiritual culture, spiritual values, drug addiction, education, patriotic education, youth policy.

Abstract: Principal reasons negatively influencing on spiritual development and spiritual culture of young people are examined; features and progress of drug addiction trends are in Russia, her rejuvenation; and also row of measures sent to reduction of drug addiction in a country.

Keywords: youth, spiritual culture, spiritual values, drug abuse, education, Patriotic education, youth policy.

"Be afraid of indifferent people - they do not kill or betray, but only with their tacit consent does betrayal and violence exist on earth" **Bruno Jasensky**

The most important philosophical questions that concern the relationship between the World and Man include the inner spiritual life of man, i.e. those core values that underlie its existence. Each person has a specific hierarchy of values. Values act as a link between the culture of society and the spiritual life of the individual. It is very important to instill in young people universal human values. they act as criteria for both the spiritual development and social progress of mankind. The formation of the spiritual culture of the individual occurs not only as a result of a targeted impact on it, but also spontaneously, under the influence of the conditions of society [1]. There are a number of serious reasons that negatively affect the spiritual development and spiritual culture of young people: - the lack of promotion of the role of the highest values of education as a factor in the successful adaptation of young people in all spheres of social life and employment [2]; - the absence of a serious youth policy, the lack of real forms of individual social self-expression, the reduction of "positive forms" of leisure; excessive commercialization of leisure and educational institutions; - lack of patriotic education; – collapse of the system of children's and youth organizations; - a sharp change in social status - stratification in society; – promotion of Western lifestyle and culture; – value crisis in society – loss of spirituality and life values; – weakening of family ties (in particular cases); – high level of economic and criminal crime in the country; - insufficient degree of civic consciousness. One of the main reasons for the desocialization of young people in the world is drug addiction and addiction. According to the results of a public opinion poll, today drug addiction is the second most important problem in Russia (the first, without a doubt, is crime). It is well known that Russia entered the world drug market in the mid-1980s. She is currently in

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into the top five producers and exporters of synthetic drugs and became the largest intermediary in the transportation of drugs to the markets of Western Europe. Starting

from the 2000s, there has been a transition of minors to hard drugs (heroin) in Russia, which is confirmed by structural changes in the drug market and a sharp increase in the number of minors who are registered primarily in dispensaries (with a diagnosis of drug addiction of the 1st or 2nd -th stage). Drug addicts have become younger: that is, more and more people who use drugs are teenagers, at best, at the age of 13-17 years [3]. In Russia, the following features are visible

the incidence and trends of drug

addiction: - growth in the volume of narcotic substances on the market and their availability, and, as a result, a high growth rate of drug addiction, especially

among women, children and adolescents; – a significant

expansion of the range of drugs; - polydrug addiction (the use of everything

in a row in unthinkable combinations); – the inclusion of drugs in the youth subculture,

which provides them with advertising; – illiteracy and inconsistency of preventive information, often leading to the opposite effect [4].

At the moment, the problem of the development of drug addiction in Russia remains unresolved. No methods have been found not only to eradicate, but even to stop this epidemic. Despite the fact that a number of measures are being taken, it is observed:

– increasing evidence of inefficiency and insufficiency of medical (medication) assistance in the treatment and rehabilitation of drug addiction; – the

existing system of treatment and rehabilitation of drug addicts is characterized by a focus on the old social structure of patients (the mentally ill, former criminal elements, etc.); – a departmental approach

prevails in rehabilitation and prevention, which hinders

a comprehensive solution to the problem of rehabilitation and prevention; –

the situation with rehabilitation leads to the creation of a myth about the incurability of drug addiction, which aggravates the

situation of drug addicts. The existing approaches to the fight against the spread of drugs and methods of treating drug addicts are ineffective compared to world indicators, which is primarily due to the existing system of financing rehabilitation, scientific research in this area and the remuneration of specialists, which does not correspond and does not improves the quality of work. Secondly, the existing system of treatment

and rehabilitation of drug addicts is characterized by a focus on the old social structure.

patients (mentally ill, former criminal elements, etc.). Thirdly, a departmental

approach prevails in rehabilitation and prevention, which prevents a comprehensive solution of the problem of rehabilitation and prevention. Fourth, and most importantly,

the orientation towards education as an important life value involves cultivating the conviction in a person that this is the only way to join an interesting and fulfilling life. Education is an indicator of the self-regulation of the personality of a modern person. Life determines education, and education affects life. Education is the culture of the individual [2]. The fight against drug addiction is a grandiose social and state

problem, which is completely solved only in a totalitarian society that is based on fear (Singapore, Malaysia). And in a democratic society, as the experience of European countries and the United States shows, this problem is so complex and multifaceted that so far it has not been possible to solve it. Not a single state is able to cope with the diseases of society alone by purely administrative measures, and religions traditional for Russia can become a key partner of the state in the spiritual and moral education of young people and all the people of our country [5].

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UDC 215

P.A. Chernomaz*

PASSIONARY THEORY OF ETHNOGENESIS - SPIRITUAL BASIS OF UKRAINIAN-RUSSIAN RELATIONS

(V.N. Karazin Kharkiv National University, Ukraine)

The essence of modern relations between Ukraine and Russia is considered as a result of the confrontation between the Slavic Orthodox and Western Christian superethnoi. **Key words:** Ukrainian-Russian relations, passionary theory of ethnogenesis, superethnoi.

Abstract: The essence of modern relations between Ukraine and Russia are considered as a result of the confrontation of the Slavic-Orthodox and Western Christian superethnoses.

Keywords: Ukrainian-Russian relations, passionarity theory of ethnogenesis, superethnoses.

The current state of Ukrainian-Russian relations is generated by a spiritual crisis, as indicated in our previous publications. It was noted that this crisis reflects the state of the spiritual basis of the Slavic-Orthodox super-ethnos - Orthodoxy and the Orthodox Church called to preserve spirituality among the people. An important aspect of the current crisis, to which this publication is devoted, is the confrontation between two different social supersystems, or superethnoi, Slavic Orthodox (Eurasian) and Western Christian (European).

For the first time, the concept of social supersystems was justified by the Russian philosopher and publicist Nikolai Danilevsky in his work "Russia and Europe" (1869), giving them the name "cultural-historical types, or original civilizations." He wrote: “Any tribe or family of peoples, characterized by a separate language or a group of languages that are close enough to each other so that their affinity is felt directly, without deep philological research, constitutes an original cultural and historical type.” In his opinion, there is a law - "the beginnings of a civilization of one cultural and historical type are not transferred to peoples of another type." At the same time, "not a single civilization can be proud of the fact that it represents the highest point of development, in comparison with its predecessors or contemporaries, in all aspects of development." N.Ya. Danilevsky devoted to the relationship of two cultural and historical types - the German-Romance, or European, and the emerging Slavic. These two cultural and historical types, which arose and developed on different spiritual principles (which were expressed in the confession, respectively, of the Catholic and Orthodox faith), in his opinion, are in opposition. The meaning of this confrontation is that “the very struggle with the German-Roman world, without which Slavic independence is impossible, should serve as a medicine for eradicating that ulcer of imitation and slavish attitude towards the West, which has ingrained itself into the Slavic body and soul through certain unfavorable conditions of their historical development". Following N.Ya. Danilevsky,

social supersystems, referred to by different terms, were studied by Oswald Spengler (“high cultures”), Arnold Toynbee (“civilizations”), Pitirim Sorokin (“cultural supersystems”), Lev Gumilyov (“superethnoi”) and a number of other scientists. In particular, the Russian historian and geographer L.N. Gumilyov in his work “Ethnogenesis and the Biosphere of the Earth” (1979) proposed one of the theories of ethnogenesis (the emergence and development of peoples), called passionary. According to this theory, each ethnic group goes through several stages of development from its inception as a result of a “passionate impulse” to the memorial phase. The full "life span" of an ethnos, not interrupted by dispersion, destruction or a new passionary impetus, as L.N. Gumilyov, is about 1500 years old. L.N. Gumilyov considered ethnos as both a social and energy system, and since systems can be of different scale and include subsystems, he provided evidence that superethnoi really exist as groups of ethnic groups that “simultaneously emerged in a certain region, interconnected by economic, ideological and political communication, which by no means excludes military clashes between them. However, unlike clashes at the super-ethnic level, when wars lead to

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extermination or enslavement (for example, the contact of Europeans with the natives of America in the 16th and 19th centuries), wars within the superethnos lead only to the achievement of temporary predominance (for example, the Guelphs and Ghibellines in medieval Europe or the strife of ancient Russian princes) while striving for a compromise. Like an ethnos, a superethnos, represented by its representatives, opposes itself to all other superethnoi, but, unlike an ethnos, a superethnos is not capable of divergence. This means that each superethnos is original and cannot be part of another. However, "it remains possible to break off individual ethnic groups and join them to another super-ethnos." Such cases, according to L.N. Gumilyov, occur on the borders of different superethnoi and can lead to the emergence of ethnic groups-“chimeras”, when a new alien ethnic integrity invades the superethnos and, “not finding an ecological niche for itself, is forced to live not at the expense of the landscape, but at the expense of its inhabitants ".

A superethnos can unite peoples of different origins who have adopted a certain "system of values" and the "demand of behavior" corresponding to it. Therefore, those that arose during the passionary push in the VIII century. “Despite local differences, the ethnic groups of Western Europe were united not by political, but by ideological ties - by Catholicism, which conquered in the 10th century. Western Slavs and Scandinavians. The spiritual basis that united the Eurasian superethnos was Orthodoxy, and the main peoples united in it were Russians, Ukrainians and Belarusians. According to L.N. Gumilyov, these ethnic groups originated about 500 years later than the Romano-Germanic peoples during the passionary push that took place in the 13th century. on the territory of Rus' and the Baltic states. “The Pripyat valley and the Dnieper region were in the shock zone: from here began the migration of the mixed Russian-Polish population, which later formed the ethnos called Ukrainian.” Also important is

the statement of L.N. Gumilyov that each ethnic group has two “cultural and political dominants” (which, by the way, can be supported by different representatives of the same ethnic group): 1) euturophilia

- the desire for originality based on adaptation to the enclosing landscape; 2) mimesis - the desire to imitate

neighbors, richer and more numerous. The current situation shows that part of the

political elite of the Ukrainian ethnos, professing the dominance of mimesis, set the goal for all residents of Ukraine to separate from the Slavic-Orthodox and join the Western Christian superethnos. The result of such a desire is always the same - the refusal of the people from their spiritual and ethnic identity and its replacement with the dominant system of values of

another superethnos. This result is well described by L.N. Gumilyov in his work “From Rus' to Russia” (1992), using the example of the desire of the “Westerners” to join Russia to “civilized” Europe: “The mechanical transfer of Western European traditions of behavior to the conditions of Russia did not bring much good, and this is not surprising. After all, the Russian superethnos arose 500 years later. Both we and Western Europeans have always felt this difference, realized and did not consider each other to be “our own”. Since we are 500 years younger, no matter how we study the European experience, we will not be able to achieve the well-being and morals characteristic of Europe now ... Of course, one can try to “enter the circle of civilized peoples”, that is, to get a foreign superethnos. But, unfortunately, nothing comes for free. We must realize that the price of Russia's integration with Western Europe in any case

will be a complete rejection of domestic traditions and subsequent assimilation. Moreover, L.N. Gumilyov warned about the inappropriateness for Russia of the European imperative of behavior in relation to the peoples inhabiting it: “The united Eurasia led by Russia has traditionally been opposed: in the west - Catholic Europe, in the Far East - China, in the south - the Muslim world ... Historical experience has shown that, as long as each nation retained the right to be itself, a united Eurasia successfully held back the onslaught of Western Europe, China, and Muslims. Unfortunately, in the XX century. we abandoned this sound and traditional policy for our country and began to be guided by European principles - we tried to make everyone the same. And

Thus, the implementation of the above goal, referred to in the political language as “European integration” of Ukraine, can be achieved only if the Ukrainian people abandon traditions (primarily the spiritual basis - Orthodoxy) and subsequent assimilation, that is, the loss of their distinctive features and their replacement. to those borrowed from the Western Christian superethnos.

The relationship between Ukrainians and Russians as the relationship of kindred ethnic groups was understood by enlightened people hundreds of years ago. This can be confirmed by an interesting handwritten document - "Statistical description of the Kharkov province of the Izyum district", dated 1837, stored in the State Archive of the Kharkov Region (SAHO). It is signed as follows: "Marshal of the nobility Colonel Malinovsky of the Izyum district."

This document is not similar to similar dry statistical descriptions for other counties. It attracts the author's presentation of his original thoughts, which combines natural observation with a good knowledge of history, references to historical sources. Analysis of the text shows that it was written by an outstanding personality. Indeed, Ivan Vasilyevich Malinovsky (1796-1873) was elected marshal of the nobility of the Izyum district several times and, apparently, very deservedly so. He was the eldest son of the first director of the Tsarskoye Selo Lyceum, Vasily Fedorovich Malinovsky (1765-1814). He received his initial education at the St. Petersburg Provincial Gymnasium, and in 1811 he entered the Lyceum, where he studied with the poet A.S. Pushkin and was one of his friends (in the lycee he received the nickname "Cossack"). At the end of the Lyceum I.V. Malinovsky entered the Finnish Life Guards Regiment and served until March 26, 1825, when he retired with the rank of colonel.

After the resignation of I.V. Malinovsky moved to with. Kamenka, Izyum district, Kharkov province, where the estate was located, which he inherited from his maternal grandfather, Andrei Afanasyevich Samborsky (1732-1815), archpriest of the Russian Orthodox Church, clergyman, teacher of English and confessor of Emperor Alexander I. A. A. Samborsky was born in the family of a priest in the village of Nizhnyaya Syrovatka, Sloboda Ukraine (then - the territory of the Sumy Sloboda regiment, now - the Sumy region of Ukraine) and was a descendant of representatives of the Ukrainian Cossack foreman who received the nobility (there is evidence that his relative was the famous Tsareborisovsky centurion Andrei Samborsky) . Secondary education A.A. Samborsky received at the theological school in Belgorod, and higher - at the Kiev Theological Academy. After that, he lived for 15 years in England, where he was rector of the Russian embassy church in London. Here he married an Englishwoman, Elizabeth Fielding, whom he converted to Orthodoxy. In 1772, their daughter Sophia was born - the mother of I.V. Malinovsky. Thus, the genus I.V. Malinovsky connected representatives of Russia, Ukraine and Western Europe. In this regard, the thoughts expressed by I.V. Malinovsky in "Statistical description of the Izyum district". In the

section devoted to the way of life of the population of the county, he writes: “... I consider it a crime to strive to separate Ukraine from Russia; and therefore, well-intentioned people should strive to destroy the nicknames “Moskal” and “Khokhla” with the proverb: “Be friends with the Muscovite and hold a stone in your bosom.” These supposedly brainless crests have faith as their first foundation; persecution for the faith by Catholic Poles *(representatives Western Christian superethnos.* – **P.Ch.)** and converted them to Orthodox Russia in 1654; The Ukrainian is faithful to his oath, almost fearless in battles, which is facilitated by his courageous appearance! Falsely modest at home, indomitable in the struggle for a just cause; imaginary careless, sluggish, - indefatigable in labor and approximately patient, achieving his goal ... ".

Thus, back in 1837, I.V. Malinovsky warned about the danger of striving to separate Ukraine from Russia and the need to remove the opposition between Ukrainians and Russians - peoples of the same faith who live not only next to each other, but also on the same territory, as in Sloboda Ukraine.

More than 150 years later, L.N. wrote about this. Gumilev, answering the question “why did the Poles lose the war with Russia for Ukraine” in the 17th century: “Like most of our contemporaries, the Polish lords and Ukrainian elders were convinced that their will would transform life, and therefore they ignored human behavior. So, the Poles believed that it was enough to attract the Cossack foremen, giving them gentry privileges, and all the Cossacks would faithfully serve; that it is possible to convince Russian rightly glorious people that the Catholic faith is better, and they will become zealous Catholics. In the same way, many hetmans believed that, depending on the political situation and their choice, one could submit either to Russia or Poland, and that success in the struggle for independence was determined by their ability to deceive the Moscow boyars or negotiate an alliance with the Turkish sultan in time. In fact, as we could see, the single super-ethnic affiliation of Russia and Ukraine, the mass support of “their own”, which were co-religionists, was of paramount importance. Against this universal feeling of unity, like waves against a rock, the rational plans of strong-willed, intelligent seekers of power were shattered. Two close ethnic groups - Russian and Ukrainian - united not thanks to, but in spite of the political situation, since the people's "volim" or "not volim" invariably broke those initiatives that did not correspond to the logic of ethnogenesis.

Conclusions 1. Mankind is not homogeneous, but mosaic, it consists of different peoples (ethnoi) and simultaneously emerged and localized in certain regions of their ideologically, politically and economically interconnected groups in the form of social supersystems - superethnoi. Each superethnos is original, has its own system of values, the imperative of behavior corresponding to it, and opposes itself to all other superethnoi.

2. Russians, Ukrainians and Belarusians formed the core of the Slavic-Orthodox super-ethnos, which is based on the spiritual and moral values of Orthodoxy. The Romano-Germanic peoples, for their part, united into a Western Christian superethnos based on the values of Catholicism. Located on the border with the Western Christian superethnos, Ukraine found itself at the epicenter of the confrontation between it and the Slavic-Orthodox superethnos. The trigger mechanism for the aggravation of relations was the fact that part of the Ukrainian political elite, ignoring the affiliation of the Ukrainian ethnos to the Slavic-Orthodox superethnos, set the goal for all residents of Ukraine to join the “richer” neighboring superethnos. 3. Based on the logic of

the development of superethnoi, the realization of the goal of "European integration" of Ukraine can be achieved only if the Ukrainian ethnos dissolves into the Western Christian superethnos due to the rejection of traditions (primarily the spiritual basis - Orthodoxy) and subsequent assimilation, that is, the loss their distinctive features and their replacement with borrowed ones.

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UDC 37

Yu.V. Dragnev*

FATRISTIC TRADITION AS THE BASIS OF CHURCH AND INTERNAL LIFE OF UNIVERSITY STUDENTS

(Association of Orthodox Scientists, Voronezh, Russia)

The article is devoted to the actual spiritual and moral problem of modern education - the patristic tradition as the basis of the church and inner life of university students. Particular attention is paid to the consideration of the scientific works of theologians, philosophers and ascetics of piety, devoted to the study of the church and the inner life of man. An analysis of literary sources led to the conclusion that the church and inner lives of students are inextricably linked with each other. Church life is characterized by the inner unity of people according to the law of love. In Lugansk, it is proposed to include the patristic tradition of the Orthodox Church in student traditions. The article may be of interest to educators, theologians, priests and a wide range of pedagogical community. **Key words:** patristic tradition, church and inner life, students, university.

Abstract: The article is dedicated to the spiritual and moral problem of modern education – patristic tradition as the Foundation of the Church and the inner life of University students. Special attention is given to the scientific works of theologians, philosophers, and ascetics of piety, devoted to the study of ecclesiastical and domestic life.
The literature analysis led to the conclusion that the Church and the inner life of students is closely connected with each other. Church life is characterized by internal unity of the people according to the law of love. In Lugansk is offered in students' tradition to include the patristic tradition of the Orthodox Church. The article may be of interest to educators, theologians, priests, and for a wide range of teaching community.

Keywords: patristic tradition, the Church and the inner life, students, University. is

The life of university students in Luhansk in 2016 cannot be called easy. Many of them have to earn extra money while studying at a university in order to be able to pay for their education. And this is not the whole list of problems. Now there are many student traditions in Luhansk, but never once, I emphasize, never once has student life been considered either in academic circles or in the educational process through the prism of the patristic tradition of the Orthodox Church. Therefore, I would like to focus on the importance of the church and inner life of university students, which are based on the patristic tradition of the Orthodox Church. Why exactly the patristic tradition of the Orthodox Church? Is Orthodoxy divorced from the patristic tradition? Why the Orthodox Church and not another? Why does a student need a Church? Why should a student be in the Church? Isn't the student a free person? Many questions immediately arise. However, we will consider only a part of these problematic issues, namely, why it would be desirable to include the patristic tradition in the list of student traditions, and perhaps even as a basis.

It should be pointed out that students, studying at a university, are in the information society, which considered as a special world, where provision is made for the freedom of expression of student youth with the use of information technology. In this artificially created world, the sovereignty of states is lost, and control over all spheres of life is transferred under the auspices of a certain “superstructure”. This implies the emergence of new models of education (electronic, distance) in the education system. In particular, this also applies to the life of university students.

In modern conditions of life, the process of reformatting humanity into an information society occurs through a rapid change in public consciousness, when entire countries become "informational" or "electronic", and in such countries an electronic government has been formed as a way of providing information and providing an already formed set of public services to citizens, businesses, other branches of government and government officials, e-universities with free education at any age, e-libraries, e-books, e-education, e-pedagogics, etc. Almost everything has become electronic. In that

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In this context, our study follows the requirements of the information age in designating the patristic tradition as the basis of the church and inner life of university students.

