TESLA'S POINT OF MIND

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Things were created rather in the minds of angels, than in Nature, I.e. angels had all things clear in their minds and thoughts before they got a real existence.

Words by Augustine Blessed cited by H.P. Blavatskaya In her book "Secret doctrine"

"I will not work for the present no more, I am working for the future"- said Tesla to journalists gathered in New York City more than seven decades ago. – "The future is mine!" Inventor of alternating current, polyphase engines and generator, reversible magnetic field, radio, teleautomatics, inventor, on whose patents energetics of XX century is properly based, worked alone on explanation of cosmic processes during decades, having a desire to combine material and spiritual theoretically like he did it in his practical discoveries.

Mentioning of Nikola Tesla's name now mainly connected with the so-called Tesla coil, inductive engine and international unit symbol to measure the force of magnetic field. Many facts of his life and his extraordinary creative gift are forgotten.

The most productive period of his creative work Tesla spent in USA. He had patented more than 300 inventions in different countries. Many of them still were not repeated; for example, receiver of radiant energy, medical apparatuses, as well.. We know nothing definite about its principle of operation besides that may be it is the question of transformer of energy produced by cosmic rays. In the period from 1899 until 1900, he devoted himself to the research of electromagnetic oscillations of very low frequencies in the specially built laboratory in Colorado Springs. Two years later he began to build a world relaying station on Long Island near New York and he didn't finish it. This experiment was financed by American steel magnate J.P. Morgan, Tesla's friend. After this project was closed in 1905, Tesla up to his death preferred to work alone, far from people's sight. This period was not without new discoveries. Just at that time being a mature scientist he came to fundamental conclusions, which should become a new milestone in future science? We know from history that when scientific thought finds itself at crossroads, the scientists address to the past seeking for support and inspiration. Let's try to answer many important questions.

How Tesla came to his discoveries? These discoveries are: influence of super low-frequency electromagnetic waves on biological systems, especially on the work of cerebrum, coalescence of energy structures, the so called "fire balls" from inductive field of primary and secondary electromagnetic coils, superconductivity of natural and artificial mediums, the so called wireless energy transfer and so on.

What are the main axioms of Tesla's cosmology? How do they follow from his metaphysics? How did he apply them in his physical experiments? Why theorists and empiricists of modern physics of time are so interested in reconstruction of Tesla's

missing theory of physical reality and his view on electromagnetic phenomena? Why Tesla didn't formulate his scientific theory and didn't publish it? Can Tesla's sight on ethic aspect of scientific discoveries help to ennoble modern natural science, especially physics, which is in crisis of ideas now? What can we expect from studying of Tesla's conceptions in near future? Whether it will be an overestimate to say that Tesla in 1900 grounded the possibility of global information-oriented society in his famous project - World-wide system? Whether it is actually technical and technological basis of that, we call now "New World order"? Shall we consider Tesla to be a spiritual precursor of a new scientific and technological civilization named as Tesliana? Technology of "time design" rules in Tesliana, where the time-shift or rather asynchronicity of various levels of physical processes will be the only and inexhaustible energy source.

Tesla's research method

Let's return to the middle XIX century, to the little village Smilyan in Lika, which was Austrian-Hungarian province. In this village on July10, 1856 Milutin Tesla, Serbian Orthodox priest, saw the birth of his forth child Nikola.

Tesla's family didn't allow him to study in Polytechnic Institute, especially father, who required him to be a priest. Nikola felt a deep and insatiable vocation to be an electrical engineer and he felt sick due to this disagreement. When crisis came and it became evident that he can die, father finally agreed with desire of his son. Soon Tesla recovered as if it was a miracle and was absorbed in inventive fantasy. After mental efforts he began to suffer from a strange phenomenon. He saw clear visions sometimes accompanied by strong light flash. It is the ability of people who have parapsychological power - "In my boyhood I suffered from a peculiar affliction due to the appearance of images, often accompanied by strong flashes of light, which covered the sight of real objects and interfered with my thought and actions....When a word was spoken to me the image of the object it designated would present itself vividly to my vision and sometimes I was quite unable to distinguish whether what I sow was tangible or not."

He also described his spontaneous mind traveling: "Then, instinctively, I commenced making mind trips beyond the limits of the small world of which I had knowledge and I saw new scenes. These were at first very blurred and indistinct, and would flit away when I tried to concentrate my attention upon them but, by and by, I succeeded in fixing them; they gained in strength and distinctness and finally assumed the concreteness of real thing. I soon discovered that my best comfort was attained if I simply went on in my vision further and further, getting new impressions all the time, and so I began to travel - of course in my mind. Every night (and sometimes during the day) when alone, I would start on my journeys, see new places, cities and countries, live there, meet people and make friendships and acquaintances and, however unbelievable, it is a fact that they were just as real and dear to me as those in actual life and not one bit less intense in their manifestations. This I did constantly until I was seventeen, when my thoughts turned seriously to invention."

Tesla was satisfied to notice that he could clearly visualize his discoveries, he even didn't need experiments, models and drawings. In such a way he developed his own method to give material form to creative ideas. Tesla sharply distinguished ideas,

which were coming into his mind as visions and those, which appear due to analytical mind clearance. Tesla explained: The moment when somebody designs an imaginary device is connected with a problem of transfer from raw idea to the practice. That's why any discovery made this way has lack of details, and usually it is inferior. Tesla used another method. He did not hurry up with empirical check. When idea appeared, he immediately began to elaborate it in his imagination. He would change its design, improving it and would "switch on" the device to begin its operation in his head. For him it did not matter whether he tested his invention in the laboratory or in his mind. He even had time to notice if something prevents his invention to work properly... The same way he could develop a perfect idea without any touch. Only then he would give a concrete look for this final product of his mind. All his inventions were developed by this method with no exceptions during twenty years... There is hardly any scientific discovery that can be foresaw only mathematically, without visualization... Introduction of unfinished, crude ideas to the practice is always a waste of energy and time.

Studying the mechanisms of his mental life, Tesla found that a number of visions "from virtual reality" are always having certain connection with events of "true reality". Soon he got an ability to realize this causation. He was glad to understand that every his thought is a result of influence of external impressions. He noted that not only thoughts but actions also appear in the same way. Some time passed and it became clear to him that he was only a kind of "automaton of cosmic forces" endowed with abilities to move, responsible on irritation of sense organs and thoughts. Invention of teleautomatic control was a result of this conclusion many years later. He understood the laws of this control through firstly unclear feeling of external conditioning of his own behavior.

Nikola Tesla used imagination as a psychological precursor of well-ordered disclosure made by mathematical methods. We can say nothing of this kind about his contemporary, inventor Thomas Edison, because having weak knowledge in mathematics; he at first was guided by long and laborious experiments.

In his records, Tesla often speaks about his predisposition to the mental processes. Principle of these processes corresponds to the same principles, which Nature should follow. He consider this inborn gift to be given as a "diffused pressure", which calls a sense to make another invention, because the experiment of previous researcher was short of something. Here he sees not only a source of invention in general, but also some proof that the law of different reality affects the man. To be short, Tesla considers creative imagination to be a threshold of conscious discovery act.

According to his words, the certain conclusions were born in his mind spontaneously, in the form of geometrical images. Then followed the understanding of principle of discovery and its physical interpretation. Only then mathematical formalization took place followed by finding of necessary technical properties of material essential for continuous operation of constructed physical model. The work on inventions he understood at first as a struggle for mental clarification, i.e. elimination of secondary ideas and sensible details, which blur imaging principle and complicate the approach to the real nature of relations between fundamental geometrical elements.

According to Tesla, process of understanding of principle shall be considered finished and ready to apply, when the connection between geometrical objects was stated. Thus, discovery appears in the moment when correspondence of elements and their physical manifestations was defined, so we can find a physical law, which rules in the real world, in the algorithm itself. For Tesla, an idea finds its manifestation already in the act of creative striking. Only then, a choice of operating parameters of specific device takes place, which follows from general understanding. This result can be a design of inductive engine or model of rotating magnetic field. As he told, a method of mental improvement was polished by him in a great extent, so he made even very small corrections of his discovery in mind, without any physical check. It can open a secret of his work, which has a great volume taking into consideration all his scientific and technical innovation, and it is a remarkable fact.