The patristic tradition is defined as the basis of the article and is understood through the tradition of the Holy Fathers of the Orthodox Church, who were the successors of the apostolic spirit and, thanks to the gifts of a God-enlightened mind, the grace-filled purity of the soul, offered in the writings the pure truth of Christ, which they embodied in their lives. In the presented article, there is no restriction in understanding the patristic tradition, which was formed in the writings of the holy fathers-theologians and ascetics of the 4th-8th centuries, as this is indicated by Western patrologists, where the period of patristic theology in the East ends with the death of St. John of Damascus (675-753). On the contrary, Orthodox scholars accept all the Saints glorified by the Orthodox Church, in whom the continuity of the divine presence of the Holy Spirit is seen. In modern education, this is precisely

what gives students the opportunity to impartially determine their meaning of life and church life. Because faith in the Truth, and Christ is the Truth, saves, but faith in a lie destroys. Proceeding from this, the church life of an Orthodox Christian is filled with faith in Christ as the real Truth of life and in the fulfillment of His commandments as normal properties of human existence. Based on the study of the scientific works of theologians,

philosophers and ascetics of piety devoted to the study of the church and inner life of a person (S. Bulgakov, I. Ilyin, John (Krestyankin), L. Karsavin, Kirill (Patriarch of Moscow), V. Lossky, A Osipov, K. Skurat, Theophan the Recluse (Vyshensky), A. Khomyakov, D. Khomyakov and others) [1-14], we point out that the church and inner life of students has the opportunity to begin with a definition of what the Church is. According to the teachings of the Apostle Paul, the Church is the body of Christ, of which every Christian is a member: “You are the body of Christ, and individually the members” (1 Cor. 12:27) [7]. The Church is a mysterious Divine-human organism. In one of his letters about the Church [10], John (Krestyankin) says that our

weapon is love for God and the Church. And our task is to protect the Church from schism and heresies. Bulgakov S. in his essays on the teachings of the Orthodox Church [1] indicates that it is impossible to determine the limits of the Church neither in space, nor in time, nor in strength, since the Church is, indeed, if not “invisible”, then unknown to me. No, the Church, even in her innermost being, is visible on earth, is fully accessible to earthly experience, has boundaries, is limited both in space and in space.

time. The invisible life of the Church, the life of faith, is inextricably linked with earthly, completely concrete forms of life. The “invisible” exists in the visible, is enclosed in it, merged with it into a concrete or symbol *(ÿÿÿÿÿÿÿÿ)* [1]. Indeed, how can one

know the limits of the Church if it is made up of people who are called to live forever with Christ? This is a rhetorical question and is not meant to be answered. Although, if you think about it and assume, the Church will have limits when people are born. But people are born, they live, they look forward to the resurrection of the dead and the life of the future age, they die and live, according to the teaching of the Church, forever. Whether the birth of human beings ever comes to an end, we do not know. In our opinion, this will not be the only criterion in determining the limits of the Church. According to A. Osipov, which he expresses in the book “The Way of Reason in Search of Truth” [9], today the path to this world is not easy for a person. Even believing in God, he must still choose religion. And having convinced yourself of the truth of Christianity, find the Church. This requires an impartial study of the faith and ascetic experience of the ancient Church (the era of the Ecumenical Councils), in order to see both the untruth of Catholicism, with its deep damage to spiritual life and proud claims to absolute power in the Church, and the rational worldliness of Protestantism, and mystical groundlessness, and often and the frank syncretism of the innumerable sects of today - to see all this in order to fully consciously and freely accept Orthodoxy.

It should also be noted that the information age for student youth is fraught with the danger of filling, basically, only with the knowledge of students during their studies at a university, without education. The information society acts as a whole. It is with such a problem as the transfer of only information in the form of knowledge that modern pedagogical education has come across. After all, knowledge is aimed only at the development of mental abilities without taking into account the requirements of the whole person. The development of students should take place in three manifestations: spirit, soul and body. For the development of the spirit - the Christian Orthodox faith. For the development of the soul - the patristic tradition of the Christian Orthodox faith, expressed in Russian ideology. For the human body - the thesis "having a healthy mind and soul - you

have a healthy body." It is necessary to clarify what the holy fathers say about the unity of society. D. Khomyakov in the book “Orthodoxy. Autocracy. Narodnost” [14] indicates that in essence in the Church everything that is not unconditionally in accordance with the idea of unity, even external, is only an earthly minus, introd

Stian unity; the ideal of the church is “one flock and one shepherd”. I. Ilyin speaks quite characteristically about this in his book “The Religious Meaning of Philosophy” [3]. The scientist points out that the Church, built on insincerity and insincerely led, distorts and perverts the cause of religion; she has lost the door to the Kingdom of God, she has planted falsehood in a holy place, she is an imaginary church. A family built on pretense and deceit is an empty illusion: it creates false communication and imaginary unity; it has no spiritual power, and it is doomed to disintegration. A deceitful state, built on violence, fear and pretense, is an organized depravity: it undermines and quenches all mutual trust; it perverts and weakens personal conscience and honor; it deprives human life of its divine meaning and creative freedom [3]. What are the correct and precise words: the ideal of the Church is “one flock and one Shepherd”, but is this true in the information society in which students live? The idea of catholicity is also revealed by A. Khomyakov in the book “The Church is One” [13]. The author argues that the unity of the Church necessarily

follows from the unity of God, for the Church is not a multitude of persons in their individual individuality, but the unity of God's grace, living in a multitude of rational creatures, submitting to grace. Grace is also given to the disobedient, who do not use it (those who bury their talent), but they are not in the Church. In this context, it is appropriate to cite the statement of Theophan the Recluse (Vyshensky) from the book “On Orthodoxy with warnings against sins against

it” [12]. Thus, discussing the basis of Orthodoxy, the saint asks the question: “What is the power to preserve the truth that the Lord has placed in His Church itself?” And he answers: "In unity." This is what I would like to lay in the foundation of the patristic tradition as the basis of the church and inner life of university students - the unanimity of students in matters of education and upbringing, and not just the acquisition of knowledge. It should be recalled that the student environment -

this is an intensive zone not only of intercultural and interethnic contacts, but also a zone of spiritual and moral progress or degradation. Young people from small towns, villages and urban-type settlements come to Lugansk to study, as well as students from countries near and far abroad. As a result of these contacts, stereotypes of perception and behavior are fixed in many students. Student age is a decisive period in the development of students' self-awareness. During the period of study at the university, the self-consciousness of students expands the system of their ideas about the world and strengthens their position in it. At this age, along with student traditions, the patristic tradition could help organize the inner life of university students. Student age is a transition between youth and adulthood, in which complex processes of finding the meaning of life take place in the personality of students. After all, it is necessary that each student think in his own way and live his free life without fear that it will lead to a sad end. It is possible, but without the Church, without the patristic understanding of spiritual life, it is impossible. So what criteria should be followed then? In our opinion, one of the criteria is the catholicity of the church's opinion about spiritual life. Thus, L.

Karsavin in his book “The Holy Fathers and Teachers of the Church (Revelation of Orthodoxy in Their Works)” [4] points out that the Truth of the Church is distinguished by a “catholic” or, according to the most accurate Old Slavonic translation, a “catholic” character. Another criterion, we think, can be the fact that the Church is not only a human organization, but God's

dispensation for the salvation of people. It is understood as a living organism. So, on May 31, 2015, on the feast of the Holy Trinity, at the end of the Liturgy in the Assumption Cathedral of the Trinity-Sergius Lavra, His Holiness Patriarch Kirill of Moscow and All Rus' addressed the faithful from the balcony of the Patriarchal Chambers with the First Hierarchal Word [5]. Here are excerpts from this word: “And if the Church were only a human organization, if it only united like-minded people, just as many existing human organizations unite like-minded people, then it would not exist long ago. Today we are celebrating the birthday of the Church of Christ… We are celebrating the great sacrament of the union of the Divine and the human, but not in the person of Jesus Christ, but in the Church of God.” In this regard, exploring mystical theology, V. Lossky in the book “Essay on the mystical theology of the Eastern Church. Dogmatic theology” [6] asserts that the Orthodox Church, although it is usually called Eastern, considers itself, nevertheless, the Church universal. And this is true in the sense that it is not limited to the sphere of a certain culture, the heritage of the Hellenistic or any other civilization, to any forms of culture characteristic only of the culture of the East.

K. Skurat says in his book “The Holy Fathers and Church Writers (I–V centuries)” [11] that one should trust the only church teaching [11], revealing the theology of St. Irenaeus. The scientist cites his words about the Church as the custodian of the apostolic traditions: “With such evidence, one should not seek from others the truth, which is easy to receive from the Church, for the apostles, like a rich man in a treasury,

put everything in it that pertains to the truth, so that whosoever desires takes from her the drink of life. She is precisely the door of life, and all others (teachers) are thieves and robbers. Therefore, we must avoid the latter, but with the greatest care choose what belongs to the Church, and accept the tradition truth."

Therefore, only by nourishing his soul in the Church, leading just such a church life, can a student bring Orthodox culture to a school or other institution, showing by his example how one can live long-sufferingly, mercifully, without envy, without arrogance, without pride, without outrage, seeking his own, not being irritated, not thinking evil, not rejoicing in iniquity, but rejoicing in the truth; cover everything, believe everything, hope everything, endure everything, as it was said by the Apostle Paul in the First Epistle to the Corinthians (13:4-7), thus showing love for people and their fellow students. In this context, I. Ilyin in his book Fundamentals of Christian Culture [2] directly says that Christians are called to create Christian culture not through the Church, for the Church cannot be involved as an instrument in all economic difficulties, in all political strife, in all wars, scholarly disputes and artistic wanderings; can't prev to grow the Church into a kind of ruling union, responsible for all earthly failures and disasters: the Church has a different, higher and better calling. In the same way, we must create Christian culture outside of the Church, for this would mean taking the Church away from her direct mission —to observe the faith, the sacraments, the office, and the Spirit of Christ—and expanding her scope and duties to the point of absorbing all life. In this regard, it is appropriate to cite the statements of Professor A.I. Osipov, who in the book “From Time to Eternity: The Afterlife of the Soul” [8] indicates that the Church is indeed the “leaven” (Matt. 13:33) of society, and its spiritual state directly determines the internal and external well-being of the people: “ a little leaven leavens the whole dough” (Gal. 5:9). What a pity when they don't see it and do not understand.

So, the church and inner lives of students are inextricably linked with each other. Church life is characterized by the inner unity of people according to the law of love. If we talk about the inner life of a Christian student, then naturally we will talk about church life. Therefore, in Lugansk, we propose to include the patristic tradition of the Orthodox Church in student traditions.

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G.A. Kirmach*

Work with students in the conditions of the spiritual and educational center of the university

(Association of Orthodox Scientists, Voronezh, Russia)

The article outlines the ways and directions of improving the spiritual and moral work with university students. The author cites the monitoring of the activities of the spiritual and educational center of the Luhansk State University. Taras Shevchenko in support of their positions.

Key words: spiritual and moral education, university students, areas of spiritual and moral education, Center for Spiritual Education.

Abstract: In the article presents the ways and directions of improvement of spiritual-moral work with University students. The author cites the monitoring of the activities of the religious education center of Lugansk State University. Taras Shevchenko in support of their positions.

Keywords: spiritual and moral education, students of the University, directions of spiritual and moral education, Center for spiritual enlightenment.

The problem of educating a person, and hence peoples, in all centuries and millennia has been, is and remains a priority and dominant task for the entire human society. Any global and systemic crises, man-made disasters, wars, political and economic confrontations, environmental problems are all, ultimately, the consequences of a person's wrong education. Higher education performs an important mission - it ensures the formation of a harmoniously

developed personality. Harmonious development includes not only the development of intellectual abilities, but also the formation of the spiritual and moral qualities of the individual, which in a holistic personality should be linked into a single system of existentially meaningful values. The Orthodox Church has always been and is the bearer and educator of spiritual and moral values traditional for our people. In this regard, there is a need to acquaint student youth with the basics of Orthodox culture and religion. By the Providence of God, for the first time in the almost 100-year history of the existence of Luhansk Taras Shevchenko University (from 1921 to 2015), a spiritual and educational center named after St. Nestor the Chronicler

was created. It was opened on December 8, 2014 after a hard spring and summer when Luhansk and other cities of the unrecognized Luhansk People's Republic were bombed *(hereinafter read: the unrecognized Lugansk People's Republic.* - **Ed.).** It is significant that 2015 has been declared the Year of Spirituality in the Lugansk People's Republic: spirituality lessons have been returned to schools and universities,

Orthodox priests of the Moscow Patriarchate take part in all spheres of public life, the introduction of a course on the basics of Orthodox culture is being tested in educational institutions of various levels, etc. The strategic goal of the Center's activity

objectively follows from the foregoing – the creation of favorable conditions for the spiritual and moral development and education of university students. We believe that this goal can be achieved as a result of a comprehensive and phased

implementation of four areas of strategic objectives:

1. Spiritual direction. 2.
Educational direction. 3. Scientific
direction. 4. Educational
direction. Tasks of the spiritual direction:

1. Concentration of efforts on the

education of the spiritual and moral values of Orthodoxy in cooperation with the diocesan administration, the Lugansk Theological University, the Lugansk Orthodox Gymnasium in the aspect of developing a concept and program of Orthodox education and upbringing of preschoolers, schoolchildren, students and adults.

2. Annual preparation for the celebration of the Nativity of Christ, the Day of the Holy Great Martyr Tatyana, Easter, etc. 3. Conducting

spiritual conversations. Tasks of the
educational direction: 1. Concentration of
efforts on the creation of a fund of books
secular writers on the Orthodox theme.

2. Collection of Orthodox literature and patristic heritage.

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3. Establishing relations with the republican library on the use and transfer of exhibitions on Orthodox topics.

4. Collection of Orthodox rarities (icons, church utensils, photographs, historical evidence, personal items). 5. Creation of charitable foundations and blah

charity account.

6. Holding meetings of students with the clergy, organizing and visiting cultural and historical centers of Orthodox culture, organizing pilgrimages, etc.

Tasks of the scientific direction: 1.

Concentration of efforts on issues devoted to the consideration of the interaction between religion and science. 2. Organization of scientific

research on spiritual and moral topics. 3. Organization of student science through

the mind of spiritual and moral education.

Tasks of the educational direction: 1. Concentration

of efforts on issues devoted to the consideration of the interaction of students, curators and the temple; spiritual and educational center, temple and students; the temple and the trade union organization of students, etc. 2. Implementation of educational activities in a single information and

educational space with other cultural institutions and public organizations in Lugansk.

3. Assistance in the patriotic and Orthodox education of the younger generation, students, students and adults, with the aim of instilling love for the Motherland and the Orthodox faith; promoting the study of history, cultural and spiritual traditions. Thus, the comprehensive implementation of the above areas of work, the actualization of spiritual

and moral aspects in the content of education and the educational process at the university, as well as the choice in favor of the priority of spiritual and moral education over other areas of educational work will allow raising the level of spiritual and moral culture in 5 years. students. We started our work with the monitoring “Formation of the spiritual and moral qualities of a student's personality in the educational process”. We consider it extremely important for ourselves to track personal changes in our students, offering them various

forms and methods of spiritual and moral education. Only the annual diagnosis of the formation of the spiritual and moral qualities of the individual gives us reason to assert that the proposed forms and methods of work within the framework of the spiritual and educational and scientific and educational sections are effective and allow you to move towards the expected result. As part of the implementation of the spiritual

direction of the Center, once a month, we offer meetings with Orthodox priests on theological topics. In this context, the main differences in the spiritual practices of world religions, the meaning of human existence and its purpose in this world, some ways of knowing the true faith, knowing God were considered. In addition, every Thursday of the week, the Center organizes a service of trust and counseling for students and teachers on the Orthodox way of life. Once a month we invite our students to classes at the school of piety, where we introduce students to the lives of the saints. The first of them was dedicated to the Monk Nestor the Chronicler, the spiritual patron of our Center. During these classes, students also learn about

the life of St. Sergius of Rado Nezhsky, St. Seraphim of Sarov and many other saints. An acquaintance with the lives of saints gives the youth an opportunity to get an idea of the ideal image to which we should all aspire. In the classes of the school of piety, we talk about the amazing pages of the life of the saints, pay attention to how they loved their neighbor, how they served for their neighbor. Love is what we lack so much today. What can be learned from saints. I would like to dwell in more detail on the work of popular student clubs as part of the work of the educational section. One of the popular clubs of the spiritual and educational center is the family education club "Love Wise". Psychologists and educators believe that the spiritual and moral development and upbringing of the individual begins in the family. The values of family life, assimilated by a child from the first years of life, are of decisive importance for a person at any age. Because of this, we believe that the upbringing and training of future parents should begin as early as secondary school and continue in higher education. In club classes, girls and

boys learn to realize what their true destiny is, what is the role of women and men in society, what does a traditional family mean and what are its values. In conversations

with the younger generation, we raise the topic of having many children and motherhood, trying to change another false stereotype about a large family as an unhappy, unpromising unit of society. According to the questionnaires, none

the girl would not want to become a mother of many children. It is obvious that ideas about the parental role have changed, the institution of the family has been shaken.

Classes of the club "Love Mudra" are held in various forms: a lesson-lecture, a lesson-seminar, a lesson-discussion, a lesson-thinking, a lesson-meeting, a lesson-conference, a film lecture, etc. Another club that is popular with

students , – intellectual cinema club. In our opinion, cinema has certain advantages in spiritual and moral education over other types of art, which, through its accessibility, popularity and realism, visibility, has power in time and space. Cinematography influences the subjective world of the individual, gives rise to deep and complex experiences. Art activates the mental activity of students, helps them better understand the world around them, other people and, as a result, changes their attitude towards them.

Despite the fact that in modern cinematography there is a shortage of strong, positive, kind, moral heroes who could become role models, the staff of the Center selected a number of feature films and documentaries in which there is a moral conflict, examples of piety, courage, faith, loyalty and devotion. All classes are held in the form of a dialogue, when every opinion is valuable for the leader, when you can calmly engage in moral polemics with other members of the club and not be afraid to be ridiculed or misunderstood.

Since September 2015, meetings with Orthodox writers and poets have been regularly held at the Center as part of the work of the literary lounge “In the beginning was the word…”. The well-known Lugansk Orthodox writer Ivan Morozov introduced the students to facts from the life of prominent figures from the field of history, science, literature and the arts, who, by their life example, demonstrated the observance of high moral qualities, nobility, restraint, generosity. According to Ivan Morozov, there are many examples in history when, in difficult and sometimes tragic situations, believers found support and consolation from the higher Heavenly Powers. Such outstanding historical figures as the Russian commander Alexander Suvorov, Admiral Fyodor Ushakov, philosopher Grigory Skovoroda, academician Ivan Pavlov were believers who proclaimed the Christian worldview throughout their lives. For a long time, the students remembered the meeting with the Orthodox literary association “Svete Quiet". Orthodox poets spoke about their lives, about how they came to God, about their views on Orthodox literature, and read out many of their poems. The students present also shared their creativity. The scientific direction in the activities of the

Center occupies a paramount place. From November 9 to 10, within the walls of Luhansk State University named after Taras Shevchenko, an international scientific and educational event was held, dedicated to the development of spiritual and moral culture in higher education - "Nestor Readings". It was held under the motto "Spiritual and moral culture in higher education: innovations, continuity, worldview paradigms". It was attended mainly by representatives of the Lugansk diocese of the UOC-MP, teachers and students of leading higher educational institutions of the Lugansk People's Republic, the Interregional Educational Public Organization "Association of Orthodox Scholars", the Luhansk Theological University in honor of Archangel Michael, the International Public Organization "Union of Orthodox Women" and scientific and publishing expert center "Science and Word". The purpose of this event is the development of innovative experience in the field of spiritual and moral development, upbringing and

education in higher education; public discussion of the university program of spiritual and moral education of students; promotion of productive cooperation between the Church, the state and society in the field of spiritual and moral development and education of youth. During the plenary session, the reports of the leading scientists of the LPR and Russia, as well as representatives of the Church, were heard. Of particular interest was the speech of Father Gennady Zaridze (via videoconference) "The spiritual and moral state of students in the conditions of an anthropological crisis." In the course of the scientific readings, different points of view, ideas and thoughts, gleaned by the speakers from the writings of the Holy Fathers, theological and psychological works, were offered as materials for discussion. As a result of the event, scientific problems in the field of spiritual and moral education of youth were singled out, which formed the basis for the research work of undergraduates and graduate students of the university. On the second day of the international readings, master classes were held at the Center's experimental sites, where they presented the innovative experience of educational institutions in the field of spiritual and moral education

of youth. During the event, the listeners of the master classes were able to ask their questions on this topic.

Every year, within the framework of the Days of Science at the University, the Spiritual and Educational Center holds a sectional meeting devoted to spiritual and moral issues. At the conference, we will listen to the reports of the faculty of the university and our undergraduates and graduate students who work in this scientific direction. During the year, for teachers, undergraduates

and graduate students, the spiritual and educational center offers a series of scientific and methodological seminars and webinars on spiritual and moral issues. Thanks to the membership of the Center's employees in the Interregional Educational Public Organization "Association of Orthodox Scholars", we have the opportunity to actively attract invite scientists of this organization to exchange experience in matters of spiritual and moral education of young

people. Summing up the annual work of the Center, I would like to remind you that its creation was not accidental. Life itself, history itself has proved that we walk the Orthodox earth and fulfill the most elementary Truth: we live with God's help and on the foundation of the Orthodox worldview. Yes, there were difficult times and persecution of the Church, but it is time to restore the truth of God. This is our most important goal right now. It is impossible to live on earth without it. Therefore, we strive to provide the most important thing on the educational market - the Orthodox worldview. And we have the right to offer it to society.