Tesla also made a hypothesis on extraordinary effect of external irritant on human thinking and memory. Referring on Rene Decart's theory, he concluded that subjective human work and human life as a whole has such feature as automatism, which is stipulated, by space. According to Tesla's evidence, creativity can be the consequence of automatic operation of brain (appearance of unknown visual ideas), that's why he develops an additional supposition about reversible effect of brain visual centers on retina. Here he sees a reason of appearance of his images, which led to discoveries. Thus, though human brain processes information about external irritants, it can create new images and relations between phenomena of real world reflected in it and images of imaginary world.

And finally, it is Tesla's opinion that thought, memory, motion are feedback processes, that's why we should mention that with attempt to understand his inborn gift of invention, he also understood the role of cybernetics as reflection of cosmic principles of material and informational organization.

Believing that the Universe is alive and people are "automates" in some extent, acting according to Creator's plans; Tesla made an original theory of memory. He considered that human brain hasn't ability to remember in the way that we consider it to do (biochemical or rather biophysical way) and memory is only a reaction of human brain on recurring external irritant. Really, it is unusual that Tesla, who had a very good memory (he spoke seven or eight languages) and had ability for eidetic imagination was sure that there is no human memory. It is more important that the author of few hundreds of scientific discoveries didn't consider his creativity to be his own desert and surely stated the is only a conductor of ideas, which come from the world of ideas to the world of people and practice. All this is not so contradictory if we remember that he being a son of a priest answered to the question about his religion that he believes in the only God, which has no description in any religion and his religion is the closest one to Buddhism. Later Tesla himself became closer to Buddhism, he even went in for yoga, watched after nutrition, meditated and the last years before his death he lived as an ascetic in New York like Indian guru or Orthodox saint.

Tesla was twelve when he could override his visions by act of will and change them to other visions. However, as he noted, he couldn't override light flashes. Usually these flashes appeared in certain dangerous situations or when he was greatly excited. He wrote: "In some certain moments I noticed that all air around me was full

of tongues of real flame. Intensity of these tongues grew after a number of years instead of falling and reached maximum at the age of Twenty-five. Once I had a feeling that my brain was enveloped in flames and a little Sun shines in my head". Tesla wrote when he was 65: "These light phenomena sometimes still appear, especially when some new idea shows me unprecedented possibilities, but their intensity is relatively weak".

During a long time Tesla tried to solve the question of death and attentively looked for any manifestations of death in real life. Tesla wrote: "Only once in my present existing I experienced something that looked like supernatural. It happened during my mother's death. I was ill and exhausted with fever, and was lying in the bed. Suddenly I thought that if my mother dies far from me, she possibly will give a sign. Two or three months later I was in London with my now the late friend, English scientist sir William Crookes, where there was a discussion about spiritism. I was impressed by his case and remembered his work on "radiant matter", which I read when I was a student. Due to this work, I understood my vocation to be an electrician. I thought that prerequisites for looking "beyond" were favorable since my mother was a woman with extraordinary intuition. All night every fiber of my brain was strained in expectation, but nothing happened until morning, and only when I felt asleep or may be began to nod, I saw a cloud, which carried cherubic figures of divine beauty. One of them looked on me with love, and little by little I recognized in it my mother. The ghost was flying along the room slowly, and finally disappeared. I abruptly woke up with the sound of indescribable pleasant voices. In this moment a confidence, which cannot be described by any words, came over me: I knew that my mother died. And it was true".

The same day Tesla sent a letter to Crookes under the influence of this vision and still being ill. These to scientists were in correspondence for many years, but Tesla's letters to Crookes disappeared together with Crookes's archives in 1918. Crookes's huge scientific material contains numerous records of spiritistic seances held in strictly scientific and experimental clue and many hundred of pictures with materialized ghosts from different historical epochs. Tesla museum in Belgrade keeps Crookes's letter to Tesla of 1893, where Crookes thanked Tesla for a special electromagnetic spiral coil sent to him. This spiral created field, which made contours of ghosts clearer and at the same time it affects good on medium's condition making an experiment easier.

At the same time when Crookes began scientific studying of spiritistic phenomena in London, Mendeleev began to do the same in Saint Petersburg in 70-s of XIX century. Committee of specialists formed in Saint Petersburg after a short work and about ten seances concluded that it is just a superstition. Since then in England and Russia science is subdivided on secret, "factitious" including Tesla's physics of ether and clear, "real", university science of commercial and even political direction, for example, nuclear physics and theory of relativity.

Tesla as a physicist

In theoretical and experimental physics of XX century, we can mark three different styles of thinking. Quantum mechanics as well as relativism (near-light speeds) and traditionalism to which Tesla belonged (really he is not recognized scientist of the

future) tried to find truth, i.e. real nature of time, space and especially the essence of motion.

Before we'll go into Tesla's metaphysics, namely into the world of fundamental processes of his physics, let's try to pinpoint the place, which Tesla ranks in the world of modern scientific systems.

Plank constant, uncertainty relation by Heisenberg, Pauli principal and wave function by Shredinger were the main theoretical instruments of quantum and mechanical approach to the cosmic phenomena. The main goal of quantum mechanics, which is to discover fundamental or elementary particle of matter, is still not realized. In spite of great success in studying of process of chain reactions activation and physics of atomic nucleus, processes of formation of nuclei of heavy elements from nuclei of light elements, many things are still mysterious and they are beyond technical control. Starting from tendency of general development, we can make a conclusion that productive basis for notions of quantum-mechanical physics are exhausted. It became evident that we should research such categories as time and space again, at deeper level of realization, at ontological level to determine a true nature of physical processes.

Special theory of relativity by Albert Einstein published in 1905 in German magazine "Annalen der Physik" marked the second milestone in theoretical physics and used four-dimensional space-time continuum by Minkovsky as a model of physical reality.

The third method to understand physical reality relates to Tesla's ideas. Starting from works by M. Faraday and D. Arago from the one hand and L. Galvani and A. Volta from the other hand, Tesla could create his own original theory of world on the basis of theory of acoustic resonators by Helmoholz and modified ether model by lord Kelvin. This theory gave outstanding results in experiments. Initial axiom of his theory was that universal energy of one physical system is based on the laws of resonance of vibrations, on coincidence of oscillations of system's parts. He considered that theory of ether cannot be excluded from physics, because matter and space cannot at all be completely and strictly separated.

This this simple and important aspect can be found in the letter of M. Faraday to R. Tailor. It is Faraday's opinion about the nature of matter. In his letter to Richard Tailor of June 25, 1844, M. Faraday wrote: So, matter anywhere is continuous... it is not necessary to assume the difference between atoms of matter and some intermediate space. The forces around centers provide these centers with properties of matter... M. Faraday considered this aspect to make a conclusion for the nature of electric conductivity and insulation. However, his point of view can be developed in gravitational aspect also. Atom and space around of an atom is the same matter in different states and the difference is the opposite directions of the time flow for "inner cosmos" of matter and "spatial cosmos" between atoms.

It is Tesla's opinion that electrified state is a fluid state based on the substance having the properties of perception and elements of consciousness. In mathematics, the scientist was the follower of realistic approach, holding the idea the properties of mathematical and physical objects directly correspond. In experimental approach to solve the problem Greek mechanican, Archimedes served as an example to him.

Archimedes stated that "time should be excluded from physics" as an excess phenomenon. It should be noted that even in XIX century scientists H. Hertz and D'Alamber tried to create theoretical physics without notion of force, but this attempt failed. Russian scientist N.A. Kozyrev followed it, but his theory also didn't achieve the level of practical application. Problem of relation between force and time in physics is still unsettled.

Tesla's experiments mainly consists in ascertainment of deep joint properties of physical systems, which should be brought to resonance. Evidence to it was his complex electromagnetic oscillator, Wardenclyffe Tower (built at Long Island near New York in 1901-1905). He could make simultaneous vibrations of ionosphere and the globe by means of this tower.