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A.I. Gazin*

Methodology for separating sources of information according to the degree of trust in accordance with the goals of teaching and educating a person **(Lipetsk State Pedagogical University, Russia)**

The problems of training and education under the conditions of continuous informational and informational-psychological influence are considered. A brief analysis of the methods and means of information and psychological influences has been carried out. A method for analyzing sources of information according to the degree of trust is proposed as one of the ways to reduce the degree of negative influence of information. Criteria for attributing a source of information to a certain degree of trust and their quantitative assessments have been developed.

Key words: informational and informational-psychological influences, influence source of information on the formation of personality, the degree of trust in the source of information.

Abstract: It is considered the problems of training and education in conditions of continuous information, information and psychological impact. A brief analysis of methods and tools information and psychological impact was made. It was offered the method of analyzing information sources with it confidence level, as one of the ways to reduce the degree of negative impact of information. The criteria of differentiation source of information to varying degrees of confidence and their quantitative assessment were designed.

Keywords: information, information and psychological impact, influence of information sources on the formation of personality, the level of confidence of the source of information.

Introduction

In the modern world, a huge number of sources of information are concentrated, constantly influencing the formation of people's attitudes to processes that often take place thousands of kilometers from their place of residence and are not directly related to them. Thus, a person is distracted from the awareness of his personal problems, from understanding the need for development in accordance with the values of the society in which he lives. There are a huge number of means and methods of information and psychological influences [1], thanks to which a person is separated from the awareness of the surrounding reality. He starts counting insignificant processes occurring with him and his environment. During the formation of a personality, this leads to the imposition of experiences alien to it, and along with them, values.

In the modern world, sources of information responsible for the stable qualitative development of a person, containing value-oriented information directly related to the world around him and society, with an understanding of the need for education, creative, intellectual and spiritual development, are becoming more and more difficult to access. And this, in turn, significantly slows down and complicates the learning process in accordance with the chosen direction. These circumstances to a large extent actualize the ability of a person to search for and identify sources of information that correspond to the goals of personality formation, and, as a result, to affirm the correctness of the choice of these goals.

Separation of information sources according to the degree of trust

In accordance with the "Strategy for the development of education in the Russian Federation for the period up to 2025" [2], "the priority task of the Russian Federation in the field of raising children is the development of a highly moral personality who shares Russian traditional spiritual values, who has an act real knowledge and skills, capable of realizing its potential in the conditions of modern society, ready for peaceful creation and defense of the Motherland. The implementation of this task is possible only if the person is familiarized with the indicated traditional values, the promotion of these values in the means

Table 1

Classification of information sources according to the degree of trust

Source of information (I.I.) I.I.				
I.I. with absolute trust	I.I. with a high degree of trust	with an average degree of confidence	I.I. low confidence	I.I. zero confidence

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table 2

Quantitative assessments of the criteria influencing the attribution of information sources to a certain degree of trust

No. p / p	Criterion name	Criteria value	Quantity–venous grade
1	Does the I.I. information prohibited for distribution in the Russian Federation [4, 5]	Yes	-100
		No	5
2	Correspondence of the information contained in the source with the cultural criteria for the formation of personality	depending on the degree of compliance, the value of the criterion is taken from 1 to 10	10
3	Correspondence of the information contained in the source with the spiritual criteria of personality formation	depending on the degree of compliance, the value of the criterion is taken from 1 to 10	10
4	Compliance of the information contained in the source with the educational goals of personality formation	depending on the degree of compliance, the value of the criterion is taken from 1 to 10	10
5	Compliance of the information contained in the source with the learning objectives	depending on the degree of compliance, the value of the criterion is taken from 1 to 10	10
6	Usefulness of Information for Personal Development	depending on the degree of utility, the value of the criterion is taken from 1 to 10	10
7	The degree of correlation of information with the person being trained, her social circle, area and country of residence	depending on the degree of correlation, the value of the criterion is taken from 1 to 5	5
8	Who is the author of the information contained in the source	depending on the degree of authority of the author, the value of the criterion is taken from 1 to 5	5
9	Recommendations and references to I.I.	depending on the number and quality of recommendations, the value of the criterion is taken from 1 to 5	5
10	The quality and completeness of the information contained in the source	depending on the quality of information in the source and its completeness, the value of the criterion is taken from 1 to 5	5
...	The accuracy of the information contained in source	depending on the degree of reliability and the possibility of verifying the information specified in the source, the value of the criterion is taken from 1 to 10	10
12	Availability of information contained in the source	depending on the degree of accessibility, the value of the criterion is taken from 1 to 5	5
13	On what resource or media is this I.I.	depending on the degree of authority of the resource, the value of the criterion is taken from 1 to 5	5
14	Origin of I.I. (natural or anthropogenic)	the value of the criterion is taken from 1 to 5 and depends on the primary source of natural information and the number of repeaters between the source and the consumer	5

mass media and the Internet, increasing the number of information sources and information resources containing knowledge about the history and achievements of the Russian state, Russian science, literature, and art. At present, in the conditions of the huge influence of Western-oriented propaganda, which implements one of the main tasks of the information-psychological war, namely, the destruction of the identity and culture of the people against whom it is waged, it is extremely important not only to increase the influence of traditional Russian values

Table 3

Classification of information sources according to the degree of trust, taking into account quantitative estimates that affect the attribution of information to a particular degree of trust

Source of information (I.I.) I.I. with an				
I.I. with absolute trust	I.I. with high degree trust	average degree	I.I. with low degree	I.I. from zero degree confidence
80-100	60-79	40-59	20-39	up to 19

but also to introduce disciplines into the learning process aimed at developing skills to counteract negative information and psychological influences, including by developing the ability to evaluate sources of information for compliance with their required system of values and obtaining quality knowledge in the required area. One of the solutions to the described problem is the separation of sources of information in accordance with the goals of training and education of the individual (trust) [3]. Methodology for attributing an information source to a source

one or another degree of trust may consist in assessing the following criteria: 1. Does the I.I. information prohibited for distribution in the Russian Federation [4, 5]. 2. Correspondence of the information contained in the source with the cultural criteria of forming personality. 3. Correspondence of the information contained in the source with the spiritual criteria of formation personality. 4. Compliance of the information contained in the source with the educational goals of the formation personality. 5. Correspondence of the information contained in the source to the learning objectives. 6. Usefulness of information for personal development. 7. The degree of correlation of information with the person being trained, her social circle, locality and country of residence. 8. Who is the author of the information contained in the source. 9. Recommendations and references to I.I. 10. The quality and completeness of the information contained in the source nick. 11. Reliability of the information contained in the source. 12. Availability of information, contained in the source. 13. On what resource or but siteli posted this I.I. 14. Origin of I.I. (of course natural or anthropogenic).

It should be noted that the specified criteria for evaluating sources of information are not final and may be supplemented or changed in accordance with the set tasks of training and education of the personality. quantitative estimates of the influence of a particular criterion on the correspondence of a source of information to a certain degree of trust also depend on specific tasks and a specific case, determined by the teacher or the student directly. However, in order to unify the definition of the influence of the criteria for evaluating a source of information on attributing it to one or another degree of trust can be lay down quantitative estimates, presented in table. 2. As can be seen from the table. 2, the influence of criteria on the attribution of information to the source certain degree of trust is not the same and cannot be the same. The table shows average values, which can be change depending on the tasks set in the process of personality formation. The maximum total value of all indicators is 100. Based on the indicated quantitative estimates, Table. 1 taking into account the total value of the criteria, can be presented in the final form (Table 3).

The ability to distinguish between sources of information and use sources with high and absolute degree of trust, while cutting off sources with a low and zero degree of trust, will positive impact not only on reducing the risks of negative information and psychological impact, but also on the speed and quality of training, because will significantly reduce the time spent on the constant search for information and distraction by the so-called "information noise". Moreover, the result of the development of this approach may be a new type of service for organizing large amounts of information in accordance with pre-declared properties, in order to provide access to them on a paid basis.

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SECTION 2. ECONOMY, FINANCE, MANAGEMENT

UDC 330

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managing the economic instability of an organization based on restructuring tools

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The article deals with the problem of increasing economic sustainability based on the restructuring of the organization. The author reveals the features of managing the economic sustainability of the organization. Taking into account the existing practice, ways to improve the economic sustainability of organizations are disclosed.

Key words:
economic sustainability, restructuring, sustainable development.

Abstract: The article considers the problems of improving the economic sustainability on the basis of restructuring the organization. The author reveals the features of management of economic sustainability of the organization. With the existing practices revealed ways to improve the economic stability of organizations.

Keywords: economic instability, restructuring, sustainable development.

The economic instability of a production organization is characterized by sharp fluctuations and a drop in sales volumes and incomes, loss of solvency, a decrease in financial stability and a number of other factors, the result of which is a deterioration in the financial condition of the organization. The problem of economic instability of a production organization is complex and multifaceted, covering various aspects of its activities. To ensure economic sustainability and restructuring, it is necessary to take into account the specifics of the life cycle of production organizations. Emerging new organizations are characterized by problems of instability in the conditions of growing scales of

economic activity and centralization of management. The most important priority for such organizations is to ensure a stable position in the sales markets, taking into account the efficiency of production. Using creativity, the entrepreneur prioritizes investments, key products and customers. Thus, the entrepreneur lays the points for business growth.

To overcome primary economic volatility, manufacturing organizations should use factors that enable creative investment, product development, and market entry. Firms that have proven their efficiency and competitiveness in the market move on to the next

life cycle stage.

At the next stage, the production organization goes through the formation in the market. Such organizations focus on innovative solutions in the areas of production and marketing. For the formation of the company, it is necessary to strengthen human capital and form a system of professional management. The instability of the production organization at this stage arises from losses, non-payments, internal disagreements between the owners and external factors. To overcome crises, emphasis should be placed on capturing market niches, expanding the product portfolio and building management systems. At the next stage, there are tendencies to increase the scale of business activities, to changes

in market priorities, to consolidate

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allocation of resources by points of growth and diversification of the business system. The unsustainability of growing manufacturing organizations is the increased complexity of management, the loss of incentives for innovation, and the emergence of contradictions due to the rapid growth of the scale of production.

The fourth stage is characterized by the achievement by the production organization of a state of maturity in strategic areas of activity. Such firms lose the flexibility inherent in their previous stages, their management systems become bureaucratized, business efficiency decreases, which slows down the speed of their development. At this stage, strategies can be focused on strengthening the monitoring of economic instability factors and restructuring assets to improve their efficiency. At the fifth stage of the cycle, the production organization falls into

decay, which is expressed in a decrease in economic development indicators. A large proportion of troubled firms are in decline. During the fall, the business shrinks, its debt load increases sharply, with a decrease in sales volumes and cash inflows; uncontrolled inert organizational processes arise. Such enterprises require a strategic reorganization with a radical review of development priorities. In the course of such a reorganization, the business is segmented according to the criterion of prospects.

Ensuring the economic sustainability of industrial organizations is a controlled process of resource movement, which not only prevents and eliminates the extreme degree of crisis instability, but also contributes to irreducible growth rates and growth of all performance indicators. To ensure the parameters of stability and dynamism of the development of the economy of industrial organizations, the conditions, functions and possibilities of restructuring should be taken into account. Ensuring the economic sustainability of the organization, on the

one hand, involves maintaining and strengthening the competitive position of the organization, overcoming the crisis, and on the other hand, preventing bankruptcy and restoring its solvency. Crisis phenomena cover various aspects of the organization's activities and lead to a deterioration in the financial situation. During the crisis period, the importance of diagnostic problems of organization management increases. The problems of economic sustainability and restructuring include issues of diagnostics and monitoring of the organization's activities. In

order to timely diagnose the causes of deterioration solving the financial condition and determining ways to restore it, it is necessary to form an indicative apparatus. As a result of the aggravation of the crisis and the emergence of threats of bankruptcy, the role of predictive indicators of crisis phenomena is growing.

The problems of restructuring procedures are characterized by the difficulties of financial recovery and rational investment in a crisis. In a crisis period, the importance of investments and innovations increases, which should ensure the preservation of existing production through the introduction of new technologies for the production of products that are in demand on the market. Given the opportunities for investment and innovation, it is necessary to
in each case, determine what needs to be done to manage successfully on the eve of the crisis and during the crisis before bankruptcy. When considering the

problems of economic instability, much attention is paid to time factors. Instability in the socio-economic system is a process that develops over time. The time limits of such a process are characterized by the period from the beginning of the crisis to its resolution. It can be concluded that understanding the nature and duration of the crisis can reduce the time and ensure its painless course. The passage of economic instability has a different degree of duration and intensity [3]. In the modern system of restructuring, the problem of the duration of instability (before bankruptcy) and the intensity of the course of crisis phenomena play a particularly important

role. Depending on the intensity of their course, there are different rates of growth and influence over a certain period of time on the activities of the enterprise. The intensity of the development of a business crisis in an organization largely depends on its scale and problems. When considering the issue of restructuring, attention should be focused on the scale and depth of crises. So, depending on the scale of influence, general crises, covering the entire economic system, and local ones are distinguished [2]. Restructuring is

closely related to two problems: the search for the causes of the crisis and the possibility of managing the processes of crisis development. At the same time, it is necessary to emphasize the fact that the consequences of the crisis can lead to abrupt changes or a soft, prolonged

and consistent exit. Crisis changes in the development of an organization are of different content: long-term and short-term,

qualitative and quantitative, reversible and irreversible. Different consequences of the crisis are determined not only by its nature, but also by the chosen tools. As a result of unreasonable restructuring measures and as a result of late payments for raw materials, there was a threat of losing key suppliers. So, due to failures in the production process, the organization may lose customers and customers and, as a result, become bankrupt. The presence of crisis phenomena, respectively, worsens the relationship of the enterprise with credit institutions. In such cases, the condition for ensuring the economic sustainability of the organization is the use of effective restructuring tools. Solving the problems of managing the economic instability of a production organization helps to reduce tension in its relations with contractors. Any form of economic instability leads to a threat to goals and values, a rather tangible shock to all economic activity. Economic instability carries not only a destructive load, but if effectively resolved, it has a progressive character from the standpoint of updating the production and management mechanism of the organization.

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UDC 334

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CATEGORIAL-CONCEPTUAL APPROACH TO THE STUDY OF THE INTEGRATION OF ECONOMIC SUBJECTS

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The author considers the economic categories associated with integration and offers methodological approaches to characterize integration processes. The author's version of the categories "integration process" and "integration of economic entities" is proposed, based on the understanding of the category "property". **Key words:** integration, integration methodology,
property, integration of business entities.

Abstract: The author examines the economic categories related to integration and offers methodological approaches for the characterization of the integration process. The author's version of the categories "integration process" and "integration of business entities", based on an understanding of "property" category.
Keywords: integration, integration methodology, ownership, integration of economic entities. sti".

The integration of activities generates the integration of enterprises in its various forms. The very same integration of economic entities is the unity of the whole and its parts. To define the concept of integrated structures, it is necessary to refer to the characteristics of integration as such, as well as to the definition of the methodological foundations of integration processes. Property is a backbone category. Some researchers believe that the study of the determinism of property relations and their transformation at the level of various economic entities can lead to a new interpretation of the fundamental problems of economic development [4], which, in our opinion, include the backbone category of "integration".

The problems of integration and its forms and principles were studied by Russian and foreign researchers, including A.N. Averyanov, G.N. Bogacheva, A.A. Bogdanov, G. Hegel, B.A. Denisov, B.M. Kedrov, T.P. Korotkov, G. Paveltsig, G. Spencer, Yu.V. Shishkov, V.A. Engelhardt, I.P. Yakovlev, V.V. Gavrilov, A.A. Popov and others. The
philosopher G. Hegel proposed a description of the "triple" principle of everything that exists and, consequently, considered the "thesis", "antithesis" and "synthesis". All three principles-stages characterize the dialectical principle of development. The final stage - "synthesis" - means, from our point of view, the main methodological approach to integration as a single whole, including parts. Apparently, based on Hegel's methodology, researchers of integration processes also relied on the principle of "trinary

Researchers (for example, V.A. Engelgard [1]) distinguish, in addition, the necessity of connections between parts in order for the whole to appear. Thus, Alexander Bogdanov in the theory of organization [2] points to three stages of the tectological transition of forms: uncertainty, systemic differentiation, and systemic consolidation. Thus, the integrated process falls only on the third form, with the obligatory existence of the first two stages. V.A. Engelhard, considering the nature of integration [1], points to three stages
of integration of parts and the whole:

stymi;
– loss by parts of their original identification qualities when they enter the whole; - the emergence of new

properties in the emerging integrity, due to both the properties of the parts,
and the emergence of new systems of interpartial

connections. V. Kedrov gives his own genetic approach to the nature of integration and distinguishes three periods of development of differentiation and integration:
– undifferentiated period; – period of
unilateral differentiation; period of true integration.
In turn, the second period includes
the "fundamental" and "technical", and the third - the initial, middle and highest stages [1].

A.A. Popov [3] defines the essence of the integration of business entities as an economic category

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Goriyu, which expresses the totality of organizational and economic relations that arise between economic entities regarding the establishment of repetitive stable interactions in the processes of organizing production, labor and management, the exchange of production results in order to harmonize economic interests and achieve a synergistic effect. Summing up the above definitions of the content of the integration of economic entities, we can state that the integration process is based on the dialectical triad and implies the obligatory economic independence of economic entities at the beginning, the acquisition of economic relationships between them at a certain stage and the final merging of structures as a result of integration.

The above opinions of the authors do not include property relations, although integration in the economic sense is precisely the relationship of economic entities regarding property relations. Integration can be seen as a tool for transforming ownership. Property is a backbone category. Some scholars believe that the study of the determinism of property relations and their transformation at the level of various business entities can lead to a new interpretation of the fundamental problems of economic development [4], which, in our opinion, include the backbone category of "integration".

Property relations are traditionally treated as objective relations of appropriation. However, it is possible to propose such a consideration of the category "property", which includes subject-object relations, and the subjectivity of these relations is a priority. In other words, the movement, the dynamics of ownership is achieved through volitional decisions of personified subjects of the economy. Officials (state property), top management (corporate and private property), heads of families (private and personal property) are considered as such. It is not the economic category “will” that acquires economic meaning, but the role of the individual and its development become the decisive factor in the economic system [4]. A factor that is able to change the structure, respectively, is the organization and management of economic systems. The property of economic formations is the material base of their effective activity. The integration aims to increase their effective operations on an even larger scale. Integration leads to an emergent and synergistic effect in the work of economic entities.

Thus, the categories "property" and "integration" are related in a meaningful way. Both categories represent the organization of a complex of property relations. Ownership expresses this in legal and economic forms, integration - in organizational and legal ones. We agree with the interpretation of the category "property", given in the works of Doctor of Economics. Shulgina L.V. She writes: “We can imagine property as one of the forms of human consciousness, as a certainty of will. In addition, property is an immanent, intrinsic property of a person to consciously identify the material world around him with himself. We are forced to conclude that property is an additional, virtual biosocial organ for the individual. The struggle for the size and shape of this organ is vital, as a person strives for free development, completeness. An individual draws ideas about the size of the property he needs in the genetic and social system of his values. Therefore, all economic activities of a person, individually or as part of a group, are closely related to the amount of property allocated to him. A rich person identifies with himself the entire volume of his property in any material form. Moreover, this identification is of an extended nature, that is, ideal ideas about oneself can be wider than the means available today. The proletarian has a limited identification with himself of the most important resources for survival and biological existence. The members of the middle class identify themselves with the size of their property, which makes it possible to lead an appropriate lifestyle. An individual may own property in any of its historical and legal forms. Here again we are talking about the development of consciousness, will. In fact, it can be said that any economic action of a person is associated with his conscious state of the owner” [4].

At the same time, we take into account that the essence of property is interpreted by the same author in this case as relations between the owner and non-owners, which have accepted the certainty of the will of the owner and established by an authoritative (forceful or legal) way, regarding the physical possession of limited factors of production in the interests of the free development of the owner [4]. From our point of view, the application of the subject-object approach to the backbone category of "property" can contribute to a change views on the nature of integration.

Under the integration of economic structures, it seems to us, one should understand the relations of owners regarding the merging of property rights.

reliance on the limited conditions of production, established by the authoritative way, in order to effectively manage these resources and minimize market risks for the free development of owners. The classical “triad” in this case looks like complete

economic independence at the first stage of integration (thesis), the acquisition of interaction with other owners through contracting and exchange relations, i.e. overcoming the uniqueness of one's property - at the second stage (antithesis), and, finally, merging property by force or legal means and completely overcoming the economic independence of economic entities - at the third stage (synthesis). It should be noted that the change of legal forms of ownership (transition from state ownership to private ownership, nationalization, etc.) is not integration itself. Not

every transformation of forms of ownership can be considered as an integration process, because there are such forms of transformation of ownership as public administration, rent, etc., but only existing within the framework of the three steps we have indicated: complete independence - economic relationships -

loss of independence in the process of merging property. On the basis of

the content of the integration of structures given by us, we will carry out a possibly complete typology of integrated structures. It seems likely to oppose the

integration strategy of externalization (transfer of the performance of the internal functions of the enterprise to third parties). The enterprise conducting the integration process takes over the functions that were previously the responsibility of a third party. “In the process of externalization, on the contrary, the functions of the enterprise that were previously in its charge are transferred to a third party” (Koenig, 1990). This problematic is thus within the classical alternative of "do or let do" and can therefore be based on the economic conclusions drawn about the problem.

subcontract. Thus, externalization is not in the full sense an integration process, it is a legal process of outsourcing. As a result of integration, horizontal, vertical

and diversified organizational forms appear. Horizontal integration involves the merging of enterprises in the same industry; in economic

dictionaries, horizontal integration is considered as “association of enterprises, establishing close interaction between them “horizontally”, taking into account the joint activities of enterprises that produce homogeneous products and use similar technologies. Researchers believe that this is a takeover or takeover of a firm located in the same industry and at the same stage of production as the acquiring firm. As a rule, horizontal integration is applicable if the market is stable or if a downturn is imminent. Economic forms of horizontal integration: - cartel - as an agreement between producers of homogeneous products on quotas in production, on prices, sales volumes; - syndicate - a kind of cartel with the generalization of sales through a syndicate office; - horizontal

concern - an association of homogeneous enterprises with a

single financial structure. The organizational and legal form of horizontal integration may look like a marketing holding, an association of companies

operating in the same market (energy companies, sales, telecommunications, etc.). They represent an

association of homogeneous businesses into branch, for example, territorial, structures, which are managed by the parent

business company. The main goal of such a merger is to create a unified system of suppliers and many subsidiaries that perform sales functions. If there are many such subsidiaries, then uniform rules for regulating them are needed.

activities.