In mathematics as well as in physics, Tesla was the follower of strict determinism. He held sacred mathematics, but also considered that physical processes could be described not only by mathematical method. It is Tesla's opinion that control of process shall be made by foresight; just the foresight provides control. Such position is radically different from the theory of relativity. According to this theory, objective (immediate) cognition is impossible and reality is recognized by mathematical calculation.

Views of Tesla and Einstein on the problem of physical reality are fundamentally different. According to Einstein, human experience is relative, fictitious and doesn't correspond to true physical reality. For Tesla physical reality is universal and penetrates all levels of cosmic existence, i.e. nobody in any way can avoid certain cognition of the truth. According to Einstein, Ether is not a real category, but exists as a result of fallacious scientific opinions. For Tesla Ether is a joint undifferentiated field, which consists of time, space, energy, and formation of matter is a result of resonant processes in ether.

According to Einstein, Time is only a rank of phenomena, it is not a substantial physical entity or even category and it is registered only by means of measurements with reference to every system. For Tesla Time is a real algorithm of materialized Mathematics. Matter is created from Ether due to time-resonance of physical systems, and returns to Ether.A

ccording to Einstein, maximal speed is achieved in Vacuum, it is speed of light equal to 300 000 km/sec. For Tesla speed of electromagnetic waves is not limited, and experiments and calculations were made and showed that transfer of waves and energy at any distance is possible in principle and speed of mechanical and electrical waves penetrating the Earth highly exceeds speed of light in vacuum.

Speaking to his friends, Tesla often refuted some of Einstein's statements, especially those, which were related with curvature of space. He considered that it breaks the law of action and counteraction and if roundness of space is formed due to the huge gravitational fields, than it should become straight due to the counteraction.

Einstein was a pure theorist and Tesla was mainly an experimenter. There are no information about contacts and talks between these two scientists. Nevertheless, Einstein congratulated Tesla with his 75 anniversary. He underlined Tesla's most

important merit in science, multiphase system of generators and alternating current motors, which is to all appearances one of his least important discoveries.

Tesla believed: "We shall have no need to transmit power at all. Ere many generations pass, our machinery will be driven by a power obtainable at any point of the universe... Throughout space there is energy..."

Tesla's views on new world order

There is no doubt that Tesla had a great feeling of uniformity of terrestrial nature and cosmic processes. He brought the essence of his "World system" announced in 1900 to 12 positions, which reflect the very essence of technical and technological network of modern world telecommunications. This system is also a technological basis to establish global informational society. Tendency of this society to the universal unification manifests in many things.

Tesla's "World order" was constructed starting from principles of his own inventions. Let's enumerate some of them. These are Tesla's transformer motors, i.e. device for creation of electrovibrations with specific properties; step-up transformer specially designed to excite the Earth (this device with its electrical transmission means the same as a telescope in astronomy). Then, Tesla's wireless system including certain quantity of devices, which is now considered to be an untouched method to transmit electrical current without wires; a device for individualization of signal, which in comparison with a primitive method to match signal means the same as advanced language in comparison with inarticulate mumbling. Due to this device, it is possible to transmit secret signal both in passive and in active form, because they do not jam other transmissions and cannot be jammed them. Any transmission is unique in its rhythm and has individual features; actually, it is an unlimited quantity of stations and instruments, which can act on one or two frequencies and at the same time they would not call any mutual jamming. One more invention is wave processes in Earth's ionosphere; in popular explanation this discovery means that field of the Earth reacts on electrical vibrations of given frequency in the same way as a tuning fork resonates with a certain length of wave. These electrical vibrations can have a strong influence on the field of the Earth. Such resonant effect can be used by different ways, and first to change universal energy system, which is far from to be perfect and didn't use up all its natural abilities.

Tesla defines the goals of "Worldwide system" in such a way that it becomes clear: Establishment of dense communicational network of all kinds and levels should serve to humanize scientific technology. In this sense in the very beginning of XX century he was a prophet of XXI century, since real metaphysical problems began to penetrate theoretical physics only now together with the problems of cosmogony, origin of the Universe, time and space. Therefore, even in far 1900 Tesla considered that the following things would be necessary (they are already realized now):

- 1. Establishment of connection between existing telegraph stations or centers all over the world:
- 2. Organizing of secret state telegraph service without a possibility of jamming (it was not realized due to the fact that inventions by Markoni were used instead of

Tesla's patents on radio transmission. Markoni's inventions required a separate frequency for every synchronous transmission);

- 3. Establishment of connection between existing telephone centers or stations on the Earth;
- 4. United diffusion of common gazette news by means of telegraph and telephone;
- 5. Organizing of service with principles of "Worldwide system" to transmit private information (it was realized by the worldwide computer web, Internet);
- 6. Establishment of interconnection of all telegraph systems in the world;
- 7. Uniform timing mark by means of clock, which mark seconds with an astronomic accuracy;
- 8. Transmission of signs, words, sounds and so on as well as typewritten and hand-written texts (it is an exact description of telex);
- 9. Creation of service to record music;
- 10. Organizing of worldwide service for needs of mercantile marine, which should help in navigation, in compassless voyages? It will help to determine location and speed, to prevent collisions and accidents and so on;
- 11. Introduction of worldwide printing system;
- 12. Reproduction of photos and all kinds of drawings or hand-written texts with a possibility to send them over the world.

Though development of modern science and technology mainly confirmed Tesla's oracular ideas, it didn't match with them in fundamental sense, namely all forethought ideas Tesla wanted to realize by means of transmission through the Earth, but not from surrounding orbits. Due to the same reasons, which made him to stand up against using of atomic energy dangerous for people because of their ignorance of real structure of matter, Tesla considered that any infringement of cosmic space, magnetic field of the Earth is an infringement of harmony inherent to natural laws. In addition, it is a consequence of negative influence of people's free will, which becomes destructive in absence of ethical component in science. Free will can be creative only with kindness, which accompanies to the higher understanding and conscious selection of positive intentions. He considered that humankind living on the Earth should understand al kinds of natural alliance with the planet otherwise people will be deprived of it.

In 1892-3 in London Tesla read his famous lectures in Royal scientific society of Great Britain. Together with above mentioned experiments he demonstrated many others, for example, lighting of lamps by wireless transmission of energy. Really, he only placed a vacuum neon tube to the field of transformer and the lamp lighted. Due to these wonderful lectures ("Light and other high frequency phenomena"), Tesla

gained a good reputation and got many friends among scientists, William Crookes, Sir Oliver Lodge and J.J. Thompson - lord Kelvin.

When returned to USA in 1893 was absorbed in the problems of radio techniques, telecontrol and wireless transmission of energy at big distances without losses. He made successful experiments with direct electromagnetic field of the Earth and wireless transmission of energy at Colorado Springs. Though his journal of this period of work kept safe and was published, he didn't advertise his most important scientific results. However, all achieved brought him to an idea of universal system of wireless transmission of energy and information. Planetary transmission should be based on such extraordinary inventions as Tesla's resonance transformer without an iron core and Tesla's Magnifying transformer. Tesla expected a lot from extending transformer. It was a particular transformer made for exiting of the Earth. By means of this transformer he made very power electromagnetic discharge at Colorado Springs. This discharge exceeded atmospheric lighting and Tesla got electricity, which made white-hot more then two hundred lamps placed at miles around the laboratory. For Tesla it was an irrefutable proof that his concept of wireless transmission of energy (action in distance) was true.

After experiments at Colorado Springs in June 1900, he returned to New York he prepared the first universal system of wireless transmission, Wardenclyffe Tower, which he successfully tested three years later. Technical specifications of Tesla's transmitting station now are still unknown, and we cannot state with certainty, what was its real destination...

After unusual night of July15, 1903 when he fired the sky not only above New York but above all vast area of Atlantic Ocean, in 1905 Tesla suddenly left his laboratory without a clear reason and left all things untouched. As we know, he never crossed the threshold of Wardenclyffe, never visited it and never appeared on this territory. It was very strange, he didn't take any calculation, drawing or document, none paper.