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SECTION 3. ECOLOGICAL GEOLOGY

UDC 556

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HYDROCHEMICAL STUDY OF THE DON RIVER WITHIN THE VORONEZH REGION

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The history of studying the hydrochemical state of the Don River in the catchment area is considered. The data on ways and methods of optimizing water management activities are summarized. The leading factors in the formation of the modern chemical composition of the river are identified, which include climatic conditions, the composition of the soil cover and geological rocks that make up the basin, the conditions of underground feeding of rivers, and human economic activity. The main polluting components are nitrites, phosphates, sulfates, heavy metals and pesticides. It has been established that this is due to the discharge of untreated and insufficiently treated wastewater from industrial enterprises, Agroindustrial facilities and housing and communal services, surface runoff from the territories of cities and towns, and flushing of pesticides and fertilizers from fields. The obtained results are generalized and conclusions are formulated. **Key words:** hydrology, hydrochemical regime, surface water pollution, water intakes, anthropogenic load, hydrological observations.

Abstract: The history of the study of hydro-chemical state of the river Don in the catchment area. Data on the methods and techniques to optimize water management. It marked the leading factors of the modern chemical composition of the river, which include climatic conditions, the composition of the soil and geological rocks that form swimming pool, condition of the underground river supply, as well as human economic activity. As a major contaminants appear nitrites, phosphates, sulphates, heavy metals and pesticides. It has been established that it is connected with the discharge of untreated and inadequately treated sewage from industrial enterprises, objects Agromproma and housing and communal services, runoff from areas of cities and towns, flushing from the fields of pesticides and fertilizers. We summarize the results and conclusions are formulated.

Keywords: hydrology, hydrochemical regime, pollution of surface water intakes, anthropogenic load, hydrological observations.

Relevance

Surface water plays an important role in human life. They are used for drinking, household, technical needs, fishing, water communication, power generation, as well as for irrigating lands. However, the rapidly increasing technogenic load adversely affects the components of the environment, including the state of surface waters. This is manifested in the depletion of surface water resources, a decrease in their minimum allowable runoff, deterioration of the chemical composition.

It is impossible not to take into account a number of natural factors that also adversely affect the quality of surface waters. Therefore, in recent years, this kind of research, such as the study of the conditions for the formation the chemical composition of surface waters in connection with natural and technogenic factors are very relevant.

Materials and Methods

resources, their distribution over the territory, but also on their qualitative indicators. The current climate changes, of course, have a direct impact on the formation of the chemical composition of water and are reflected in the water regime of rivers. In some regions, these changes do not have a strong impact on the water regime of rivers and are manifested rather weakly, while in others,

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as for the Don basin, they lead to its complete restructuring and significant changes in the health status of the population in some areas of the central regions of Russia [3].

The first hydrological observations on the Don were organized by the commander of the Azov Fleet by decree of Peter I in 1704-1706. The first stationary gauging station was equipped near the city of Rostov in 1852, and in 1876 6 gauging stations were opened, operating on a single methodological basis. Two of them (Pavlovsk and Kalach-on-Don) are still functioning. Between 1914 and 1920 practically the entire hydrometric network ceased its activity, and only

since 1922 the restoration of posts began to be carried out by the Don Basin Hydrographic Bureau. The planned start of the organization of the hydrological service was laid by A.F. Samokhin, by 1936 the number of hydrological observation points in the Don branch reached 65, and in 1932-1935. the first generalizations of data on the water regime and resources were carried out in the publication "State Water Cadastre of the USSR". After a period of decline during the Second World War, the development of the hydrological network received a new impetus; it was necessary to generalize the accumulated information on the water regime, which were collected in the collections “Resources of Surface Waters of the USSR” [1]. By the beginning of the XXI century. a large number of works have been devoted to the study of the water regime of rivers, including the rivers of the Don basin. In the works of M.V. Bolgov considers modern problems of assessing water resources and water supply in regions with

intensive water use (on the example of the Upper Don basin), probabilistic models of fluctuations in river flow, necessary for solving problems of assessing and promising use of water resources. New results are presented in the field of stochastic modeling of long-term and seasonal runoff fluctuations, as well as its extreme values [2]. For some regions with intensive water use, the conditions of runoff formation are studied in detail, including an analysis of the results of experimental observations. On the example of large energy facilities, the problem of joint use of surface and groundwater resources is discussed. In general, the knowledge of the meteorological regime, climate, hydrology, snow avalanches, mudflows, and glaciers in the plains is sufficient, but mountainous areas have been little studied. It is necessary to open new stations and posts, including automatic ones, and organize snow route observations. It is necessary to prepare and publish new reference books on climate, resources surface water itself, a catalog of glaciers, create catalogs of snow avalanches and mudflows based on

modern topographic maps and space pictures.

The Don River with its tributaries is a regional drainage system. Groundwater is discharged into the Don River, confined to the upper part of the sedimentary cover.

The current state of the problem is formed the chemical composition of groundwater is closely is associated with the development of a new scientific direction - ecological hydrogeology, which considers, among other things, the problem of groundwater pollution under the influence of the ever-increasing role of the technogenic factor. The attention of scientists is increasingly drawn to the study of regularities leading to changes in the chemical composition, to the study of the processes of accumulation and migration of pollutant components [9]. The patterns of formation of the chemical composition of

groundwater are considered in the work of A.A. Valalshchikov (on the example of the Pavlovsky district of the Voronezh region).

RESULTS AND DISCUSSION Within the limits of Voronezh

oblast, the waters of the Don River basin play an important role as sources of domestic and drinking water supply.

Water consumed daily by a person should not contain harmful impurities. At the same time, natural waters should contain a sufficient amount of microelements involved in human metabolic processes. However, the use of water containing high concentrations of chemical components can lead to various diseases [3]. The processes of formation of the chemical composition of natural waters are extremely complex; accordingly, in order to explain the composition of a

particular water body, it is necessary to have a full range of information on the natural and technogenic conditions of the study area, and the composition of bottom sediments [5]. As part of the ongoing work, a study was made of the hydrochemical composition of the waters of the Don River. The content of biogenic elements in natural waters is one of the main indicators of their quality [8]. And the concentration and regime entirely depend on the intensity of biochemical and bio

logical processes occurring in water bodies.

In the course of research, much attention was paid to the content of components in the Don River that characterize organic pollution (nitrogen in the nitrite and ammonium form, as well as polyphosphates).

The ammonium content in all samples is approximately the same, does not exceed the MPC (0.39 mg/l) and varies within the background values. Nitrite
concentrations range from 0.02 to 0.98 mg/l. The maximum values are typical for the mouth of the Chernaya Kalitva River (1.7 MPC), as well as for sites located downstream of the city of Voronezh (1.2 MPC) and on the border with the Lipetsk region (1.5 MPC). The maximum values of dissolved
forms of phosphorus are typical for samples taken in Liski and Pavlovsk, exceeding the MPC by 1.5 times. The increase in the concentration of phosphorus can probably be associated with the activation of the processes of decomposition of organophosphorus compounds in the water bodies. Insignificant concentrations of phosphates
were noted throughout the entire water area of the river. At the same time, the maximum values are typical for the central part of the Voronezh region.

Based on the data obtained, it was concluded that the dynamics of the concentration of biogenic elements in 2012 indicates a significant role of biochemical processes in the formation of the hydrochemical appearance of the reservoir. The most important indicators of
water quality,
associated with organic pollution are COD and BOD-5. The data obtained show that the
waters of the river. Don have pollution only at the mouth of the river. Black Kalitva. At the other sampling points, the excess of MPC is not observed. COD values indicate the presence of persistent chemical contamination in quantities exceeding the allowable values (< 35 mgO/dm3). The BOD-5 indicator also exceeds the MPC by 2 times, reaching maximum values
(3.95 mgO/dm3) in a sample taken in the river. Black Kalitva. This is explained by the high concentration of easily oxidized organics. The content of iron for most samples fluctuates in a narrow range - from 0.07 to 0.28 mg/dm3, the highest
values - up to 0.28 mg/dm3 - were noted in the sections at the mouth of the girl, r. Voronezh, as well as near the city of Novovoronezh.

As for the sources of iron in surface waters, three main directions of migration can be distinguished. The first is the introduction of iron by surface and groundwater. Second -
leaching of iron-bearing minerals from host rocks. Due to the first two factors, a natural background is formed at the MPC level. The third direction is associated with discharges of insufficiently treated wastewater, which form
local anomalies.

Also in the course of the research, the content of sulfates was determined. Its concentrations in almost all samples were below the MPC, with the exception of the sampling point at the mouth of the river. Chernaya Kalitva (2.5 MPC) and near the city of Pavlovsk.

The aggravation of environmental problems associated with the deterioration of the state of water bodies under the influence of human activity predetermines the need to obtain the most accurate and reliable information about the sources of their pollution and the amount of pollutants entering them. For the implementation of water management
activities in the basin of any river, systematized objective information is required, covering the entire geoecological system of the river basin, as well as the socio-economic structure that creates an anthropogenic load. Such a task can be solved provided that the state system of integrated monitoring of water bodies is created and operates [4, 6].

Conclusions Summarizing all the above studies, several conclusions can be drawn.

– Firstly, the Don River is one of the most studied in terms of hydrology and hydrochemistry. This is due to its location and connection to the center of Russia. The Don flows through the most developed parts of the country. - Secondly, the current state of the Don River
can be assessed as unsatisfactory, which is associated with a significant shallowing of the river, its pollution with sewage and storm water.

– Thirdly, there is no comprehensive generalization of accumulated observations on the rivers of the basin for all phases of the water regime, taking into account changes in the last 10-20 years. -
Fourthly, it is necessary to develop a system of integrated environmental monitoring of the basins on the Don River to identify and control negative impacts, to develop a Concept for environmentally sound and reasonable use of the river.

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UDC 556

A.E. Zalata, K.Yu. Silkin*

SOME ASPECTS OF QUALITY FORMATION SURFACE AND GROUND WATER OF THE VORONEZH RESERVOIR AREA

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The issues of changes in the ecological and geological state of the water area and the coastal part of the Voronezh reservoir under the influence of a complex of natural and anthropogenic factors have been studied. The processes of overgrowth of a reservoir with hard vegetation, formation of alluvial territories, and thermal pollution are analyzed. It has been established that the spread of hard vegetation over the water surface is mainly of a natural nature, thermal pollution of water is technogenic, and the transformation of the banks of alluvial territories occurs under the influence of both factors. The deformations of the geological base of the reservoir bed, caused by an increase in the area of the water area occupied by aquatic vegetation, and, as a result, intensive sedimentation, as well as technogenic transformation of the coastline, are studied. The threat of pollution of the Neogene-Quaternary aquifer complex as a result of silting and swamping of the reservoir is assessed. The dependence of the quality of groundwater used for drinking water supply on the ecological state of the reservoir has been revealed. The obtained results are generalized and conclusions are formulated.

Key words: hard vegetation, alluvial areas, thermal pollution, water intakes, ecological state, groundwater quality.

Abstract: We have been studied the question of ecological and geological changes in the state of the waters and the coastal area of the Voronezh reservoir influenced by natural and anthropogenic factors. The processes of overgrowing pond tough vegetation formation of alluvial areas and the emergence of thermal pollution have been analyzed. It was found that the distribution of the vegetation on the hard surface of the water basically caused by natural process, thermal pollution of water – human-caused, and the transformation of the coast of alluvial areas occurs under the influence of both factors. We have studied the formation of the geological base of the reservoir bed. The reason of this process is increasing the water area which occupied by aquatic vegetation, and as a result, an intensive sedimentation, as well as man-made transformation of the coastline.
The risk of contamination of the Neogene-Quaternary aquifer as a result of siltation and eutrophication have been assessed in the report. The dependence of the quality of groundwater used for drinking water supply, ecological state of the reservoir have been found out. The results have been summarized and conclusions have been formulated.

Keywords: hard vegetation, alluvial areas, thermal pollution, water intake, the ecological state, the quality of groundwater.

Relevance The development of comprehensive studies of reservoirs as water bodies of artificial origin, provoking significant natural and socio-economic transformations, is one of the urgent tasks of nature management. These studies should be based on the study of the interrelationships of processes both within the artificial reservoirs themselves and their interaction with the environment. From an ecological point of view, a plain channel reservoir, such as the Voronezh reservoir, is the most complex water body that requires steel observation and a comprehensive study of the dynamics of development of the water area of the reservoir itself and the features of the formation of its coastal zone. Among the studies that make up a comprehensive assessment of the ecological and geological state of the reservoir, includes an analysis of the dynamics of thermal pollution, an assessment of geodynamic processes within the coastal zone, and a study of the overgrowth of a reservoir with hard vegetation. In recent decades, certain successes have been achieved in the field of the indicated problems, various research projects have been carried out. research and on their basis a lot has been written on scientific works.

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Research materials and methods The first problem under consideration is thermal pollution of water bodies, i.e. artificial increase in water temperature due to the discharge of warm water from cooling systems. The environmental problems of water bodies subject to the discharge of heated industrial waters from enterprises are the topics of a number of foreign and domestic studies and works in several areas:

– identification of regularities of thermal processes in water bodies of various types using software systems for their visualization under various scenarios of the ratio of natural and anthropogenic factors; - identifying the features of competing technologies for engineering solutions to reduce thermal pollution in water bodies, in compliance with regulatory requirements; – development of applied aspects of choosing an effective solution, taking into account the regional characteristics of water bodies that are objects of thermal impact.

According to B.V. Shilin, an increase in water temperature in water bodies increases the effect of toxic substances and introduces distortions into the biological processes of the existence of aquatic communities. Under natural conditions, with slow increases or decreases in temperature, fish and other aquatic organisms gradually adapt to changes in ambient temperature. But if, as a result of the discharge of hot effluents from industrial enterprises into a reservoir, a new temperature regime is quickly established, then there is not enough time for acclimatization, living organisms receive a heat shock and die [5]. In the work of V.Ya. Girshfeld devoted to the study of thermal power plants and their impact on the surrounding ecosystem, it was noted that in summer the water temperature increase by only a few degrees can cause 100% death of fish and invertebrates, especially those that live at the southern boundaries of the temperature interval. shaft. Artificial heating of water can significantly change the behavior of fish - cause untimely spawning, disrupt migration. If the destructive power of power plants exceeds the ability of species to self-repair, the population declines [6]. A significant contribution to the study of the problem of thermal pollution of water bodies was made by V.N. Beznosov and A.L. Suzdalev. In their works, they raise such issues as the consequences of the growing demand for energy resources and increased anthropogenic impact on aquatic ecosystems, the formation of exotic species of phyto- and zoobenthos in water bodies, subject to changes in the temperature regime, as well as possible ways to solve the problem of thermal pollution [7]. It should be noted that at each specific point in time, the effect of the discharge of heated waters on the temperature regime of different parts of the reservoir is determined by a complex of factors, each of which is subject to significant changes over a relatively short period. Firstly, this is the natural temperature level characteristic of a given season of the year. Secondly, the volume and temperature of water discharged from the cooling system can vary significantly depending on the mode of their operation. Thirdly, the nature of the distribution of heated waters over the water area of the reservoir from the discharge area is determined by specific hydrometeorological conditions. The second important problem in the operation of reservoirs is the transformation of the coastline, including as a result of the creation of alluvial territories and islands in the water area. The emergence of negative situations in the coastal zone of various water bodies is due to the manifestation of destructive processes, both natural and anthropogenic. As a result of the studies, it becomes obvious that one of the serious consequences of anthropogenic impact on the coastal zone of reservoirs is the activation of exogenous geological processes - erosion, landslides, suffusion, karst, etc. The banks of reservoirs, which are an unstable form of relief, are easily washed away by waves As a result, agricultural, forestry, recreational and other lands go under water. Intensive processing of the banks of reservoirs in the process of creating and operating alluvial territories leads to water pollution in reservoirs and deterioration of its quality due to mineralization. Coastal erosion is accompanied by the movement of erosion products into the wave-surf zone with their subsequent sorting and formation of a coastal abrasion-accumulative shoal. The destruction of the bedrock strip during the retreat of the crests under the action of erosion is accompanied by a number of characteristic processes in the adjoining zone. Among such processes are the decompaction of geological rocks composing coastal ledges, the emergence or activation of characteristic geomorphological processes, the disruption of the hydrogeological regime in the coastal strip of the bedrock coast, the activation of tectonic processes, the degradation of coastal landscapes, the limitation of economic activity, and the change in the conditions of the human living environment.

An even greater danger is posed by alluvial areas, which not only increase the likelihood of landslides, but also negatively affect the environment. As a result of the introduction of alluvial sections into the reservoir, such zones are formed in the water area where there is practically no natural flow, and an artificial environment is created in which neither fish nor useful river plants can exist. But there are all conditions for overgrowing of the surface with algae.

The overgrowing of the water area with hard vegetation is negative both for the reservoir itself and for the ecosystems associated with it. Reed masses form an ever increasing physical barrier that slows down the current, which accelerates areal sedimentation across the entire width of the reservoir, resulting in siltation and, subsequently, swamping of the territory. For this reason, the development of rigid vegetation within the water area is the third problem.

comprehensive analysis of the ecological state

reservoirs. The

peculiarity of the study of the higher aquatic and coastal vegetation of reservoirs is that, having common features with other continental water bodies, it also has some originality. When reservoirs are formed on rivers, dams restrict the movement of water masses from one geographic zone to another, make the living conditions of organisms more dependent on the local geographic environment, which changes the zonal nature of vegetation. The development of vegetation depends, first of all, on the level regime. In addition, the vegetation of reservoirs is more susceptible to the action of anthropogenic factors than the vegetation of the original reservoirs, since the formation of reservoirs contributes to the development of large agroindustrial complexes around them. In accordance with the studies of B.A. Baranovskii, a number of new

landscape elements appear in reservoirs, forming a zone of shallow waters in artificial reservoirs with a more complex combination of environmental factors than in natural ones [8]. They create special conditions for the formation and further development of higher aquatic vegetation. Much attention is currently being paid to the study of the vegetation of reservoirs. Higher vegetation is the main component of shallow water biocenoses and performs a number of important functions here. It is the main producer of organic matter, a food object, a refuge for various groups of aquatic animals, a substrate for spawning of generative phytophilic fish, and (together with meadow-marsh and forest vegetation) a natural biofilter between the watershed.

and a reservoir. Vegetation plays an important role in the processes of self-purification in water bodies, in the purification of water from industrial and domestic pollution, it is a competitor of algae, which causes "water bloom", and also stops the wave abrasion of the coast. Higher aquatic plants can serve as indicators of the aquatic environment; in addition, the volatile properties of aquatic plants are known.

RESULTS AND DISCUSSION The general result of the development of the vegetation cover of the Voronezh Reservoir in the conditions of an urbanized landscape and a high degree of anthropogenic impact on the watershed is an acceleration in the rate of overgrowth of shallow water areas. On average, it accelerates by 2-2.5 times compared to similar water bodies, and there is a rapid transition of the upper reaches to the stage of attenuation of the functioning of the aquatic ecosystem and the formation of initial plant communities. The current state of the vegetation cover of the Voronezh Reservoir as a whole can be assessed from a biological point of view as a relatively stable stage of development that has formed in an urbanized landscape with a certain type of reservoir exploitation.

The Voronezh Reservoir is undergoing significant transformation both by natural processes and by human activity. The factors of overgrowing of the water area with hard vegetation, the creation of alluvial territories and artificial increase in water temperature have a negative impact on the state

Neogene-Quaternary aquifer complex. It is known that water intakes that provide the population of Voronezh with drinking water, according to various authors, are formed by 45-70% due to water filtration from the reservoir. Considering that the area affected by aquatic vegetation and thermal pollution sources is constantly increasing, the reservoir may lose its fishery importance and, most importantly, deprive the population of the city of drinking water.

Conclusions Summarizing all the above studies, we can draw several conclusions.

The influence of a change in the temperature regime of reservoirs as a result of the discharge of heated water from enterprises onto aquatic inhabitants and higher aquatic vegetation was revealed.

Conducted studies demonstrate

positive and negative consequences of creating

alluvial territories within water bodies. The dependence of the amplification of the factors

silting and overgrowing of the water area as a result of technogenic transformation of the coastline.