Last time suppositions that Tesla was the man who called a strong and strange by its consequences explosion in Siberia in the region of Podkamennaya Tunguska in 1908! It was considered that this explosion could call a meteorite, but there was not still found not the faintest fragment of it. It is also true that Wardenclyffe Tower was good in technical sense and Tesla passed energy through the earth and could accumulate and discharge simultaneously a huge quantity of energy at ant place of the planet. It fully matched the results of his work of many years standing on studying of Earth's properties as a medium for propagation of electromagnetic waves.

THE MISSING THEORY

Tesla didn't give us his own physical theory but with numerous experiments, he created a basis for new, resonance understanding of electromagnetism. He considered that world is a uniform continuous electromagnetic medium and matter is one of manifestation of organized electromagnetic oscillations described by mathematical algorithm. He considered that resonance law is the most general natural law, which eliminates time and distance, and that all relations between phenomena are established only by mean of various simple and complex

resonances, i.e. coordinated vibrations of physical systems, which have almost electromagnetic nature.

Finally, instead of Newton's integrals, Leibniz's differentials and Maxwell's theory of field lying in his calculations Tesla used simple mathematics of Ancient Greek mechanicians, at first Archimedes, making an analogy between mechanics and electromagnetism. It is not possible to fully evaluate the significance of such method of thinking, which directly points out the necessity of more full physical interpretation of elementary mathematical notions.

Obviously, studying of Tesla's heritage is not related only with history of physics. We shouldn't look for technological aspects only; its essence is in miraculous human creativity in science.

Tesla's scientific way needs understanding and following

We need analysis of Tesla's evidences relating with creativity lying in the base of new physical and technical processes discovered by him. It possibly leads to opening of new way of cognition. It is important to understand an original scientific and research method of Tesla and non-developed cosmic principles (relation), which are realized, with the world of ideas. Tesla could create visual images competitive with images really perceived by organs of vision. He as if changes the usual direction of nervous impulse on the opposite direction, from brain to retina, eliminated external image and substituted it with eidetic one. Tesla sent his impulses like from "inside". He called it mental laboratory. In addition, it was his main method of experimenting. He had an ability to transfer mathematical, abstract notions into inside visible images, give them geometrical interpretation, and than transfer them into the form that could be physically realized, form of working models for realization in device.

He "made corrections" and adjusted a device for operation in his mind. When later this device was made of wire or another material, it always worked. As Tesla said, there was not a case when such invention didn't correspond to nature, i.e. didn't work as a physical prototype.

His method was unique in comparison with other scientific prophecies. Michael Faraday, for example, like Albert Einstein felt a kinesthetic premonition in the moment of striking (it was pressure and motion in peritoneum region), he had some kind of mental stress in the moment when an idea appeared. Dmitry Mendeleev dreamed of periodic table in three dimensions colored with bright almost fiery red colors like it is in all prophetic dreams. However, it happens very rare, with few people and at certain moments. In addition, Tesla was in this condition all his life, has been training during decades to maintain his spiritual and creative activity.

Tesla was a man, whose main philosophy and axiomatic didn't belong to the modern world. We can attribute him to the epoch before Socrates, ancient philosophy. It was not an accident that he was born on Balkan Peninsula. Antique civilization appeared in the old days in southern part of this peninsula. Probably, the reason is different geomagnetic informational field, algorithm, which is general to evolution of neural structures of Pythagoras, Plato, Zenon and Tesla.

Perception of Tesla's physics requires quite different understanding of mathematics, in some extent it is sacral in the spirit of Pythagoras. Pythagoras considered that numbers and subjects are really interrelated. They correspond to each other in some properties due to informational and mathematical aspects of matter existence as one of manifestations of Divine Logos. Even less attentive researcher can immediately notice that there are no infinitesimal or differentials in Tesla's works. Tesla told about James Maxwell, creator of theoretical electromagnetism with understanding. He told that his elegant differential equations are the poetry. One could find Maxwell's works in Tesla's library; these works were published when Tesla was twenty and he was a student in Graatz. There is no another reason, which allows to explain, why Tesla didn't use them except one, very serious and deep: he discovered more simple and more effective way and more felicitous physical interpretation of mathematical notions. By means of these notions he foretold course and results of experiment. It is evident that he was a man of such strength and astuteness that he could keep away from conclusions of science, which was modern to him, its system of notions and mathematical apparatus, which were far from perfection. It is not occasional that he didn't uphold his diploma. It was an indication of spiritual independence for him, but not idleness or revolt as it can be some times.

His method of work could turn him to the absolutely different direction but it didn't happen. It proved that he could control the essence of his psychic visions and other conscious or unconscious manifestations that is the basis of creation. In the moment when he felt effects of impulses came from outside, he could override them, control and analyze. He could do an impossible thing. By means of exercises, which he developed himself, he got up to the level of man, who does not depend on impulses provided by external world, and at first on his own inner psychic states. Essence of his genius was in the fact that things understood by him and appeared in his subconsciousness under influence of external field was nothing but a picture of cosmic processes or the same natural laws. Because of it, he was distinctly different from other people.

He said about rotation of magnetic field, with which the rotor of an engine began to rotate under the influence of changes taken place in the external field: "Now I know, how Cosmos works".

This is the source of his theory on people as automates of cosmic forces. If we add Tesla's practically discovered axiom, that energy of system is derived from environment, than we will find the reason of his conviction that entire Cosmos acts on the principle of vibration and resonance. Finally, if we agree with the fact that all energy of system appears under the impact of external induction, than it will be easy to fancy Tesla's cosmological model as a series of circuits of magnetic fields, which rotate concentrically. Really, the Galaxy rotates, Solar system rotates around the center of the Galaxy, the Earth rotates around the Sun, and molecules, atoms and electrons rotate ... All this is nothing but a range of rotating magnetic fields, which can be described by the only one law, the same law that was responsible for starting Tesla's of inductive motor.

An open question is about Tesla's real understanding of time and space categories. We can say with certainty that in his research of how low frequency electromagnetic waves are transmitted through the Earth Tesla didn't face with the problem of

conjugacy of force and space as, for example, general theory of relativity. This theory has some complexities in physical explanation of differential equations, which describe the properties of curved space under the influence of gravitational forces of different power. According to this theory, the constantly increasing attraction force can influence time itself returning events back and violating the principle of causality.

Rene Decart in creation of his coordinate system used the same geometrical notion to picture abscissa and ordinate. They are two straight lines interminable in their lengths, which he interpreted as time and space as if there is no difference between them. Is it possible? It is hardly possible. You know, space and time are different physical categories and we hadn't understood their nature enough. Besides, abscissa and ordinate are divided by an angle, which does not have a special physical interpretation. That's why picturing physical phenomena in so geometrical way, we have a risk of not taking into consideration the criteria of reality in check of mathematical hypotheses.

There is no doubt that Tesla by means of his physical research discovered a fundamental physical law, which is not clear yet, and applied it so easily and with a such astuteness, that a dilettante as well as a specialist could similarly understand that he spoke about exact knowledge. But now it is hard to imagine, what were these usual mathematical operations of division and multiplication, natural algorithm or square root taken separately, which are significant in Tesla's experimental works. Physical explanation of mathematical methods, especially univocal, is situated on the boundary, from where we can see the field of transcendental mathematics. However, it is evident that if all physical reality can be reduced to the mutual relation of electromagnetic fields, then mathematics is a theory, which can express the essence of these connections most effectively.

If electromagnetic oscillations correspond to the mental plan discovery made by Tesla at Colorado Springs is still proved experimentally now), then it means that mental plan itself should have the same nature and follow resonance law.

A conclusion arises that numbers are some "programs" of organization. Tesla's research, as it were, prove the verity of cognition theory by Plato. In his theory, Plato stated that mathematics is a link between world of ideas and world of material phenomena. To be more precise, mathematical algorithms and mathematical logic is properly a method to realize ideas. Finally, all old innermost legends teach that matter is only a concentrated light, and it is Tesla's all- penetrating cosmic substance, "luminoferous ether".

Warships as time machines

There is a story, book and two movies describing an event, when in 1943 American navy made an unusual experiment to make one of the warships invisible. It was necessary to make ship create a strong field around itself using power magnetic generators. This field should be able to change the direction of light beams as well as to grade the radiation from radar sets and thereby hide its location. It took place as recently as six months after Tesla's death and disappearance of important scientific documents and apparatuses from his room. The event took place in Philadelphia seaport. When generators were engaged exceedingly, something unexpected

happened. The whole range of strong electromagnetic fields changed local time-space coordinates and "Eldridge DE-173" cruiser disappeared for some time. Then the cruiser appeared for few seconds in another place, i.e. in one of the biggest sea base at Norfolk, in the port at south-east Virginia at Atlantic coast, which is 350 km far from Philadelphia. The strangest things happened to the crew. One half of sailors disappeared forever, some of them went crazy or got an ability to disappear and appear again by their own will. Part of the screw who survived, stated that they "have changed the world" and saw or even spoke to nonearthy beings. A thick greenish fog preceded to the disappearance of the ship. This fog covered the hull with starting of strong electromagnetic generators for producing of intensive concentrated electromagnetic beams.

Three ships took part in this experiment. The above mentioned cruiser was in the middle, shell of other two ships served as a mirror. Actually, the case in the point is open "lasers", which do not need vacuum. Beams of these lasers can be transferred at any distance and in any medium. Tesla produced such lasers in his New York laboratory even in XIX century. He illumined the room without any lamps, just calling the luminescence of air.

Let's return to the significance of Tesla's experiments in Colorado Springs in 1899-1900 and see, what are the real results of his work there? When making experiments with ultra low and ultra high frequencies of electromagnetic waves, he obviously was successful to determine the frequency and type of modulations, which is provided by fields of fine body of living people as well as dead ones (numerous articles are devoted to it, but these articles are lacking of theory and contain inexact suppositions). Most likely, he could create a field using ultra high frequency. This field corresponded to resonance frequencies of disincarnate soul (soul, which already has no connection with the body) and thus he became proficient in visualization techniques of the so-called astral level of being for biological organisms. Calculations in Tesla's records could seem to be insignificant for modern specialist since they are very simple and can be understood without additional explanations. Only mind, which has similar perceptive ability, can understand them.

Secret of "fireballs"

Tesla could reproduce complex energy structures in laboratory conditions. He called the "fireballs". Russian academician Peter Leonidovich Kapiza also studied them, but he couldn't reproduce them in dirigible kind without Tesla's resonance transformer. Nowadays physicists (Corum brothers in America) reproduce some of Tesla's experiments with a certain success. They could receive "fireballs" of a very short standing and only three millimeters in diameter. Tesla produced ball lightning" of football ball size, kept them in hands, put them to the box and covered it with a lid, then he took them from the box. These ball lightning were almost stable structures, which could be kept for minutes. Certainly, Tesla knew much more about this phenomenon than modern science; he knew the secret of cold plasma fusion in free space.

Thus, Tesla penetrated to the field, which was unexplored before, i.e. the time engineering technologies. He also emphasized that his electromagnetic waves were different from Hertz's waves; i.e. the length of wave transmitted by him is equal to the

distance on which this wave is transmitted. In other words, it is equal to the distance between sending object and receiving object. Hertz measures and space measures are changing in opposite directions: one Hertz is taken as corresponding to the wave length of approximately 300 000 km, 2 Hz – 150 000 km, 3 Hz - 100 000 km etc., which means that real length in space is decreasing with number of Hertzs which are increasing.... That is why Tesla did not count in Hz-s...(technically, one meter of wire gives one Hz, two meters of wire two Hz and so on. Obviously, Hz's measures are not adjusted to technical properties of electromagnetic tools.

In 1932 N. Tesla wrote: "I have showed that universal medium is a gaseous body. Only longitudinal impulses can propagate to this body. They create variable compression and decompression like those, which are created by the sound waves in air. Thus, the wireless transmitter does not create Hertz's waves, which are a myth, but it creates the sound waves in ether. The behavior of these waves looks like the behavior of sound waves in air excluding the fact that the huge elasticity and very small density of this medium makes their speed equal to the speed of light". Besides, there were not only circles of oscillator (a device, which took part in the transference) in resonance, but the entire system was also in resonance with natural electromagnetic waves of the corridor of their passing. It meant that an oscillator starting transmitting almost intercepted ether in the space between transmitter and receiver and there it created a distinctive field of standing waves. Thus, a waveguide formed at first, which couldn't transfer energy of its own. Then Tesla turned on a lowfrequency field and transmitted waves, which were the lower harmonic components of the main field carrier, in the ratio of 1:4. In such a way he could transmit energy at the desired distance and make strong continuous electromagnetic discharges in certain zones while creating the wall from ionoplasma. Nothing could make a way through such energy wall without decay on molecules or atoms.

Tesla as a clairvoyant

It is evident that Tesla knew the phenomenon that we can call parapsychology in the lack of a better word. As we told above, a method he used to make his discoveries or work in the laboratory has no analogues in the history of science. There are more that 150 000 documents in Nikola Tesla museum in Belgrade, but he didn't leave any description of his scientific method, which is comparable only with states experienced by yogis or with things known by saints. Now few people consider Tesla to be a philosopher or spiritual man. They do not think he was a man who inspired physics, technology and science. Finally, he founded a basis of a new millennium civilization with all his life and work. Though now his influence on the modern tendencies in science is minimal, his role heeds overestimation. Only the future will give a real explanation of Tesla as a phenomenon, because he went far ahead and he stands higher than the methods accepted nowadays.

A well-known Indian philosopher Vivekananda, on of the members of Ramakrishna mission, who was sent to the West to find out a possibility to join all existing religions, visited Tesla in his New York laboratory in 1906 and immediately sent a letter to his Indian colleague Alasingh. He rapturously described his meeting with Tesla: "This man is different from other western people. He showed his experiments with electricity. His attitude to electricity looks like an attitude to a living being. He speaks with it and gives orders to it. I speak about the highest degree of spiritual person. It is

no doubt that he has a spirituality of the highest level and can call all our gods. In his electrical multicolored lights, I saw all our gods: Vishnu, Shiva... and I felt the presence of Brahma himself".

physics of time according to Tesla

Resonance is simultaneity, and if we change the periods of oscillations of electrical contour, then geometrical picture of magnetic field distribution will change and generator is set in motion only under the influence of temporary factor. Motion is a result of asynchronism. It proves the fact that it is possible to obtain the change in speed of engine and thereby its mass without an additional impulse, i.e. without an additional force. Tesla's reversible magnetic field can be a proof of this fact, isn't it?

Tesla wrote from Colorado Springs to his New York friend Johnson that he found a thought in "scribble" of high-frequency electromagnetic discharge and soon Johnson would be able to read his poetry personally to Homer, whereas Tesla would discuss his discoveries with Archimedes. The same way we can find a detailed description of "green" electromagnetic waves in his research journal. These waves looked like a fog, which appeared when the warship in Philadelphia disappeared. When Tesla returned to Colorado Springs, he told journalists that he made a connection with extraterrestrial civilizations. Few people regarded seriously to this claim. However, there are evidences that Tesla continued his research on "parallel worlds" alone and silently without publicity of the results. To all appearances, he made a device to tune electromagnetic oscillations of his own brain, in other words, to control his mental activity. Thus, he could communicate with realities displaced in time (parallel worlds) without any problems.

These researches open a new page in the modern science. They show a possibility to merge material and spiritual aspects in human consciousness (matter and spirit in nature are already merged). Tesla had an ability to develop both directions of uniform science. He studied physical basis of mind and mental basis of physics with the same success. He came to the essential general conclusions that matter consists of organized parts, which are manifestations of ether in its excited state. One of these manifestations is electromagnetic oscillation. That's why resonance law is general natural law and it's of time nature, too. A connection between phenomena is provided by resonance of different kind. Electromagnetism is the basis for these resonances. Needless to say that from the one hand, if physical reality can be reduced to the interrelation of electromagnetic fields, then mathematics is a theoretical expression for these relations. From the other hand, if electromagnetic oscillations interact with mental plan, which has the same nature, then numbers are some reflections of organizational structure of electromagnetic fields.