Work has been carried out to study the development of higher aquatic vegetation, its composition and genesis. Studies have been carried out on the impact of overgrowth of the water area of the reservoir on its biological regime. The negative impact

of the processes occurring in the reservoir on the chemical and bacteriological composition of water, which, in turn, penetrates into the weakly protected aquifer and pollutes it, was revealed. Thus, the quality of groundwater used in

for municipal and drinking purposes, directly depends on the ecological and geological state of the water area of the reservoir. At present,

many methods and technologies for studying water bodies are known, there are monitoring programs and environmental management systems for assessing and reconstructing the ecological geological state of water bodies. In this regard, the problem of developing comprehensive studies of the reservoir as a water body of artificial origin, provoking significant natural and socio-economic transformations, is becoming increasingly important.

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SECTION 4. THEOLOGY

UDC 234.12

Archpriest Gennady Zaridze*

SPIRITUAL AND MORAL BASES OF STUDYING THE TEMPERATURE OF THE HOLY FIRE

(Association of Orthodox Scientists, Voronezh, Russia)

The article presents the results of the first experiment to measure the temperature of the Holy Fire immediately after its appearance and several hours later to determine the determinant conditions. The results obtained are commented on from the point of view of the transformation of natural phenomena with determinant conditions into a miracle, where determinant conditions have not yet been scientifically determined.

Key words: spiritual and moral foundations, experimental technique, physical properties, Blessed Fire.

Abstract: This article presents the results of the first experiment to measure the temperature of the Holy Fire immediately following its occurrence, and a few hours later to determine the determinant of conditions. The results obtained are commented in terms of the transformation of natural phenomena with determinate conditions in a miracle, where scientific determinate conditions yet to be determined.

Keywords: spiritual and moral foundations of the experimental method, physical properties, Holy Fire.

The history of the Holy Fire, or Holy Light, has almost two thousand years. At all times there were witnesses of this miracle, who described in detail this supernatural phenomenon itself. The first to bear witness to the Holy Light was the apostle Peter. St. Gregory of Nyssa, St. John of Damascus write about this: “Soon Peter appeared before the Sepulcher and, Light in vain in the Sepulcher, terrified” [1]; “... therefore the Prophet foretold that there would be Light before evening (Note: Zech. 14:6-7). Then there was the night before Saturday, then - Saturday itself, then - the night before one from Saturdays, and, finally, the most radiant and luminous day of the holy Resurrection, the day on which the uncreated Light came bodily from the tomb, like the Bridegroom, shining with the beauty of the resurrection " [2].

They began to testify about the Holy Fire from the time of the construction of the Church of the Holy Sepulcher. From 326-331 - from the moment of the construction of the Church of the Holy Sepulcher - to this day, an unquenchable lamp has been burning at the site of the Resurrection of Christ. Saint Gregory, Enlightener of Armenia (257-331) testifies about the celebration of the descent of the Holy Fire. The book “History of Armenia” by historian Kirakos Gandzaketsi (1201-1271) describes the events as follows: “St. He asked God that on the feast of Pascha this place would be sanctified by the Light of the immaterial, which is happening to this day” [3].

The Arab historian al-Masudi also speaks about the descent of the Holy Fire from the time of the construction of the Church of the Resurrection (326-336), and in the life of the Monk Theodore Savvait (836) it is indicated that on Holy Saturday he participated in the sacred service of the Holy Light [4, p. 53].

Doctor of archeology Jodi Magness writes in his article about archaeological finds - ceramic lamps of the 4th-8th centuries, on which the inscription: "The Light of Christ enlightens all." "Illuminating Byzantine Jerusalem, oil lamps shed light on the ancient Christian cult." The archaeologist claims that they are directly connected with the sacred service of the Holy Light on Great Saturday [5].

In 947, cleric Nikita arrived in Jerusalem as an official representative of the Byzantine emperor Constantine VII Porphyrogenitus and participated in the sacred service of the Holy Light. It testifies that on the morning of Great Saturday, April 7, 947, the Emir, the representative of the Caliph of Baghdad, met with the ruler of Jerusalem, and they informed the Patriarch of Jerusalem that it was ordered to ban the sacrament of the Holy Light. The emir replaced the wick of the inextinguishable lamp with a metal one, but despite this, the lamp flared up by itself and burned [6]. The Arab scientist-Encyclopaedist al-Biruni testifies to the same [4, p. 77]. There are 45 reliable testimonies of a miracle over seventeen centuries.

*** Zaridze Gennady Vladimirovich - Archpriest, rector of the Church of the Intercession of the Most Holy Theotokos with. Otradnoe, Chairman of the International NGO "Association of Orthodox Scientists", Voronezh Region,**

In the 20th century, Patriarch Diodoros I of Jerusalem, who participated 63 times in the service of the descent of the Holy Fire, spoke about him especially vividly: “Indescribable Light emanates from the depths of the stone on which the body of Christ lay. As a rule, it has a blue tint, it can change and acquire different tones. Sometimes it covers only the tombstone, sometimes ... the whole Kuvuklia. In a certain place, this Light rises upward, forming a pillar, the flame of which has a different nature, and so I can light my candles from it ”(book“ Miracles - Encounters Betweeu Heaven Ane Earth ”(“ Miracles - Encounters between Heaven and Earth ”)) [4, p. 260]. The Fire did not descend only twice - in 1101 and 1923, when the Patriarchs of Jerusalem were not Orthodox. A lot of rumors arose

around this sacred rite, but some priests are in no hurry to expose them for unknown reasons. One can cite the memoirs of Osipov A.A., a

former professor at the Leningrad Theological Academy, who became a militant atheist. A.A. Osipov recalls the prominent theologian, professor of the Moscow Theological Academy N.D. Uspensky, who expressed his opinion about this miracle - at one of the annual acts of the Moscow Theological Academy on October 9, 1949, he spoke to his colleagues with an act speech "On the history of the rite of the holy fire performed on Great Saturday in Jerusalem." “He proved with exhaustive accuracy that there never was any “miracle”, but there was and is an ancient symbolic rite of lighting by the clergy themselves over the Tomb of a lamp. And as a result of all this work, the late Metropolitan of Leningrad Grigory (Chukov), also a man with a theological degree, gathered a number of theologians of Leningrad and said to them (many of my former colleagues probably remember): “I also know that this is only legend! What…he is absolutely right!” [7, p. 114]. Russian physicist Andrey Alexandrovich Volkov, head of a department at the National Research Center “Kurchatov Institute” (formerly the Kurchatov Institute of Atomic Energy), participated in the delegation from the Russian Federation at the Holy Fire in 2008 and 2015. On Holy Saturday at about 9 am, Andrey Volkov entered the Church of the Resurrection, carrying with him the necessary equipment. For measurements, we used a Veliman

electronic oscilloscope of the American assembly. We finalized it, installed a sensitive antenna and special protection against static voltage so that there was no extraneous noise. Then this equipment was tested

in a variety of situations, at concerts, during thunderstorms (Vera newspaper dated April 21, 2009) [4, p. 165].

Judging by numerous descriptions, the appearance of the Holy Light is accompanied by the appearance of plasma, which outwardly very much resembles low-temperature plasma. For example, it is known that for some time this Light does not burn hands and face at all. Also, for almost a thousand years, eyewitnesses have been talking about some flashes running along the walls of the temple, in front of them and at the moment of the Light descending. The

researcher was located approximately ten meters from the entrance to the Holy Sepulcher, and his main goal was to register the spectrum of electromagnetic radiation at certain frequencies. For the last 20 years Andrey Volkov has been

working on low-temperature plasma. In the laboratory, it is studied only in a vacuum. “It can also exist in the air, but only under strictly defined conditions ... and at very high humidity. But it is hot and dry over the Holy Sepulcher on Easter, there is no moisture conducting electricity, and there is nowhere to come from a powerful potential difference. Meanwhile, flashes appear there, luminous pillars, which turn into a spark and form Light. The climax of the measurement was reached during the manifestation of the Holy Light, when the Patriarch was inside the Tomb. At 14:04 (15:04 Moscow time), a few minutes before the removal of the Holy Fire from Kuvuklia (the chapel where the miraculous fire lights up), the device that fixes the spectrum of electromagnetic radiation recorded a strange long-wave impulse in the temple, which no longer manifested itself . That is, an electrical discharge has occurred. According to Andrei Volkov, it is difficult to judge anything reliably from one dimension, since a series of experiments is needed. But still, “it could also happen that we fixed the cause preceding the appearance of the genuine Divine Holy Fire”… At the moment of the descent of

the Holy Fire, the instruments recorded a sharp burst of electromagnetic radiation. Andrei Volkov reports that shortly before the appearance of the Holy Light, three inexplicable facts were scientifically recorded: - firstly, the inexplicable appearance of plasma,

which, according to him, is already a miracle in itself;

- secondly, the inexplicable and unreasonable electrical charge of the air in combination with a powerful difference in electrical potentials; - thirdly, the appearance of an electric

discharge at the moment of the descent of the Holy Light. The measurement results, according to the

physicist, are “confirmation of the miraculous nature of this

phenomena" [4, p. 165-169]. The results of the studies in 2008 and 2015 were identical.

In 2016, with the blessing of His Eminence Metropolitan Sergiy of Voronezh and Liskinsky, I was sent to Jerusalem during Holy Week for the descent of the Holy Fire as part of an official delegation from the Russian Federation. With the blessing of His Holiness Patriarch Kirill, it was traditionally headed by Vladimir Ivanovich Yakunin. Vladyka Sergiy blessed me to

study the temperature of the Holy Fire flame. I had a pyrometer device with me - an infrared thermometer VT 303. On Holy Saturday, April 30, 2016, our delegation arrived at the Church of the Holy Sepulcher. The Holy Fire descended quickly in this, as in the previous year. After I was lucky enough to wash myself with the non-scorching Holy Fire three times, a series of measurements of the temperature of the flame of the Holy Fire was carried out using zirovanie silver plate. The laser beam of the device was repeatedly directed to a silver plate heated by the Holy Fire 1 mm thick, 5 mm wide and 200 mm long. The average temperature was 42 degrees Celsius, after 15 minutes the Holy Fire acquired a temperature of 320 degrees Celsius. This once again proves to skeptics that the miracle of the Holy Fire violates the laws of our Universe. Cold plasma appeared

It radiates and exists for several minutes in the conditions of our earthly atmosphere (which is impossible from a scientific point of view), then after 10-15 minutes it receives additional energy and becomes an ordinary hot fire, violating the law of conservation of energy. If skeptics had created a stable cold plasma in the conditions of the earth's atmosphere, I think they would have been awarded the Nobel Prize. Do not believe in falsifications and statements discrediting the Blessed Divine origin of the Holy Fire.

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UDC 213

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A critical look at the original origin of life on Earth

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The article considers two main views on the origin of life on Earth - evolutionary and creational. It is shown that since the 19th century, the materialistic point of view has dominated the scientific worldview, that is, the appearance of life in a “natural” way without the participation of the Creator. The article criticizes the theory of evolution from the point of view of the complexity of the scientific substantiation of original biochemical synthesis. Refutations of evolutionism from the point of view of probability theory and the second law of thermodynamics are presented. The conclusions indicate that the evolutionary theory prevailing in modern science is mainly supported by materialists and atheists and is not substantiated and proven. **Key words:** creation model, life on Earth, Creator (God), original formation of life, evolutionists, macromolecules, amino acids, vicious circles, self-assembly probability, second law of thermodynamics, panspermia theory.

Abstract: The article considers two key viewpoints on the origin of life on Earth and evolutionary creation. It is shown that since the XIX century in the scientific world dominated by the materialistic point of view, that is, the emergence of life "natural" means without a Creator. The article criticizes the theory of evolution from the point of view of the complexity of scientific substantiation of the original biochemical synthesis. Presented refutation of evolutionism from the perspective of probability theory and the second law of thermodynamics. The findings indicated that dominant in modern science, evolutionary theory is mainly supported by materialist and atheist and is not justified and proven.

Keywords: creation model, life on Earth, Creator (God), the original formation of life, evolutionists, macromolecules, amino acids, confined vicious circles, the probability of self-Assembly, the second law of thermodynamics, the theory of panspermia.

"I have never been an atheist in the sense of denying the Creator" **Ch. Darwin**

Until the 19th century, the scientific world was dominated by the creation model, according to which life on Earth was created by the Creator (God) already in perfect form. Creacinists did not deny the possible change in the animal and plant world, but more often in the direction of its deterioration [5]. As mankind retreated from God and after the appearance of the book by Charles Darwin "The Origin of Species by Natural Selection ...", the evolutionary theory began to dominate, which assumed that life on Earth appeared spontaneously, through evolution.

The modern view of the emergence of life on Earth is based on the experiments of Oparin, who, under laboratory conditions, tried to reproduce the conditions of the "primitive planet". He passed electric discharges through a gas mixture of methane, hydrogen and ammonia and as a result received three amino acids out of twenty possible. This experience was evaluated by evolutionists as confirmation of the possible formation of more complex organic substances from inanimate nature and the possible original formation of life without the participation of the Creator. Modern evolutionists say that life originates from random cells that formed about four billion years ago. Then these randomly arisen cells formed multicellular organisms, and so gradually, in a natural way, all the modern diversity of life was formed: half a million species of plants and one and a half million species of living organisms, including humans.

Evolutionists deny the Creator and accept the fact that inanimate nature has some kind of internal force that produces all life on Earth. This materialistic theory was supported by the majority of atheist scientists and always drove a wedge between the religious and scientific worldview. At the same time, any disagreement with this theory is interpreted as obscurantism and anti-science. This theory itself in Soviet and Russian

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biology textbooks are taught as the only true knowledge about the origin of life without any alternative. From the point of view of modern science, this theory has not been confirmed, and life experience rather refutes it.

Thomas Edison, inventor of the modern electric light bulb, telephone, and telegraph, said, "The existence of God can be proven chemically." In fact, the facts of molecular physics, genetics and biochemistry prove the impossibility of spontaneous origin.
life.

There are many contradictions that make natural biosynthesis impossible. The first contradiction: in the question of self-formation of macromolecules, it was assumed that amino acids bind to each other by peptide bonds in an anhydrous medium, since hydrolysis prevents this biosynthesis. Evolutionists at first described the formation of life in the primary ocean, that is, including with the participation of water. The second contradiction is the

oxidation of amino acids under the action of atmospheric oxygen. It was assumed that there was no oxygen in the initial atmosphere. But even in the most ancient rocks, iron dioxide is present, which refutes the possibility of anoxic protein synthesis. If oxygen was absent in the atmosphere, then ultraviolet irradiation made protein biosynthesis impossible. Thus, both the presence and absence of oxygen in the primitive atmosphere is unacceptable for the self-formation of life [1]. The assumption that the primary atmosphere consisted of methane and ammonia, which are necessary for the synthesis of amino acids, also had no experimental confirmation, since these gases would be destroyed by ultraviolet irradiation in an anoxic atmosphere [2]. It is fair to ask, where did the amino acids that are necessary for protein synthesis come from then? Modern scientists point to many vicious circles in the hypothesis of

spontaneous generation of life: – first, DNA is reproduced with the help of

enzymes (proteins) encoded by DNA itself;

- second - proteins are synthesized using protein complexes of ribosomes;

– third, cell membranes are synthesized only on membranes; –

fourth, ATPs are synthesized only on membranes with the help of ATPs

themselves [1]. All this contradicts the gradual evolutionary appearance and formation of individual more complex biosystems from simple ones. Independent formation of the most complex biological systems requires a huge number of counteres sciences.

chivy and mutually exclusive processes that do not allow modern scientists to build a coherent theory of the evolutionary formation of life on Earth.

Evolutionary theory is subjected to even greater criticism from the point of view of probability theory. So, for example, the random formation at least once in a billion years of enzyme molecules that catalyze chemical transformations in a living cell has a probability of 1040000. According to the well-known astrophysicist Fred Hoyle, this probability is so small that one can bury the theory of evolution of Charles Darwin [8] (a probability of 10 to the minus 50th power

is considered an absolutely impossible event). The

probability of self-assembly of a living cell is equal to 10100000000000. This value clearly shows how wrong we are in considering the emergence of life as a “natural process” [9]. Evolutionists admit that calculations of the mathematical probability of the spontaneous generation of life have not been carried out, since evolution was considered an undoubted fact. In

fact, from the point of view of probability theory, the spontaneous generation of life is an absolutely incredible event [1]. In addition, the second law of thermodynamics says that natural conditions lead to disorder in any system, that is, entropy (disorder) under normal conditions increases. That is why, arriving at the dacha after a long break, we find a rickety fence and a leaky roof, and not the second floor built in an incredible way. The theory of evolution is a scientifically unfounded scenario that contradicts the second law of thermodynamics. The theory of self organization by Prigogine, Arnold, and Haken does not prove the possibility of spontaneous genera

The theory of spontaneous generation of life on Earth and its evolutionary development does not currently have a solid scientific foundation so that evolutionists and materialists try to explain the emergence of life by bringing it from outside with the help of meteorites, comets and other celestial bodies (panspermia theory).

Summing up, we can conclude that at present the materialistic view of the origin of life on Earth dominates, which is, in fact, a worldview position that explains the emergence of life without the participation of the Creator. This position does not have a solid scientific basis and over the past one hundred and fifty years has been more refuted than confirmed. Ch. Darwin's theory actually turned out to be "unscientific"

justification for denying God. The unwillingness to live according to the Commandments and somehow resist sin is one of the foundations of materialism. Unfortunately, the younger generation in our country is presented with the theory of spontaneous generation of life. and evolution as the only true one, without any alternative. Modern textbooks do not contain criticism of Darwinism and evolutionism, laying an atheistic worldview in the souls of young people.

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SECTION 5. FOOD TECHNOLOGIES

UDC 615:011.4:661.123

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Development of a method for obtaining chitosan using electrophysical processing of shell-containing raw materials of crustaceans

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The search for approaches that ensure the intensification of technological processes while achieving a high quality of the resulting chitosan is a key factor in expanding the applied aspects of this biopolymer, including various industries, agriculture, medicine, and veterinary medicine. Important tasks in this direction are the expansion of the raw material base for the production of chitosan through the disposal of waste from the industrial processing of crustaceans and the simplification of the process of obtaining chitosan. An alternative technical approach has been developed, which involves combining the stages of grinding and deproteinization of raw materials. This eliminates the need for additional use of alkali at the stage of deproteinization due to the use of electro-hydraulic shocks carried out using ultra-long discharges. **Key words:** chitin, chitosan, shell-containing raw material, electrohydraulic shock, super long discharge.

Abstract: Search of approaches for intensification of technological processes in achieving a high quality of chitosan is a key factor in the expansion of the applied aspects of this biopolymer, including various branches of industry, agriculture, medicine, veterinary medicine. One of the problems solved in this dissertation is to expand the resource base to obtain a chitosan by utilizing the waste of industrial processing of crustaceans and simplify the process of obtaining the chitosan. We have developed an alternative technical approach to obtaining chitosan from panzerstecher raw materials. It is designed to combine the stages of grinding and deproteinizirovanny, eliminates the additional use of alkali at the stage of deproteinizirovanny through the use of electro-shock. Electro-beats are made using extra-long bits.

Keywords: chitin, chitosan, shell containing raw materials, electro-replicase punch, extra long discharge.

An urgent problem at the present stage of development of engineering and technology is to ensure the quality of life population through nutrition under negative environmental factors. A promising raw material for solving the problems set is the natural polymer chitin and its simplest derivative, chitosan [1–3]. results studies of chitosan in medicine, ecology, and agrobiology serve as a prerequisite for its use in technology food products (Skryabin K.G., Vikhoreva G.A., Varlamov V.P. et al., 2002). However, despite the promise of obtaining and using chitosan in the food industry as a component of self organizing biopolymer systems with polyfunctional properties, implemented solutions are extremely scarce, which is explained both by the shortage of chitosan and the lack of modern technologies for its production. The purpose of this work is to improve the technique and technology for obtaining chitosan from regional sources of shell containing

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raw materials of crustaceans (crayfish, shrimp shell) through the use of electrophysical processing methods.

In this work, we used shell-containing raw materials (PSS) obtained during the industrial processing of freshwater crayfish and arctic shrimp. The quality of the resulting chitosan was determined by a set of chemical and physicochemical parameters. The content of mineral substances was determined according to GOST 7636. The molecular weight of chitosan was determined viscometrically. The method consists in measuring the outflow time of a certain volume of the test liquid under the influence of gravity.