I personally believe that mathematical and physical truth, or rather geometrical and arithmetical phenomena, should join and become a basis of uniform Cosmology; we should take into consideration that now we are staying on the threshold of this Cosmology. Somebody calls it a "New science", but "Uniform science" is more appropriate term, because uniform laws make the basis of our Cosmos. In fact, Uniform Science is the Science of Time.

Tesla's electromagnetic theory was an apt illustration of unification of material and spiritual origins of world organization. Possibly, he could leave us a religion but he didn't want to do it. He knew that God in science needs conscientious followers.

"Mysterious pilgrim" by Mark Twain

A famous writer Samuel Clemens (we know him under the pseudonym Mark Twain) often visited Tesla's laboratory at night. Tesla was very close to him and after Twain's death he spoke about him as if he was alive. The writer Mark Twain died in 1910, and his enigmatic novel "Mysterious pilgrim" was published six years later. In this novel, he told about an angel who left heavens and came to a small Austrian village. There he met a group of boys and let them into the secret of the universe. If we recognize little Austrian village as Smilyany and figure of Angel as Tesla, then an explanation of a very strange theory on human destiny and cosmology will appear. This theory expressed in this short story made it to be different from other stories of this writer. Angel tells about the source of all people's troubles and misfortunes. All it comes from misunderstanding of true sense of occasionally very small events. Each of these events defines future links of the next events. As he considered, people's free will is an illusion since all is predetermined and will come to a principally predictable result. That's why the given human individual psychosomatic structure has limited number of possible destinies (ranks of events) and a man can switch back and forth due to the will of higher beings. For example, Angel takes part in the event, when a woman closes or opens a window, which was predetermined to her. In addition, the destiny of this woman will go another way depending on her specific action, and will call a new succession of events. This entirely coincides with Tesla's idea of a man as an "automaton of cosmic forces" and it is brought out clearly by simple dramaturgic tools used by famous writer. Finally, before Angel left his friends, he let them to the last magic secret, which would be terrible to them, i.e. secret of Non-existence. He said that all is only a thought. There is nothing existent.... "I am only a thought, lonely thought, which travels along the empty space of the Universe".

Mystery of wardenclyffe tower

Let's visit Tesla's laboratory in Colorado Springs again, where inventor made his experiments using electromagnetic field of high frequency. He studied operation of human brain on himself. He wrote to his fellow Johnson about some intelligent properties of electromagnetic field. Biophysical principles of neurology were born.

Just after this, in 1901, a construction on Long Island began. The matter concerns a complex transmitter of electromagnetic waves. Tesla applied all his knowledge to design it. They are: teleautomatic control, Hertz's wireless wave transmission, unique ether theory, according to which any natural element of Mendeleev's system has its own gravitational acceleration as well as its own techniques to control the speed of time course. A new physics was born.

A question appears what concept of the world lies in the basis of experiment with resonance concentration of magnetic and electromagnetic fields. Let's return for a moment to a mystic Monard and his picture of cosmos. Speaking about vibrations, he underlines the presents of different nations, races and tribes on the planet, but we cannot meet people, who could live without music and dancing. Even 2500 years ago

Pythagoras said to his progeny that stone is a frozen music. Every particle of the physical Universe has a certain property, which is pitch and pitches of its separate frequencies, i.e. its melody.

Nature of influence of music on a man is the same as the nature of its influence on the world of things and events, because vibration is the basis for all. Frequency of vibrations of subatomic particles is very high and waves in the center of subatomic nucleus move quicker. Vibrations of all radiant energies (radio waves, heat, light, X-waves and so on) could be regulated. Electromagnetic spectrum in such consideration contains more than 80 known octaves and visual light is only a part of this rank.

Electromagnetic waves as acoustic waves in music have their own harmonious highpitch tones and there is some kind of octave principle, i.e. doubling of frequency. Laws of music and harmony applied to electromagnetism give splendid results. That's why Nikola Tesla used the works by Herman Helmholz about sound in his electrical resonators.

Johan Kepler, an astronomer, who lived in XVII century, believed that every planet of Solar system is alive and there is a guardian angel on every planet, which listens its music. Planets "play music" on their circumsolar orbits.

A particular combination of sounds, which we call music, is an expression of relation between things, in other words, their likeness and difference. It is also a principle of appearance and disappearance of phenomena as well as the principle, which shows how new and younger systems form from coordinated harmonious systems. The inner structure of music is the same as the structure of all the rest.

A Dutch scientist Christian Huyigense in 1665 noticed that pendulums of two clocks hang on the wall near each other starts to work in rhythm. It is a universal phenomenon. When two or more oscillators begin to pulse with sufficiently small difference in time (with small shift in phases) their oscillations come to coincidence spontaneously. They behave according to the principle of minimum energy since every separate pendulum requires less quantity of energy with synchronous pulsation than in the case of arrhythmia. This co-ordination is everywhere, but we rarely notice it. We can say that all animate things are oscillators, which pulse and change their rhythms. Even the simplest unicellular organism is in complex oscillatory state. All motions on subatomic, atomic, molecular, subcellular and cellular levels are coordinated. In such an organism like a human one it is very difficult and even impossible to determine corresponding parameters. Our inner rhythms are closely interconnected and they are coordinated with external world. Physics of a man and states on his rarified plan (astral) change in one rhythm with the Earth's movement around the Sun, with ebbs and flows, change of day and night and with many other cosmic rhythms. With violation of coordination between these rhythms organism feels discomfort and even presentiment of near illness.

Our physical body serves as exponent of our inner leading pulse and at the same time, it is our individual distinction in Cosmos. The so-called "fine body" in essence has an electromagnetic material base. Live of each of us is characterized by certain

rhythmical scheme, which is subjected to physical death and retains an extracorporeal experience of the spirit, which should be reincarnated.

There is a supposition that the so-called "Shuman waves" takes place in the telepathic transmission of image and thought. These are waves of 7,8 Hz frequency, which form a field of standing waves in the space between ionosphere of the Earth and its surface. It is our natural electromagnetic layer, which can be fully felt at the seashore or in the forest, though sea and forest absorb other harmful frequencies. It may occur that a brain enters the state of resonance with some external structure; a result will be appearance of its image at a distance, i.e. there is a contact made by means of resonance but not by means of radiation. Since these waves have a big length (38 000 km), then transmission takes place immediately. Waves with such an extreme low frequency cannot be screened by usual means. In essence, waves of an organism often coincide with these waves by phase. However, the problem is that waves with such low frequencies can transmit quite little information and therefore it is often impossible to receive a clear picture and give a full description of images of things.

Modern holistic (integral) approach to understand the Universe has sacral traditions per se. These traditions were laid in foundation of any religion, which are Judaism, Islam, Buddhism, Christianity, where we can find a clear statement that every part of Cosmos includes the whole. It is analogous to the principle of holography. It is considered that we can make a full hologram of the Universe based on any of its small parts. Formation of this hologram can take an arbitrary long time. Hologram of a real man is something different from physical basis of ideal cosmic rhythm.

Consciousness, which is a continual manifestation of rarified substance (astral) of a man, is shifted by its phase in comparison with genetic material, and conscious will is only a one of universal instruments of cosmic purposefulness. A "right" man acting in a "right place" is a man whose intentions are coordinated with cosmic rhythm.

Conscious intention has a big power, and our main choice is to take a responsibility for its results. So, actually we are made of waves but not of matter, which is called "solid". All that we call things and events is a manifestation of acting of these waves. Every man has its unique cosmic identifier assigned by a certain function of waves, which represent us. Every man has his own hologram, which contains a universal information about time. Identifier is a main element of Cosmos; it characterizes an individual specificity of a subject, who using this identifier can influence on everything by methods, which even seem to be unusual. We are a peculiar hologram, so potentially we know all about all.

Secret of Wardenclyffe is deep-hidden, and it is impossible to speak about its real destination now. Nevertheless, many things show that the object built by Tesla in Long Island (that time it was a New York suburb) went ahead of all dreams of modern scientists. It was a translator of electromagnetic wave system, which could be easily checked. By means of these waves that scientist called earthquakes, "mental" shifts in people and animals, fired the atmosphere, made impenetrable energy barriers in ionosphere, controlled time, split and condensed the clouds by means of corresponding frequency of waves and, finally, he got an inexhaustible energy from ether using a principle of "ether" technology, which is still unknown for us. Great Master Tesla demonstrated his experiments to numerous witnesses, but he

never announced all results and devoted anybody to his scientific principles. Real reasons to build this giant electromagnetic and mechanical oscillator were the motives much more serious than we can imagine.

A report by W. Pickering, professor of Harvard observatory, named as "Alternating light from Mars", was published in "New York Times" on January 16, 1901. It may be shortened like: "Last year in the beginning of December we got a telegram from Lowell observatory at Arizona. This telegram informed that a strong light flux was noticed coming from Mars and lasted for 70 minutes. Lowell observatory specializes on observations of Mars, and observer was an attentive, approved and experienced man, so we have no doubt in his statements. We will consider these facts immediately and will notify Europe and America via telegraph. The light came from the known point on Mars and there is no unusual in this point according to scientific data. Whatever there was, now we have no means to research anything. We cannot say with certainty if it is a sign that there is an intellect. For the time present this phenomenon is inexplicable."

When this information appeared, Tesla was in New York. He just returned from Colorado Springs, where he in the course of year made epochal and inexplicable experiments with electromagnetic field of strange resonance property. (Tesla's laboratory in Colorado was situated precisely on the summit of Pike's Peak. It is interesting that this peak was deified by Indians Hopi, they consider it a Spiritual Pole of the World).

Encouraged by the information he got from Lowell observatory, Tesla stated in the gazette that during his research in Colorado Springs he communicated with Mars himself. That time he made hints about that he already designed a device available for interplanetary communication, which will be improved in future. He wrote: "I'll never forget the first feeling that I felt when I understood that I have a contact with something, which will have priceless and immense results for all humankind. Thing that I noticed, frightened me as if I saw something mysterious and almost preternatural. Little by little I understood that I am the first who hear messages sending from one planet to another..."

A respected Professor Holden didn't consider Tesla's contacts with extraterrestrial beings by means of electromagnetism, because he thought it was not a serious case. Tesla did worked with some extremely long electromagnetic waves of a very high frequency that does not correspond to the accepted theory, because increase of wave frequency is always related only with short-wave transmission. However, Tesla's waves were different from those discovered by Hertz. They propagated with a speed, which far exceed the speed of light, better to say that their propagation were instantaneous. Tesla has his own theory of electromagnetism, which still is not interpreted. He discovered not only the possibility of wireless transmission of energy through the Earth and atmosphere without any losses, but also he proved an unprecedented "breakdown power" of these waves in negotiation of space. There is an unconfirmed legend that Tesla was the first who sent periodical signals to the stars. There were coded geometrical theorems like theorems by Tales, Pythagoras, and an Archimedean formula of harmonic series (we speak about addition of the series 1+1/2+1/4+1/8+.... Sum of this series is equal to two but number of terms can be infinite). Three days later Tesla was surprised to get a response. He guessed the

principle, which lied in the basis of response code, and got a human face with regular features. At first he couldn't understand, if this picture was made by those who sent this signal and wanted to show that they know our civilization, or they drew their own image to demonstrate that there are similar beings in Cosmos. If it is true, then it should be clear that Tesla refused from any open discussion of this discovery because he couldn't get a due reaction. But soon something occurred that returned discussion of this problem in American press.

In 1902, a famous English physicist Lord Kelvin visited America. When spoke to Tesla, he expressed a full consent and understanding of the fact that details of Tesla's "extraterrestrial communication" were not for public discussion. After the banquet organized in his honor, Lord Kelvin said some good words about New York: "It is the city with the best illumination in the world and it is the only place on the Earth, which can be seen from Mars". In addition, as if in some kind of inspiration he finally exclaimed "Mars is signaling New York". This time nobody had objections. Even persistent Professor Holden kept silence. It was not polite to contradict to such an old and respected man as Lord Kelvin. Instead of objections an article written by the writer and publicist Julian Hotorn, Tesla's associate, appeared as a direct conclusion from this discussion. He described Tesla's sensational methods as a fantasy. Hotorn wrote: "It is evident that people from Mars and other old planets had been visiting Earth for years and attentively observe the development of our civilization. Besides, Tesla's birth changed all. May be, it is possible that people from the stars control his spiritual and scientific development, isn't it? Is there anybody who can know something concrete?"

In the heat of the disputes concerning Martians Tesla was alone in his Tower and continued to work hard and insensibly on the biggest project of his life, Wardenclyffe Tower to make radical changes in development of our civilization. These changes cannot easily be considered true.

Earth - planet as a resonance system

When made a decision to build a relaying station, Tesla at first bought a plot at Long Island and then asked a famous manufacturer Morgan for help. Morgan was a member of numerous secret organizations; also, he was a genius of business organization. He already had cancer and had a hope that Tesla's science would help him to recover. He expected that Tesla somehow would connect him to some energy sources and would make him to be young and healthy forever. Tesla thought that Morgan should be a man who would maintain this plan. He considered that a man has predestination of his life collisions and every man is predisposed to its own activity.

Negotiations between two old friends were private and hard. There is no clear information about the time when Tesla decided to begin the construction of Tower and about expectations of Morgan as an experienced businessman.

During his public appearances, Tesla changed his statements on destination of the Tower at Long Island twice. At first, he stated that the question is about universal telegraph and telephone system of wireless energy transmission through the Earth. Technical properties of Wardenclyffe do not prove neither of them. The truth could be

find in his letter to Morgan: "What I contemplate and what I can certainly accomplish, Mr. Morgan, is not a simple transmission of messages without wires to great distances but it is the transformation of the entire Globe into a sentient being, as is were, which can feel in all its parts and through which thought may be flashed as through the brain..."

Many authors, especially Tesla's biographers, blamed Morgan for reduction of financial assistance in the moment when Tesla was already on the threshold of very important discoveries, when it was necessary to finish and start his masterpiece, Wardenclyffe Tower. Tesla in his autobiography clearly tells us about it. In spite of all that was said, Morgan fulfilled all his obligations regarding him. "My project was retarded by laws of nature. The world was not prepared for it. It was too far ahead of time. But the same laws will prevail in the end and make it a triumphal success."

Tesla tested his transmitter at its full capacity on June 15, 1903. He began his experiment sharp at midnight. This night New York citizens witnessed the even, which was outstanding for future science. Glaringly bright strands of electrical plasma with the length of more then hundreds miles connected the spherical cupola of Wardenclyffe with the sky. The next day "New York Sun" wrote that people living near Tesla's laboratory at Long Island were interested very much in his experiments with wireless energy transmission. Last nights they were the witnesses of very strange phenomena, multicolored lightning made by Tesla himself, then inflammation of atmosphere layers at different altitudes and along the big territory. Night suddenly turned to day. Sometimes air was full of luminescence concentrated along the edges of human body, and all people radiated a mysterious shine. They seemed to be ghosts.

According to the initial Tesla's plan, five towers, the same as Wardenclyffe, should be built. The second tower should be constructed in Amsterdam, the third in China and the fourth and fifth should be built in the North and South Poles. However, this plan was postponed due to the reasons that should be investigated. Finally, if all this could be realized, then what would be achieved? The Earth would become a uniform homogeneous system, which could be controlled by telephone commands destined for starting of certain oscillators, which produce and transmit electromagnetic waves of various frequencies. The same electromagnetic system should be completed with a system for mechanical resonance with the Earth. These systems consisted of a tunnel passed under the laboratory and filled with water and oil, and hydraulic pumps served as oscillators. By synchronized actions, based on exact mathematical calculations both systems could start vibration simultaneously together with rarified stratosphere, ionosphere and atmosphere as well as with liquid and solid structures of our planet.