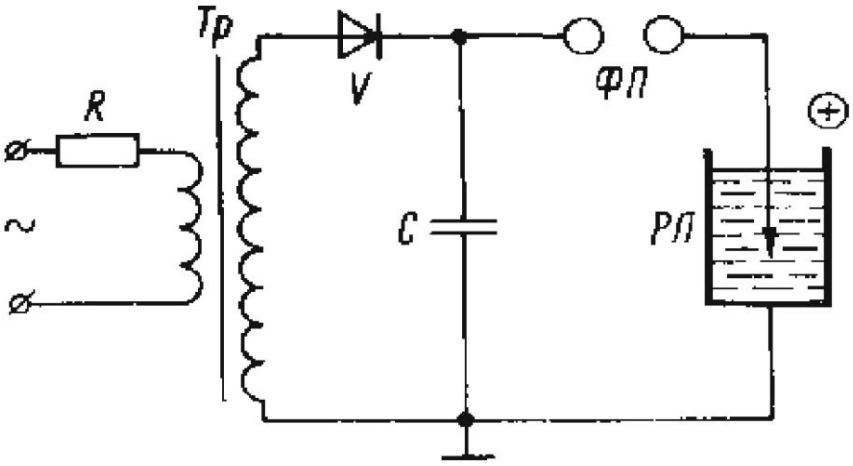

Figure 1 - Electrical diagram of the installation for reproducing electro-hydraulic shocks: R - charging resistance; Tr - transformer; V - rectifier; FP - forming a spark gap; RP - workspace; C - capacitor

A weighed portion of chitosan was preliminarily dispersed in succinic acid. The measurements were carried out at 20 oC in an Ubbelohde capillary viscometer with a diameter of 0.54 mm. The calculation of the molecular weight was carried out according to the Mark-Kuhn-Hau Wink equation [4]. The degree of deacetylation was determined by potentiometric titration on an EV-74 universal ionometer using glass electrode. The method is based on the titration of hydrogen chloride bound to a chitosan molecule. The studies were carried out by titrating a chitosan solution with a sodium hydroxide solution [5]. An electrohydraulic shock (EHU) makes it possible to convert electrical energy into mechanical energy without intermediate mechanical links [6]. During the implementation of the EHD inside the volume of the liquid in the vessel, under the action of a specially formed pulsed electric spark discharge, ultrahigh hydraulic pressures arise around the zone of its formation, capable of perform useful mechanical work and accompanying

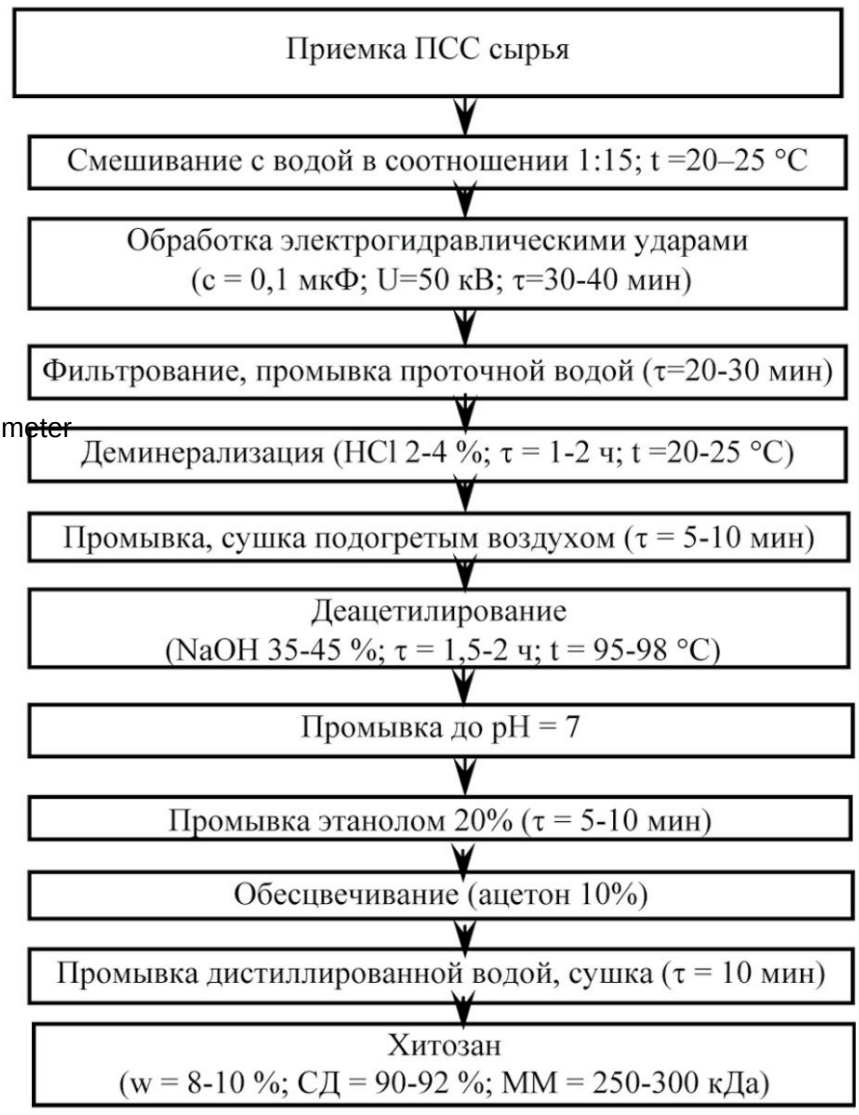

Figure 2 - Technological scheme for obtaining chitin and chitosan using electro-hydraulic shocks

being a complex of physical and chemical phenomena.

Technological possibilities

The electrohydraulic shock performance is ensured by ultra-long discharges in conductive liquids by limiting the active, i.e., contacting with the liquid

stu, area of positive

electrode while increasing the active area of the negative electrode.

In water, in the presence of H+ and OH_ ions, the main role in the discharge process belongs to the OH_ ion . The number of electrons shedding from OH_ ions and inflow

flowing then into the discharge channel, its presence and its length are determined. At the same time, the H+ ion (or hydroxonium H3O+) does not take part in the growth of channels and, from this point of view, is useless for the entire discharge

process. With a sharp decrease in the active surface of the positive electrode in contact with water (through its maximum isolation along the entire length, except for the front end) and a simultaneous sharp increase in the active surface of the negative electrode in water, a significant asymmetry of the field arises between the electrodes and, as a consequence of this, , special ionic atmosphere (mainly of the same sign), method

which corresponds to the intense growth of the streamer in the liquid. Such a field asymmetry creates favorable conditions in the region between the electrodes for the rapid neutralization of H+ ions and enrichment of the liquid with OH_ ions . H+ ions are easily discharged onto the large negative electrode, while the minimal surface of the positive electrode hinders the formation of new H+ ions. As a result, there is a sharp decrease in the total number of H+ ions in the volume between the electrodes, the pH of the liquid in this volume shifts to

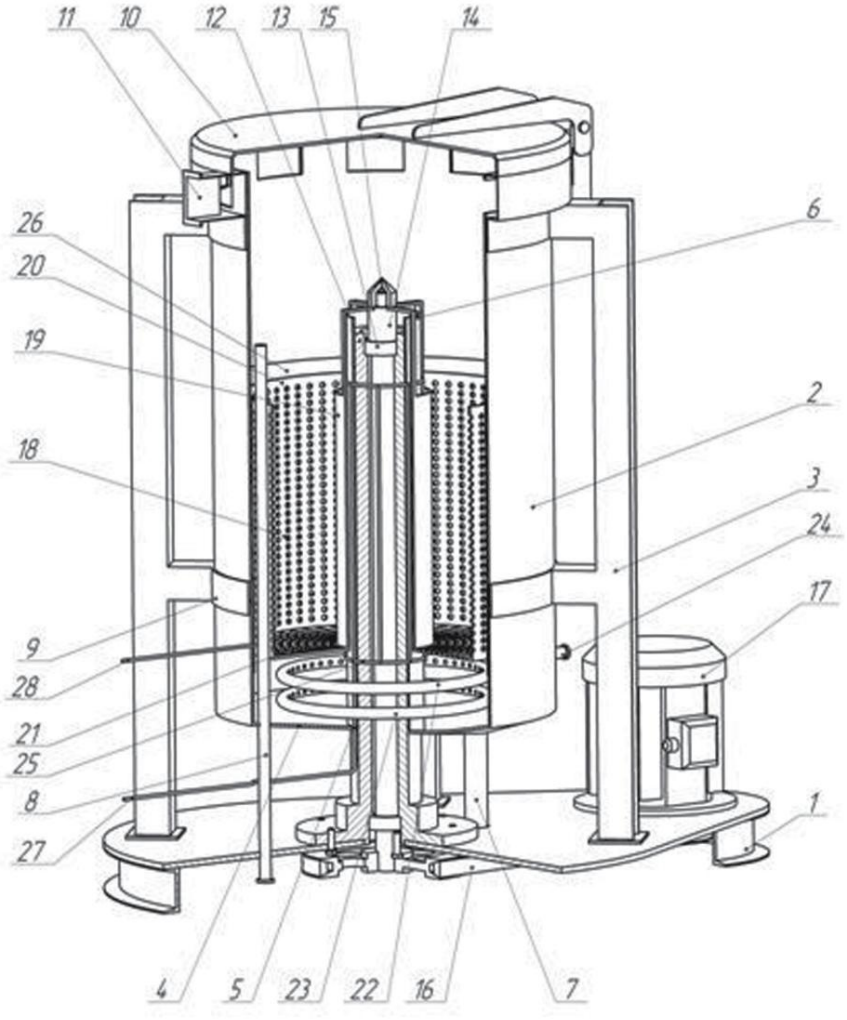

Figure 3 - Installation for reproducing the EGU: 1 - base; 2 – reactor capacity; 3 - vertical support; 4 - inclined bottom of the reactor; 5 - the central hole of the reactor; 6 – inner cylindrical wall of the reactor vessel; 7 - drain pipe; 8 - overflow pipe; 9 - adjusting ring; 10 – reactor cover; 11 - ventilation duct; 12 - tubular body; 13 - bearing; 14 - vertical shaft; 15 - shank; 16 - belt drive; 17 - electric motor; 18 – container for initial material; 19 - inner wall of the container; 20 - outer wall of the container; 21 - the bottom of the container; 22, 23 - upper and lower compressed air supply pipes; 24 - compressed air supply pipe; 25 – central positive electrodes; 26 – external negative electrode; 27 - contact wire of positive electrodes; 28 - contact wire of the negative electrode

alkaline area. At the same time, OH_ ions, easily receiving new charges from the extensive negative electrode, saturate the interelectrode space and are actively discharged, but not on almost the entire isolated positive electrode itself, but mainly on the channel growing from the positive electrode. Between the electrodes there is

a negative space charge that easily from OH_ ions to , gives up its electrons a growing spark discharge channel. The quantitative shift of the ionic equilibrium towards the predominance of OH_ ions corresponds to the Kohlrausch law [6]. To reproduce electrohydraulic shocks inside the

volume of a mixture consisting

from shell-containing raw materials crustaceans (shrimp shells) and water in a ratio of 1:15,

used installation, including power supply with condenser sator as storage electrical energy (Fig. 1).

The voltage on the capacitor rises to a value at which a spontaneous breakdown of the air forming gap occurs, and all the energy stored in the capacitor instantly enters the working gap in the liquid, where it is released in the form of a short electric pulse of high power. Further, the process at given capacitance and voltage is repeated with a frequency depending on the power of the supply transformer. The installation that reproduces electrohydraulic shocks (EHS), depending on the values of its main parameters - voltage *(U)* and capacitance (s) - has three main modes of operation: hard - U> 50 kV;

c<0.1uF; medium - 20 *kV<U<50* kV; 0.1uF<s<1.0uF; soft - U<20 kV; c>1.0uF. The average discharge duration is 0.00001–1.0 μs in hard modes, 0.1–100.0 μs in medium modes, and 10.0–10000 μs in soft modes. The current frequency at the installation is 50 Hz. The rigorous mode of processing shell-containing raw materials in an installation that reproduces EHC leads to the breaking of intermolecular bonds of chitosan, a decrease in molecular weight, a change in the supramolecular structure, and the degree of crystallinity.

ness and to a decrease in viscosity its solutions, which limits the possibility of using irradiated chitosan in the food industry. Increasing the capacity or stress reduction in the case of a mild mode of processing shell-containing raw materials does not provide the impact energy sufficient for rupture

Table 1

Physical and chemical parameters of chitosan

Physico-chemical indicators of chitosan	Chitosan from the shell of the king crab, manufacturer CJSC "Bioprogress" (control)	Chitosan obtained by the proposed method	
		chitosan from PSS shrimp	chitosan from PSS freshwater crayfish
Intrinsic viscosity (in a solution of acetic acid with a mass fraction of 2%), dl / g	25.0	24.1	22.9
Molecular weight, kDa	260	300	270
Deacetylation degree, %	82	92	90
Ash content, %	0.7	0.4	0.5
Residual protein, %	0.05	0.05	0.03
Humidity, %	9	9-10	8-10
Particle size (granulometric composition), mm	0.1-0.2	0.05-0.1	0.05-0.1

bonds between the protein and chitin in its structure, and also leads to an insufficient degree of its grinding, which does not allow the process of chitosan deproteination to be carried out simultaneously with grinding. It has been established experimentally that it is expedient to treat PSS of

crustaceans at the average operating mode of the installation reproducing EHC, which ensures the breaking of the N-glycosidic bond, due to which chitin in PSS is bound to the protein. As a result, the protein component is removed (deproteination). Simultaneously, the degree of grinding of crustacean PSS is reached, at which the process of chitin deacetylation proceeds uniformly throughout the entire volume of the mixture. This technical approach (Fig. 2) makes it possible to reduce the duration of the process of obtaining chitin and chitosan by combining the stages of grinding and deproteination of the feedstock and to exclude

the use of alkali in the stage deproteinization. The use of other modes of the installation reproducing EHC leads to the production of chitosan of lower quality, with a lower molecular weight.

mass and heterogeneous degree of deacetylation (DD), which limits the possibility of its use in the food industry.

laziness.

The proposed processing regime allows deacetylation under homogeneous conditions with completely destroyed chitin and chitosan crystal structures. Homogeneous deacetylation leads to uniform deacetylation of N-acetylated units along the

entire length of the molecule and the formation of chitosan uniform in SD,

which has a positive effect on physical and chemical properties [7].

The described scheme is implemented in the original technical solution of the installation for the production of chitin and chitosan [8], the general view of which is shown in Fig. 3. 3.

The installation contains a reactor for technological processing of the initial solid raw material, in which a removable perforated container is mounted for loading the processed raw material. The proposed method for producing chitosan makes it

possible to obtain a product characterized by high reactivity and sorption capacity, which makes it possible to use it as a biological

hygienically active food supplement. In terms of physicochemical parameters, it meets the requirements for food chitosan (TU 9289-021-00492894-2015 "Food chitosan from shrimp shell"): mass fraction of the main substance - not less than 85%, moisture - not more than 10%, minerals - not more than 0.7%, pH of a 1% solution of chitosan in acetic acid with a mass fraction of 2% - not more than 7.5. Physico-chemical screening bodies of chitosan obtained by the proposed method, in comparison relations with the prototype are presented in the table. The proposed method for obtaining chitosan has the following advantages:

– the possibility of organizing the process of utilization of PSS of crustaceans in the conditions of the production base for processing the main raw materials; – reduction of alkali consumption and wastewater volume due to the use of electrohydraulic shocks at the deproteinization stage;

– reduction of the list of chemicals used in the technological process and the use of available and relatively cheap reagents [9]. The technical result consists in reducing the duration of the process of obtaining chitosan due to the combination of the stages of grinding and deproteination, and the exclusion of the use of an alkali solution at the stage of deproteination.

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UDC 664:661.4

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obtaining, properties and sanitary-hygienic assessment of food selenium-containing collagen supplement

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Selenium is an essential trace element in nutrition and performs various biological functions in living systems. An urgent area of research is the development of new food sources of selenium, including those with polyfunctional properties. Collagen biomodification products are a promising bionanomaterial for use as a matrix in the design of nutritional supplements with desired properties. A technological scheme for obtaining a new selenium-containing collagen additive, a characteristic of its chemical composition and functional and technological properties, a comparative assessment of its antioxidant activity with other sources of collagen and selenium, sanitary and hygienic indicators, and recommended areas of application are presented. **Key words:** selenium, collagen, food additive, functional and technological properties,

antioxidant activity, sanitary and hygienic indicators.

Abstract: Selenium is an essential trace element in the diet and perform various biological functions in living systems. Current direction of research is to develop new food sources of selenium, including with multifunctional properties. Products biomodification collagen are a promising bio-nanomaterial for use as a matrix while constructing nutritional supplements with the desired properties. We have developed the technological scheme of obtaining new selectabase supplements, presented the characteristic of its chemical composition and functional and technological properties, a comparative evaluation of its antioxidant activity with other sources of collagen, and selenium, sanitary-and-hygienic indicators, recommended applications.

Keywords: selenium, collagen, food additive, functional and technological properties, antioxidant activity, hygiene indicators.

In connection with the role of selenium as an essential element in nutrition and the diversity of its biological functions in living systems, an important area of research is the development of new food sources of selenium, including those with polyfunctional properties [1, 2]. The totality of research results [3-5] allows recommending the use of collagen biomodification

products as a matrix for designing food additives with desired properties, in particular, bitoprotective, to impart physiological functionality to food products based on raw materials of animal origin [6].

Selenium-containing collage novel additive (SKD) was obtained

in accordance with technological

the scheme presented in fig. 1. Technological operations contribute to an increase in moisture-binding, water-retaining abilities, which favorably affects the functional and technological properties and the mass yield of the additive. The resulting additive is characterized by the indicators presented in Table. 1. Application of freeze drying on

final stages allows

increase the shelf life of the additive up to 120 days, while saving energy resources to create storage conditions.

Hydrocoloid preparations are widely used in the dairy industry in the production of curd products, curd pastes, and dessert products, performing the functions of structure formers and dietary fiber analogues. At

this positive technology

The logical effects are associated with their moisture binding capacity and structure forming properties. A selenium-containing collagen

supplement can be used in the recipe of products based on animal raw materials as a structure former and stabilizer, and also allows you to adjust the level of enrichment of products.

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selenium depending on its dosage. A comprehensive assessment of the antioxidant activity of the source Selenium compounds and their immobilization products on collagen biomodification products were measured amperometrically on a TsvetYauza-01-AA instrument; the results are shown in Fig. 1. 2. The total content of antioxidants (TAC) in the samples varies from 0.6 to 23.8 µg/g. It can be seen from the diagram that the largest amount of antioxidants is in DMDPS and immobilized DMDPS on collagen biomodification products (PBC), the smallest amount is in samples with sodium selenite, and the amount of antioxidants in pure collagen is close to zero. It has been experimentally established that 2.5-3.0 hours are needed for enzymatic treatment. If the duration of treatment is less than 2.5 hours, insufficient collagen hydrolysis occurs, and therefore the sorption capacity and a high level of functional properties (moisture-binding , water-retaining, gel-forming, fat-retaining abilities). With a treatment duration of more than 3 hours, the loss of the collagen fraction increases and the microbiological parameters of the product deteriorate. Maximum

collagenolytic activity collagenase is observed at pH 6.5-8.5. Deviation from given range will increase the exposure time of the preparation with collagen hydrolyzate.

At temperatures below 36 °C, the activity of the enzyme preparation decreases, which leads to an increase in the duration of the process. Heating the reaction mixture to a temperature above 38 °C leads to a deterioration in the functional properties of the SKD and an increase in energy consumption.

Figure 1 - Process flow diagram for obtaining a selenium-containing collagen supplement: DMDPS - 4-di[3(5-methylpyrazolyl]selenide

When the dosage of the drug "collagenase food" is less than 0.02% destruction of native collagen is not achieved, accompanied by an increase in the number of free ÿ-chains, which provide high sorption capacity. The dosage of the preparation "collagenase food" over 0.02% does not lead to a further increase in the sorption capacity

hydrolyzate of collagen, due to the peculiarities of the molecular weight distribution of protein fractions in the composition of hydrolysis products. Evaluation of the safety and biological activity of the source

Selenium analysis was carried out using an express bioassay. A free-living, easily cultivated unicellular organism Paramecium caudatum was used as a test object (V.S. Buzlama et al., 1997). The express biotest reacts quite sensitively to the active substances contained in the test objects and reflects their relationship to the viability of the organism. Similar results were obtained for the initial

selenium preparations (Table 2) and products of their immobilization on PBC.

The results of the conducted studies show that in

Table 1

Chemical composition and functional and technological properties

The name of indicators	Characteristics and value of indicators for samples of SKD in technological forms powdery White with a	
	gelatinous	cream tint Neutral
Color	yellowish	
Odor		
Mass fraction, %:		
moisture	82.70	4.42
squirrel	16.56	90.28
ash	0.71	4.92
fat	0.3	0.38
Selenium concentration, μg/g	1.2	7.9
WCC,	7.69	26.42
% WHC, %	39.37	88.7

samples of the inorganic selenium compound showed a certain aggressive effect on the test culture, while PBA with immobilized 4-di[3(5-methylpyrazolyl]selenide) slightly stimulated proliferation and increased cell viability. immobilized DMDPS

safe, and it is promising to use it in the food industry.
mindset.

Based on the requirements of the Federal Law “On the Sanitary and Epidemiological Welfare of the Population” dated March 30, 1999 No. 52-FZ and the Regulations on State Sanitary and Epidemiological Regulation, Technical Regulation Ta

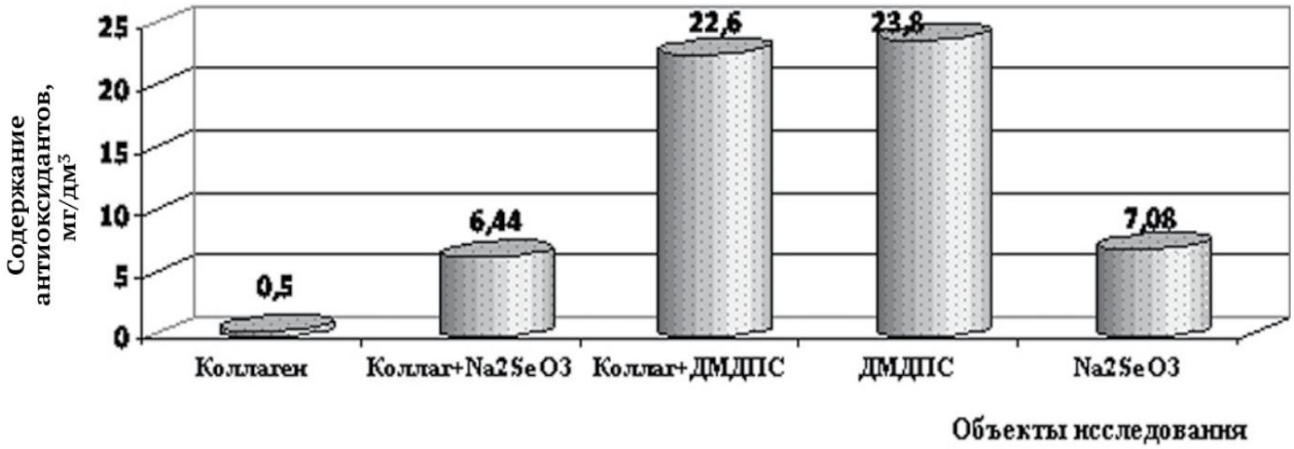

Figure 2 - Comparative evaluation of the antioxidant activity of the objects of study under consideration

Table 2

Indicators of biological activity of SKD with different sources of selenium on Paramecium ÿaudatum culture

Breeding	Biosecurity		Inoculum Density (PI)		Biological Activity Index (BIA)	
	Sodium Selenite DMDPS	Sodium Selenite DMDPS	Sodium Selenite			DMDPS
1:1000	BA	IN	08.1±0.1**	1.19±0.1***	0.76±0.1***	1.19 ±0.1***
1:10000	IN	IN	0.87±0.1	1.1±0.1	0.9±0.1	1.1±0.1
1:100000	IN	IN	1.0±0.1	1.0±0.1	1.0±0.1	1.0±0.1

** IN, indifference; BA, bioactivity; BC-50, 50 ± 10% of cells died; BC-100 – 100±10% of cells died ** PI – 1±0.1 – the object is biologically inactive; PI - more than 1 ± 0.1 - the object stimulates reproduction; PI - less than 1 ± 0.1 - the object inhibits cell reproduction *** IBA - 1 ± 0.1 - the object is biologically inactive; IBA less than 1±0.1 – the object reduces cell viability; IBA more than 1±0.1 - the object increases cell viability*

of the Customs Union TR TS 033/2013 "On the safety of milk and dairy products", the Technical Regulations of the Customs Union TR TS 021/2011 "On food safety", as well as the requirements of SanPiN 2.3.2.1078 (Table 3), an analysis of safety indicators was carried out received SKD. Hygienic requirements for the permissible level of the content of toxic elements are imposed on all types of food raw materials and foodstuffs [7, 8]. The determination of residual amounts of toxic substances was carried out, the results are presented in Table. 4, 5. The obtained results show that the shelf life of SKD with indicators not exceeding the threshold value for QMAFAnM (5 104 CFU/g) in the powder form is longer than in the gel form and is 160 days.

Table 3

Determination of residual amounts of toxic substances

Indicators, units of measurement	Research results	Value acceptable level
	PBK+DMDPS	
Hexachlorocyclohexane (ÿ,ÿ,ÿ-isomers), mg/kg	Less than 0.003	0.1
DDT, mg/	Less than 0.001	0.1
kg Cadmium,	0.0021	0.05
mg/kg	0.001	0.03
Mercury, mg/kg	0.01	0.1
Arsenic, mg/kg Lead, mg/kg	0.002	0.5

Table 4

PBK safety indicators according to SanPiN 2.3.2.1078-01 (index 1.1.1.4 - semi-finished minced meat, minced beef, pork, meat from other slaughter animals)

QMAFAnM, CFU/g, no more	Storage duration, days						
	1	thirty	60	95	120	150 norm	
Gel-like SKD	2 103	2 103	4 103	8 103	2 104	2 106	5 106

Table 5

PBK safety indicators according to SanPiN 2.3.2.1078-01 (index 1.1.1.4 - minced beef, pork, meat from other slaughter animals)

QMAFAnM, CFU/g, no more	Storage duration, days 40 80 120						
	1				160	200 norm	
Powdered SKD	2 103	2 103	4 103	6 103	9 103	2 104	5 104

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SECTION 6. CONFERENCES, DISCUSSIONS, PRESS RELEASES

PRESS RELEASE

on holding the V International scientific-practical (cross-country cascade) conference "ORTHODOX SCIENTIST IN THE MODERN WORLD" MAY 24-31, 2016

The initiators of the conference were: International Public Organization "Association of Orthodox Scientists" (Russia), Suprasl Academy (Poland), European Academy of Natural Sciences (Hannover, Germany), European Scientific Society (Hannover, Germany), Chamber of Commerce and Industry of the Voronezh region (Voronezh, Russia), Voronezh State Forest Engineering University named after V.I. Morozova G.F.» (Voronezh, Russia), Fineconomservice 2000 LLC. The conference was attended by

128 people who spoke as representatives of the following Russian and foreign universities and organizations: Polskie Stowarzyszenie Ekonomistów ÿrodowiska i Zasobów Naturalnych, Kraków, Polska.

Uniwersytet w Biaÿymstoku, Biaÿystok, Polska.

European Academy of Natural Sciences, Gannower, Germany.

European Scientific Society, Hannover, Germany. Suprasl Academy, Poland. Republican Institute of Higher Education, Minsk, Belarus. Ukrainian State University of Railway Transport, Kharkov, Ukraine. Office of the Honorary Consul of Kyrgyzstan in the Voronezh region, Kyrgyzstan. Kyzyl-Kiya Institute of Technology, Economics and Law, Batkent State University, Kyrgyzstan. Academy of Labor and Social Relations, Moscow, Russia. Military Educational and Scientific Center of the Air Force “Air Force Academy named after Professor N.E. Zhukovsky and Yu.A. Gagarin”, Voronezh, Russia. VOKK "Diagnostic Center", Voronezh, Russia.

Voronezh State University of Architecture and Civil Engineering, Russia. Voronezh State Forest Engineering University named after V.I. G.F. Morozov, Russia. Voronezh State Medical University named after V.I. N.N. Burdenko of the Ministry of Health of Russia. Voronezh State Pedagogical University, Russia. Voronezh State Technical University, Russia. Voronezh State University, Russia. Voronezh Institute of Economics and Social management, Russia. State Social and Humanitarian University, Kolomna, Russia. Moscow Academy of Economics and Law, Voronezh branch, Russia. MPOO "Association of Orthodox Scientists", Russia. Odintsovo secondary school No. 17 with in-depth study of individual subjects, Russia. Fineconomservice 2000 LLC, Voronezh, Russia. Oryol State University I.S. Turgenev, Russia. St. Petersburg State University of Economics, Russia. SRO "VGASU-stroy", Voronezh, Russia. Voronezh Institute of Economics and Law, Russia. Tambov State University, Russia. Chamber of Commerce and Industry of the Voronezh Region, Russia. University of Dubna, DINO branch, Russia. MIP LLC "Intellectual", Russia. NIIEOAPK TsChR Russia, Voronezh, Russia.

The conference began on May 24-25, 2016 with the Medical Congress in Hannover. At the Congress, which was held in conjunction with the exhibition of medical products "REHABILITATION & NUTRITION" and with the departure of participants to the Netherlands, the section "Orthodox ethics in medicine" was announced for the first time. On the eve of the Congress, the President of the European Academy of Natural Sciences Prof. **V.G. Tyminsky** sent a greeting to the conference participants. 9 people participated in the Russian section of the conference from the Hannover scientific platform "EURO MEDIKA".

The conference was continued by the scientific platform at the Suprasl Theological Academy, Suprasl, Poland. The work was attended by 27 Russians headed by Archpriest **Fr. Gennady Zaridze.** This group subsequently participated in an international scientific conference in Belarus (Zhirovichi).

On May 30, a meeting of the Russian section of the conference took place at VGLTU. G.F. Morozov. The number of participants is 25 people. At the round table, greetings were received from the leadership of VGLTU. G.F. Morozov (rector **M.V. Drapalyuk),** Fr. Gennadiya Zaridze (media materials), President of the EAEN, Germany, Professor V.G.

Tyminsky. In the speech of the teacher of foreign languages of VSU **Kryuchkova V.V.** verses were read in Russian and Spanish from the book “The Wanderer” by G.V. Zaridze, a fragment of a sermon in a Spanish church was shown.

Speech by the priest **Fr. Georgy Vysotsky** reminded the participants of the conference about the need for the growth of morality in the activities of scientists. A story followed about the condescension of the Holy Fire and the measurement of its temperature, which testifies not just to a miracle, but to unknown phenomena that science has yet to find out. Fr. George stopped at the greeting of Fr. Gennady Zaridze and once again drew attention to the fact that the scientific discoveries made only seem to be the absolute truth. Subsequently, it turns out that all the results of scientific research are relative,

the truth has not yet been revealed. Report of Professor VIESU **Meshcheryakov D.A.** included an analysis of the level of trust of the Russian population in different branches of government. It follows from the report that “the institution of trust is the predictability of the relationship between subjects. It is trust that makes possible the rational pursuit of goals, planning activities in various fields. Acting as a kind of institutional norm, trust is a set of informal universal norms and rules that is adopted in a particular social or economic system. The professor also said that citizens trust the President of Russia to the greatest extent (72.0%), the Russian army (67.0%), churches (47.0%), the Government of Russia (37.9%). To the greatest extent, citizens do not trust political parties (56.3%), local governments (50.4%), the judiciary (49.4%), the police, internal affairs bodies (48.7%), the press (newspapers , magazines) (45.6%), the State Duma of Russia (45.2%), trade unions (37.8%). For comparison: 11.3% do not trust relatives, 17.0% do not trust friends. Report of Professor VGASU

Shulgina L.V. was devoted to the problems of state and municipal management of property and land relations, raised in connection with the need to develop the Strategy 2030 in the Voronezh region. The speaker cited economic axioms about property, made a conclusion about the absolute nature of primary state ownership of land, i.e. Never in the history of Russia, since the 15th century, has there been a complete realization of private property, and so far only about 10 percent of the land has been privatized. This is the sacred meaning of managing state and municipal property. Proposals were made to reform the relationship between government levels and municipalities through partnership mechanisms, clusters, the introduction of social indicators, the strengthening of control and planning mechanisms, and the simplification of the management structure. Report of the Head of the Committee for Demography, Employment and Migration of the Chamber of Commerce

and Industry of the Voronezh Region **V.I. Muzhensky** was devoted to the topic of the migration situation in the Voronezh region. The speaker pointed out that in the field of international migration, in recent years, there has been a tendency for the number of incoming migrants to exceed the number of outgoings, as a result of which the migration balance remains positive. In 2015, more than 178,000 foreign citizens and stateless persons were registered for migration. More than 50% of migrants who come to us are labor migrants. In the Voronezh labor market, sectoral segments of the employment of foreign labor have actually been "fixed" to certain countries. Thus, in construction, the main share of labor migrants are citizens of Uzbekistan and Tajikistan. Citizens of Ukraine work in manufacturing industries, while Moldovan citizens work in agriculture. In wholesale

and retail trade - citizens of Azerbaijan. The most demanded on the territory of the Voronezh region among foreign citizens who arrived on the territory of the Russian Federation in a manner that does not require a visa are unskilled specialties (auxiliary workers, construction workers, gardeners, fruit and vegetable growers, etc.).

Doctor of Economic Sciences, Professor of the Department of Economics and Fundamentals of Entrepreneurship VGASU **Shibaeva M.A.** reported to those present on the need, ways, tools for the formation of a construction cluster in the Voronezh region. The advantages of the construction cluster for small and medium-sized enterprises are generally understood. However, the cluster does not find support among large construction enterprises, such as Vorone Zhdom, IP KIT, etc., due to the fact that it can squeeze the positions of these enterprises in the market and compete in some positions, for example, in finishing works. Nevertheless, the idea of a cluster continues to be developed, and its implementation is possible. Associate Professor of the Department of Economic Disciplines of the Voronezh Branch of the Moscow Academy of Economics and Law, Candidate of Economic Sciences **Shulgin A.V.** spoke on the

topic of public-private partnership in supporting the human capital of people with disabilities. He pointed to the growing activity of the state and activities related to various programs of the Accessible Environment project. He cited the implementation of these programs in the Voronezh region as an example, pointing out that disability today is a way of life and demonstrates a person's desire to overcome circumstances. Associate Professor of the Department of Economics and Fundamentals of Entrepreneurship of VGASU **Provotorov I.A.,** Candidate of Economic Sciences, reported to the conference participants on the formation of a private initiative mechanism in PPP projects. He pointed out that the mechanism of private initiative has significant differences from the

"traditional" public projects.

private partnership, implemented on the initiative states. In the latter case, the state (municipality) acts as a development driver: an infrastructure object is searched for, the project efficiency is assessed, and an investor is searched for. The young scientist suggested that at present, in order for the mechanism of private initiative in Russia to work effectively, it is necessary to develop basic concepts,

techniques, methods and economic-mathematical models. First of all, methods should be developed to justify the optimal amount of investment; it is necessary to determine the main types of risks arising at different stages of preparation and implementation of projects; Methodological approaches should be developed to conduct an independent examination of the proposal of a private initiator. Postgraduate student of the Department of Constitutional Law of the Voronezh State University **Anton Kosolapov**

conveyed greetings from his supervisor, Ombudsman of the Voronezh Region, Honored Lawyer of the Russian Federation Zrazhevskaya T.D. and spoke about morality in modern paid medicine. He gave practical examples that testify to the chaotic choice of the healthcare financing model, and came to the conclusion that modern Russian medicine tends to switch to a paid basis even in the case of providing assistance to the population. The round table concluded the work with the report of the head of the scientific platform in Voronezh **T.L. Bezrukova,** Doctor of Economics, Professor, Dean of the Faculty of Economics of the G.F. Morozov on the topic "Improving

the competitiveness of the regional economy."

E.I. Whitebeard*

PILGRIMAGE AND SCIENCE: RESULTS OF THE INTERCOUNTRY CASCADE V INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE "ORTHODOX SCIENTIST IN THE MODERN WORLD" (SUPRASL, POLAND; ZHIROVITSY, BELARUS)

(Moscow State Regional Social and Humanitarian Institute, Kolomna, Russia)

From May 24 to May 31, the V International Scientific and Practical Conference "Orthodox Scholar in the Modern World" was held. This year, her work was organized at several sites - in Voronezh (Russia), Hannover (Germany), Suprasl (Poland), Zhirovichi (Belarus).

The Association of Orthodox Scholars at the sites in Suprasl and Zhirovichi was represented by a delegation of 27 people headed by our leader and spiritual mentor Father Gennady Zaridze. In Poland, we were

hosted by the Suprasl Academy, located on the territory of the monastery of the Holy Virgin Mary in the city of Suprasl. The responsible organizer, our constant and ubiquitous guide, as well as a good friend of the entire delegation was the head of the Polish branch of the MPOO OPU **Antoniy Mironovich,** Doctor of Historical Sciences, Professor, Dean of the Department of History of Central and Eastern Europe at the University of Bialystok (Bialystok, Poland). The monastery provided a comfortable bus,

which took our entire delegation to the railway station in Grodno. Along the way, we saw many Orthodox churches and rejoiced at this. Later, Professor Anthony explained that the north-eastern part of Poland, including the city of Su Prasl with its famous ancient monastery and the city of Bialystok, is a kind of Orthodox center, a place where the Orthodox feel more relaxed and where their population density is higher than in others areas. But there was a frightening event on our way. On May 28, the Ministry of Sports and Tourism of Poland held an

annual action, a kind of folk festival called “Journey to the East”. People

families, companies flocked to specially

selected natural areas to relax, play paintball, fight with inflatable swords,

enjoy sweets and have some fun. So, a long column of restored equipment from the times of the Great Patriotic War passed by our bus. Cheerful young and not so young people in camouflage, sometimes in German helmets, were sitting in cars and motorcycles, waving flags, shouting, honking. Historic show! Later, Professor Anthony, in response to our inquiries, explained that now the ideological struggle for the minds of the youth is carried out covertly, but very persistently. Such sports and tourism events, competitions such as Eurovision and similar ones are the main means of shaping public opinion on the most complex political issues, and the media conduct a “scientific” argumentation of key installations. All subsequent days within the framework of the conference, scientists discussed this problem from the point of view of science and Orthodoxy in all its versatility.

At the same time, the delegation of Orthodox scholars was received very warmly and cordially. First of all, we visited the service in the largest temple of the monastery, which was blown up by the Nazis and rebuilt. The abbot of the monastery gave us an introductory tour and invited us to the museum of icons operating at the monastery. We were also shown the exhibition center of the monastery, where exhibitions of works by Orthodox parishioners are organized. We were able to see the paintings of a young woman who had been paralyzed for more than a year, as well as the works of a Polish artist dedicated to memories of her home, family and village way of life. We started our first working day with Holy

Communion. It should be noted that it was a Sunday, and many local parishioners came to the service at the monastery. I was pleasantly impressed that most of the people were walking in families - all smartly dressed, standing shoulder to shoulder strictly and solemnly. True, women

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we do not cover our heads, men and women do not stand on opposite sides of the temple, and children participate in the singing of the choir. All this is a consequence of Uniatism, that period of history when the right and glorious rites were preserved in many churches that came under the jurisdiction of the Pope. The problem of the existence of Uniate communities was recently discussed at the highest level during the meeting between Patriarch Kirill of Moscow and Pope Francis of Rome. Of course, Russian and Polish scientists and theologians could not avoid this topic in their discussions. That is why the topic of the meeting of the suprasl part of the conference is entitled "The problem of preserving spiritual and moral values in the secular world."

The atmosphere at the conference was warm, friendly and at the same time had an intense working character. Each speech was actively discussed, the audience asked clarifying and problematic questions, everyone wanted to find specific answers to complex topical problems. The meeting was also attended by local residents, albeit in small numbers. Several speakers came specially from the Universities of Bialystok and Lublin. After the formal end of the meeting, the participants could not disperse and continued to discuss the issues raised with enthusiasm in an informal setting. It is especially pleasing that several ideas and creative alliances were born in these friendly discussions, which are planned to be turned into real practical results. In the evening, at a meal, we all sang Paschal troparia together in different languages, looked for new possible forms of cooperation, and accepted three more people from the Polish community into the Association of Orthodox Scholars.

The next day was preparing a lot of incredible surprises for us. We visited the two largest Orthodox churches in Bialystok. The first of them was built in the image of St. Sophia Cathedral - tall, spacious, beautifully painted in all two tiers, each of which is available to the parishioners for visiting during the service. The rector of this church demonstrated an altar that had been placed outside the altar so that parishioners could be present during the preparation of bread and wine for Holy Communion. It turns out that this is a very ancient Greek tradition, and on holidays, parishioners bring a huge amount of bread in order to join the sacred action through them.

The second temple, quite young, was built over the past few decades by local residents and the priesthood. Its huge size is justified by the fear of people, because, perhaps, they will no longer be able to build Orthodox churches ... Its architecture cannot be called classical, but, driving through the streets of Bialystok, we noticed that

The influence of modern technologies, materials and mores of Europe is really very strong in the presence of such structures. Professor Anthony confirmed this assumption, but noted that in the construction of Catholic churches, neo-styles appear much more often and noticeably.

On the outskirts of Bialystok, we visited the largest Orthodox community in Poland in the parish of the Holy Prophet Elijah, where the rector of the parish, **Father Aleksey Nesterovich ,** organized a nursing home, supported by donations from parishioners. In a literal translation from Polish, it is called "The House of Peaceful Old Age". On the territory of this parish, in one of the new villages where many young people live, a new church is being built in memory of the Hieromartyr Archimandrite Gregory (Peradze), who died in the gas chamber of the Nazis. Our pilgrimage delegation reverently read the akathist in the temple under construction. The next stage of the

pilgrimage was the women's monastery in Zverki, where we had the grace to venerate the relics of the infant martyr Gavri il Zabludsky, who was killed for his faith in 1690 and found in relics three hundred years later. The sisters of the monastery donated a vessel of chrism to us, and **Father Gennady,** having blessed us to venerate the relics, anointed everyone. It is amazing what a magical aroma exudes this world! The rest of the day was devoted to communicating

with Archimandrite Gabriel and visiting his hermitage named after Saints Anthony and Theodosius of the Caves in Odrynki. It should be noted that this is the only Orthodox monastery in Poland, and it is located on a small island in the swampy part of the Narew River in a protected area. Everything here made an unforgettable impression: sorrel stew under the crown of a huge oak, and a wooden belfry with large mallets that send sound for 2.5 km, and a wooden church built without a single nail according to an old Russian project of the XIV century, and the holy spring of Anthony of the Caves, and a refectory church with a huge tray of fried fish “that God sent”, and a summer downpour, and the noise of reeds, and tears of tenderness in the eyes of pilgrims standing in front of the miraculous icon of the Mother of God ...

Road again! They are waiting for us in Belarusian Zhirovitsy. The next working day of the conference was held at the Minsk Theological Seminary, located on the basis of the Zhirovichi Assumption Stauropegial Monastery. Russian Orthodox scholars, teachers of the Minsk Theological Seminary and senior seminarians, teachers of Sunday schools and secondary schools of the Grodno region, teachers of the Republican Institute of Higher Education (Belarus) took part in the work of this section.

As part of the discussion, the teachers of the Minsk Theological Seminary very clearly and firmly formulated their appeal to Orthodox scientists: it is necessary together, in commonwealth, to seek scientific truth from Orthodox positions, all scientific knowledge should be communicated to people with the greatest accuracy and honesty. The enemy of human souls in the modern world has chosen theosophy as its weapon, which is increasingly distorting historical memory, understanding of universal values and the traditional foundations of society. Science must become a means of preserving life. Orthodoxy stands strong in Rus'. And all around there is growing continuous, unannounced, strong pressure on Orthodox Christians. Christians with only one goal - to stop its existence. That is why we

consider it our priority task to preserve the purity of moral, primordial Orthodox traditions, true values and to transmit them to today's youth by means of scientific activity. All participants of the conference at the listed international venues

had to think hard, clarify or adjust their creative plans, enlist the support of colleagues. We all returned inspired, filled intellectually and spiritually. May God help us in all our good undertakings!

SUMMARY

SECTION 1. PEDAGOGY, SPIRITUAL AND MORAL EDUCATION

E.Kh. Lokshina, O.A. Bahrakh, V.G.
Kuganov THE MAIN CAUSES OF DESOCIATION OF YOUTH

The main causes that negatively affect the spiritual development and spiritual culture of young people are considered; features and trends in the development of drug addiction in Russia, its rejuvenation; as well as a number of measures aimed at reducing drug addiction in the country.

P.A.
Chernomaz PASSIONARY THEORY OF ETHNOGENESIS - THE SPIRITUAL BASIS OF UKRAINIAN-RUSSIAN RELATIONS

New and Western Christian superethnoi.

Yu.V.
Dragnev PATRISTIC TRADITION AS THE BASIS OF THE CHURCH AND INTERNAL LIFE OF UNIVERSITY STUDENTS The article is devoted to the actual spiritual and moral problem of modern education - the patristic tradition as the basis of the church and inner life of university students. Particular attention is paid to the consideration of the scientific works of theologians, philosophers and ascetics of piety, devoted to the study of the church and the inner life of man. An analysis of literary sources led to the conclusion that the church and inner lives of students are inextricably linked with each other. Church life is characterized by the inner unity of people according to the law of love. In Lugansk, it is proposed to include the patristic tradition of the Orthodox Church in student traditions. The article may be of interest to educators, theologians, priests and a wide range of pedagogical community.

G.A.
Kirmach WORK WITH STUDENTS IN THE CONDITIONS OF THE SPIRITUAL AND EDUCATIONAL CENTER OF THE UNIVERSITY The article outlines the ways and directions of improving the spiritual and moral work with university students. The author cites the monitoring of the activities of the spiritual and educational center of the Luhansk State University. Taras Shevchenko in support of their positions.

A.I. Gazin
Methodology for separating sources of information according to the degree of trust in accordance with the goals of training and education of the individual

The problems of training and education under the conditions of continuous informational and informational-psychological influence are considered. A brief analysis of the methods and means of information-psychological influences has been carried out. A method for analyzing sources of information according to the degree of trust is proposed as one of the ways to reduce the degree of negative influence of information. Criteria for attributing a source of information to a certain degree of trust and their quantitative assessments have been developed.

SECTION 2. ECONOMY, FINANCE, MANAGEMENT

N.Yu. Psareva, S.V. Ovsyannikov
MANAGEMENT OF THE ECONOMIC INSTABILITY OF THE ORGANIZATION ON THE BASIS OF RESTRUCTURING TOOLS The article considers the problem of increasing the economic stability on the basis of the restructuring of the organization. The author reveals the features of managing the economic sustainability of the organization. Taking into account the existing practice, ways to improve the economic sustainability of organizations are disclosed.

S.A. Nasriddinov

The author examines the economic categories associated with integration and offers methodological approaches to characterize integration processes. The author's version of the categories "integration process" and "integration of economic entities", based on the understanding of the category "property", is proposed.

SECTION 3. ECOLOGICAL GEOLOGY

A.A. Valalshchikov, M.A. Krasotkina

HYDROCHEMICAL STUDY OF THE DON RIVER WITHIN THE VORONEZH REGION The history of the study of the hydrochemical state of the Don River in the catchment area is considered. The data on ways and methods of optimizing water management activities are summarized. The leading factors in the formation of the modern chemical composition of the river are identified, which include climatic conditions, the composition of the soil cover and geological rocks that make up the basin, the conditions of underground feeding of rivers, and human economic activity. The main polluting components are nitrites, phosphates, sulfates, heavy metals and pesticides. It has been established that this is due to the discharge of untreated and insufficiently treated wastewater from industrial enterprises, Agroindustrial facilities and housing and communal services, surface runoff from the territories of cities and towns, and flushing of pesticides and fertilizers from fields. The obtained results are generalized and conclusions are formulated.

A.E. Zalata, K.Yu. Silkin

SOME ASPECTS OF THE FORMATION OF THE QUALITY OF SURFACE AND GROUND WATER IN THE VORONEZH RESERVOIR REGION

Questions of changes in the ecological and geological state of the water area and the coastal part of the Voronezh reservoir under the influence of a complex of natural and anthropogenic factors have been studied. The processes of overgrowing of the reservoir with hard vegetation, the formation of alluvial territories and the occurrence of thermal pollution are analyzed. It has been established that the spread of hard vegetation over the water surface is mainly of a natural nature, thermal pollution of water is technogenic, and the transformation of the banks of alluvial territories occurs under the influence of both factors. The deformations of the geological base of the reservoir bed, caused by an increase in the area of the water area occupied by aquatic vegetation, and, as a result, intensive sedimentation, as well as technogenic transformation of the coastline, are studied. The threat of contamination of the Neogene-Quaternary aquifer complex as a result of silting and swamping of the reservoir was assessed. The dependence of the quality of groundwater used for drinking water supply on the ecological state of the reservoir has been revealed. The obtained results are generalized and conclusions are formulated.

SECTION 4. THEOLOGY

Archpriest Gennady Zaridze

SPIRITUAL AND MORAL BASIS OF STUDYING THE TEMPERATURE OF THE HOLY FIRE

The article presents the results of the first experiment to measure the temperature of the Holy Fire immediately after its appearance and several hours later to determine the determinant conditions. The results obtained are commented on from the point of view of the transformation of natural phenomena with determinant conditions into a miracle, where determinant conditions have not yet been scientifically determined.

Archpriest Georgy Vysotsky, A.A. Vysotskaya A

CRITICAL VIEW ON THE ORIGINAL ORIGIN OF LIFE ON EARTH

The article considers two main views on the origin of life on Earth - evolutionary and creational. It is shown that since the 19th century, the materialistic point of view has dominated the scientific worldview, that is, the appearance of life in a “natural” way without the participation of the Creator. The article criticizes the theory of evolution from the point of view of the complexity of the scientific substantiation of original biochemical synthesis. Refutations of evolutionism from the point of view of probability theory and the second law of thermodynamics are presented. The conclusions indicate that the evolutionary theory prevailing in modern science is mainly supported by materialists and atheists and is not substantiated and proven.

SECTION 5. FOOD TECHNOLOGIES

I.A. Glotova, V.S. Balabaev, S.V. Shakhov, V.N. Izmailov

Development of a method for producing chitosan using the electrophysical processing of crustacean shell-containing raw materials The search for approaches that ensure the intensification of technological processes while achieving a high quality of the resulting chitosan is a key factor in expanding the application aspects of this biopolymer, including various industries, agriculture, medicine, and veterinary medicine. important tasks

in this direction are the expansion of the raw material base for the production of chitosan through the disposal of waste from the industrial processing of crustaceans and the simplification of the process of obtaining chitosan. An alternative technical approach has been developed, which involves combining the stages of grinding and deproteinization of raw materials. This eliminates the need for additional use of alkali at the stage of deproteinization due to the use of electro-hydraulic shocks, carried out using ultra-long discharges.

ON THE. Galochkina, O.S.
Vetokhina obtaining, properties and sanitary-hygienic assessment of food selenium-containing collagen supplements

Selenium is an essential trace element in nutrition and performs various biological functions in living systems. An urgent area of research is the development of new food sources of selenium, including those with polyfunctional properties. Collagen biomodification products are a promising bionanomaterial for use as a matrix in the design of nutritional supplements with desired properties. A technological scheme for obtaining a new selenium-containing collagen additive, a characteristic of its chemical composition and functional and technological properties, a comparative assessment of its antioxidant activity with other sources of collagen and selenium, sanitary and hygienic indicators, and recommended areas of application are presented.

SECTION 6. CONFERENCES, DISCUSSIONS, PRESS RELEASES

PRESS RELEASE ON THE V INTERNATIONAL SCIENTIFIC AND PRACTICAL (INTERCOUNTRY CASCADE) CONFERENCE "ORTHODOX SCIENTIST IN THE MODERN WORLD", MAY 24-31, 2016

E.I. Belous
PILGRIMAGE AND SCIENCE: RESULTS OF THE INTERCOUNTRY CASCADE V INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE "ORTHODOX SCIENTIST IN THE MODERN WORLD" (SUPRASL, POLAND; ZHIROVITSY, BELARUS)

ABSTRACTS

SECTION 1. EDUCATION, SPIRITUAL AND MORAL EDUCATION

EH Lokshina, OA Bakhrakh, VG Kuganov
THE MAIN CAUSES OF DESOCIALIZATION YOUTH

The main causes that negatively affect spiritual development and spiritual culture of the youth; characteristics and trends of drug abuse in Russia, its rejuvenation; as well as a number of measures aimed at reducing drug abuse in the country.

PA Chernomaz
THE SPIRITUAL FOUNDATION OF RUSSIAN-UKRAINIAN RELATIONS IN THE LIGHT OF PASSIONARNOST THE THEORY OF ETHNOGENESIS

The essence of modern relations between Ukraine and Russia is considered as the result of confrontation between the Slavic-Orthodox and Western Christian superethnoi.

YV Dragnev
THE PATRISTIC TRADITION AS A BASIS FOR THE CHURCH AND THE INNER LIFE OF UNIVERSITY

STUDENTS Special attention is paid to consideration of the scholarly work of theologians, philosophers and ascetics devoted to the study of the Church and the inner life of man. The analysis of the literature allowed us to conclude that the Church and the inner lives of students are inextricably linked to each other. Church life is characterized by internal unity of the people according to the law of love. In Lugansk is offered in the student's tradition to include the patristic tradition of the Orthodox Church. The article may be of interest to educators, theologians, priests, and for a wide range of teaching community.

GA Kirmach
WORKING WITH STUDENTS IN THE RELIGIOUS EDUCATION CENTER OF THE UNIVERSITY

The article describes the ways and directions of improvement of spiritual-moral work with University students. The author cites the monitoring of the activities of the religious education center of Lugansk State University. Taras Shevchenko in support of their positions.

AI Gazin
The method of division information sources with confidence level
in accordance with the purpose of personality training and education

It is considered the problems of training and education in conditions of continuous information, information and psychological impact. A brief analysis of methods and tools information and psychological impact was made. It was offered the method of analyzing information sources with it confidence level, as one of the ways to reduce the degree of negative impact of information. The criteria of differentiation source of information to varying degrees of confidence and their quantitative assessment were designed.

SECTION 2. ECONOMICS, FINANCE, MANAGEMENT

N. Yu. Psareva, SV Ovsyannikov
MANAGEMENT OF ECONOMIC INSTABILITY ORGANIZATION-BASED INSTRUMENTS RESTRUCTURING

The article considers the problems of increase of economic stability on the basis of restructuring the organization. The author reveals the features of management of economic sustainability of the organization. Given the existing practices revealed ways to improve the economic stability of organizations.

SA Nasriddinov
CATEGORICAL-CONCEPTUAL APPROACH TO THE STUDY OF INTEGRATION OF ECONOMIC ENTITIES

The author examines the economic categories associated with integration, and offers methodological approaches for the characterization of the integration processes. The author's version of the categories "integration process" and "integration of economic entities", based on the understanding of the category "property".

SECTION 3 ENVIRONMENTAL GEOLOGY

AA Valyalschikov, MA Krasotkina
HYDROCHEMICAL STUDY OF THE DON RIVER IN THE VORONEZH REGION

The history of the study of the hydrochemical state of the river don catchment area. The data on ways and methods of optimization of water management. Highlights the main factors of the formation of contemporary chemical composition of the river, which include climatic conditions, composition of soil cover and geological rocks composing the pool, the conditions of the underground supply of rivers, and human activities. As the leading contaminants are nitrates, phosphates, sulphates, heavy metals and pesticides. Found that this is due to the discharge of untreated and insufficiently treated wastewater from the industrial enterprises, objects of Agroprom and housing and communal services, and surface runoff from the territories of cities and towns, run-off from fields, pesticides and fertilizers. Summarized the obtained results and formulated conclusions.

A.E. Zalata, K.Yu. Silkin
SOME ASPECTS OF FORMING OF QUALITY OF SURFACE AND GROUNDWATER IN THE AREA OF THE RESERVOIR

The question of changes of environmental and geological condition of the water area and the coastal part of the reservoir under the action of complex natural and anthropogenic factors. The article analyzes the processes of overgrowing of the reservoir is rigid vegetation, education, alluvial areas and the occurrence of thermal pollution. It is established that the distribution of rigid vegetation on the water surface is mostly natural, thermal water pollution is man-made, and the conversion from the shores of the islets occurs under the influence of both factors. Studied the formation of the geological base of the bed of the reservoir, the cause of which is the increase of area occupied by aquatic vegetation, and, as a consequence, intense sedimentation, and anthropogenic transformation of the coastline. Assessed the threat of pollution of the Neogene-Quaternary aquifer complex in the result of siltation and eutrophication of the reservoir. The dependence of the quality of groundwater used for drinking water supply, ecological status of the reservoir. Summarized the obtained results and formulated conclusions.

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The article presents the results of the first experiment to measure the temperature of the Holy Fire as soon as it appears and a few hours later to determine the determinantal conditions. The results obtained are commented from the point of view of the transformation of natural phenomena with determinate conditions in a miracle, where the determinant is not scientifically defined.

Archpriest Georgy Vysotsky, AA Vysotskaya A
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The article considers two key viewpoints on the origin of life on Earth and evolutionary creation. It is shown that since the XIX century in the scientific world dominated by the materialistic point of view, that is, the emergence of life "natural" means without a Creator. The article criticizes the theory of evolution from the point of view of the complexity of scientific substantiation of the original biochemical synthesis. Presented refutation of evolutionism from the perspective of probability theory and the second law of thermodynamics. The findings indicated that dominant in modern science, evolutionary theory is mainly supported by materialist and atheist and is not justified and proven.

SECTION 5. FOOD TECHNOLOGY

IA Glotova, VS Balabaev, SV Shakhov, VN Izmailov A
METHOD OF PRODUCING CHITOSAN USING ELECTROPHYSICAL TREATMENT PANZERSTECHER RAW SHELLFISH

the Search of approaches for intensification of technological processes in achieving a high quality of chitosan is a key factor in the expansion of the applied aspects of this biopolymer, including various branches of industry, agriculture, medicine, veterinary medicine. Important tasks in this direction are expanding the resource base of chitosan by utilizing the waste of

industrial processing of crustaceans and simplify the process of obtaining chitosan. Developed alternative technical approach, which involves combining the stages of grinding and deproteinizirovanny raw materials. This eliminates the need for additional use of alkali at the stage of deproteinizirovanny through the use of electro-hydraulic shock is carried out using extra-long bits.

NA Galochkina, OS Vetohina
preparation, properties and sanitary-hygienic assessment of food
selectarray collagen supplements Selenium is an

essential trace element in the diet and perform various biological functions in living systems. Current direction of research is to develop new food sources of selenium, including with multifunctional properties. Products biomodification collagen are a promising bio-nanomaterial for use as a matrix while constructing nutritional supplements with the desired properties. We have developed the technological scheme of obtaining new selectabase supplements, presented the characteristic of its chemical composition and functional and technological properties, a comparative evaluation of its antioxidant activity with other sources of collagen, and selenium, sanitary-and-hygienic indicators, recommended applications.

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EI Belous

A PILGRIMAGE TO SCIENCE: A CROSS-COUNTRY RESULTS OF THE CASCADING OF THE V INTERNATIONAL SCIENTIFIC-PRACTICAL CONFERENCE "THE ORTHODOX SCIENTIST IN THE MODERN WORLD" (SUPRASL, POLAND; ZHIROVITSY, BELARUS)

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reviewed and (in the case of a positive review) scientific and control editing.

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The most beautiful Orthodox cathedrals
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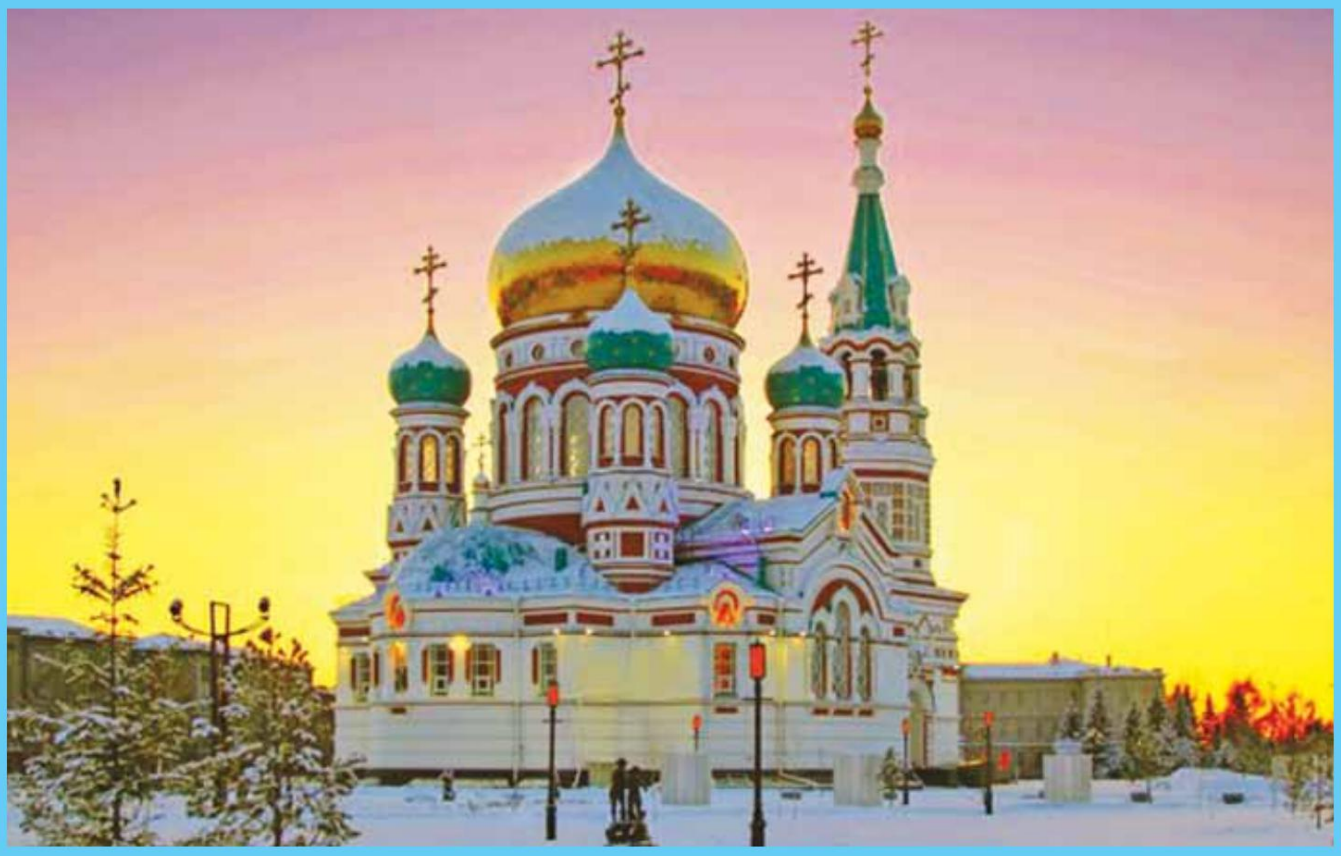

The Assumption Cathedral is located in the center of Omsk, on Cathedral Square. It was founded in 1891 by the architect E. Wirrich, who took as a basis the project of the St. Petersburg Church of the Savior on Spilled Blood. The first stone in the foundation of the cathedral was laid by Tsarevich Nikolai Alexandrovich, the future Russian Emperor Nicholas II, who at that time was traveling around Russia. He also sent 5,000 rubles for the construction. The cathedral was built on donations from the population and the budgetary funds of the city of Omsk. John of Kronstadt served the liturgy in the cathedral. Until 1929, the cathedral was closed by the "Reds", opened by Kolchak. But since 1929, the cathedral was closed completely, and in 1935 it was blown up, but the altar wall with paintings survived. The temple could n

The iconostasis of the monastery

Service in progress

Christmas trees were set up on and on its ruins. In 1999, the Memorial Cross was erected on the site of the cathedral, and in 2005, the authorities decided to revive the cathedral. In January 2006, the construction of new walls began, in March 2007 the construction was completed, the iconostasis was restored. The restoration of the cathedral was finally completed in July 2007, which was celebrated in Omsk with holidays. The cathedral is considered unique, in its lower church are the relics of St. Sylvester, Archbishop of Omsk and Pavlodar, the first Omsk canonized saint.