Before conjecturing relating to all possible consequences of such event, we should give two more examples that are unusual. In his interview of July 17, 1930 given to "New York Sun" Tesla redoubled his enigma stating that people who live near Wardenclyffe and were frightened with his experiments could see much more...if during last two years they were more awake than asleep they could get acquainted with really incredible things. Sometimes, but not now, "I'll announce something, which you cannot find even in fairytales."

After unusual night, when he fired the sky above not only New York but also above all vast area of Atlantic Ocean during his experiment, Tesla suddenly left his laboratory without a clear reason and left all things untouched. As we know, he never crossed the threshold of Wardenclyffe, never visited it and never appeared on this territory. It was very strange, he didn't take any calculation, drawing or document, none paper. It was a turning point in his public scientific work. He was living for 40 years continuously working, but he patented his mechanical discoveries only and published only the articles in newspapers.

Tesla's ether technology

Tesla discovered and used the law, which concerned fundamental properties of Ether, and the law, which structure the initially infinite and homogeneous ether. Supposition made about continuity of ether as one of the main cosmic mediums means that imaginary "center" of Cosmos is everywhere, that law of structuring of such medium should have analogues with the law of location of points at geometric spheres. There is no information that Tesla formed and told his theory in such a way, but he left some systems working on the principles, which are unknown to modern physics. The question is about ether generator, i.e. electromagnetic ball, which has constant electrical potential in spite of energy leakage, then about a synchronous motor working on gravitational waves of the planets of Solar system (this motor turns on independently at the certain season and reacts on the corresponding arrangement of planets. It also independently turns off, when resonance interval of time ends). Besides, Tesla designed a metal disk, which could be hang on some height and has antigravitational properties, which do not depend on attractive force of the given place.

Parts of the structured ether can be resonant or not. In the first case a condensation of subatomic particles, such as electrons, protons, neutrons, takes place. These particles appear by means of resonance synthesis of photons, according to the same principles as during formation of photons as specific particles of ether. Asynchronous, non-resonant parts of ether form a space, in which resonating photons form matter.

Tesla's Wardenclyffe Tower was a "Pythagorean" oscillator. Mathematical description of transmission of particular electromagnetic waves was identical with Pythagorean creative method. Signs used by Tesla in his equations have a single-meaning physical interpretation. Principles of Tesla's ether technologies belong to the level of cosmic existence, on which it is possible to control space and time. The principle of resonance and harmonic oscillation of ether seems to be so clear that all problems of modern physics, especially problems of energy conversion, will be solved with its development.

By means of his vacuum tube Tesla got protons, electrons and neutrons directly from physical continuum (ether) and reproduced them at any distance. Instead of giving a possibility to the bundle of protons to move free through space to some place, he created conditions for momentary appearance of arbitrary quantity of particles in the given place. Quantity of protons, neutrons and electrons was not limited by anything, difference in their quantity was stipulated by created shift in time.

Starting from suppositions that Tesla knew some unusual for science and still inconceivable laws of nature, we should think about what technical goals he followed using Wardenclyffe Tower and what consequences he expected?

- 1. To call oscillations of ionosphere. Since the difference of voltage between surface of the Earth and ionosphere constitutes about two billion volts, then the Tower is continually oscillating on upper and lower harmonics of oscillations of ionosphere up to full coincidence with it by phase (up to resonance) and can discharge it in the same way as usual electrical condensers are discharged. Due to the reason that such a charge could pass immediately, there would be a real threat to New York. A high-energy plasma column of a very big diameter (possibly of several hundred kilometers) would appear from ionosphere, and all situated in this space would be disintegrated. Of course, Tesla had no intention to destroy New York. He only wanted to take energy from ionosphere by means of short oscillatory intervals to recharge his huge oscillator, which required maximum voltage of one hundred million volts. As a system for hyperfine oscillating, Tesla used a huge quantity of ultraviolet lamps, placed at the top of his Tower.
- 2. To take energy from Ether. It is possible to shift time coordinates and produce an energy transmission by time cycles from the past to the future without any violence of electromagnetic equilibrium of environment by means of oscillation of non-resonance electromagnetic fields. Of course, it should be done with strict following of mathematical law, which determines the interrelations of frequencies with a great accuracy. In an opposite case, the results can get out of control and an unexpected destruction of material and biological objects or their momentary drop out form segments of our reality can take place like in Philadelphia.
- 3. To open temporary windows in "parallel worlds". Since parallel worlds have an electromagnetic structure with the wavelength and frequency of oscillations different from those of the Earth, then is could be possible to make some connection between frequencies of oscillations of our world and other worlds by means of complex harmonic oscillating. Due to this, some pictures of these worlds could become apparent in our earth conditions (and vice versa).
- 4. To accelerate human evolution. If we make a permanent high-frequency field harmonizing with collective electromagnetic field of people, then little by little it will be possible to achieve an increase in sensibility of perception and increase in ability to receive ideas. Radiation of these frequencies could be harmful: any disharmony of field (nonresonance) calls a partial separation of astral and physical substance of a man, it can lead to sickness (for example, cancer) or mental disorders. Full separation of one substance from another, of course, leads to death. In addition, all these processes act slowly. Due to their lack of knowledge, people pollute their electromagnetic environment more and more by radio waves, microwave radiation form locators (which call cancer, it was proved experimentally). Other electromagnetic radiation also has negative impact. These electromagnetic waves are in disharmony with frequencies of oscillations, which are natural for vital functions and for informational field of Solar system.
- 5. To be able to transfer the Earth planet into "parallel realities". If Tesla could finish the construction of system made of five transmitters and start it, then he could make

the whole Earth to be in the state of oscillating as a uniform resonance structure, and such oscillation, which is peculiar to some other reality, and thus physically move us to the "parallel world". Thus possibly, he wanted to accelerate evolution of civilization. However, it could be very dangerous, because if the Earth enters the state of resonance oscillating with "parallel worlds" and it takes a long time, then catastrophes could occur like that was described in the myth about Atlantis.

Modern experimenters should keep in mind that secret of physical world lies in metaphysics and as long as our science will be blinded with research of "crude" matter, we will be in the state of illusionary split consciousness. It is necessary to provide a breakdown of human consciousness, and it will happen in physics. We should free human mind and adjust it to deep cosmological research.

Ethics is a cosmic principle, which contribute to energy distribution, isn't it? Then it can get a status of natural law. And we will be able to explain to the supposed habitants of worlds, which are shifted in time, why we can influence on the Galaxy and stars by means of special reactors and why we take part in experiments, which directly change us.

If ethics is really a harmony and kindness is equilibrium of energy, then mathematical, cosmic ethics certainly acts in the world. It is impossible to violate mathematical laws. "There is no czar's way in geometry" – said Euclid to the czar Edip, who worked on solution of difficult geometrical problem.

Cosmos itself seems to be a big experimenter. Our mind asks it the questions, which are clever or not. That's why every true philosopher and scientist should reject the applied science appeared form defect and rigid theory, when he studies something concerned with cosmic phenomena.

Evolution of Tesla's philosophical positions beginning from oracular one and finishing with engineering ones, beginning from engineering ones and finishing with metaphysical ones, as Tesla's private life, these all are the milestones on the way of formation of a new paradigm of scientific and technical civilization. His attitude to people and himself is a result of transpersonal absolute manifested in him. He had no personal attitude to anybody including himself and that's why he did little mistakes during his life.

Tesla is often cited in modern science. The scientists, who didn't notice contradictions of Maxwell's electromagnetic theory until now, began to study Tesla, especially those who work on unification of electromagnetism, gravitation and strong and weak interactions. Is it true that matter is infinitely divisible or not? If space could be divided infinitely? Finally, what is the role of time in physical processes? May be time is only a measure, usual coordinate, as it is supposed in modern physical theories basing on the theory of relativity and quantum mechanics.

Aversion of Tesla's ideas about ether as a basic medium, which structurally joins space and matter, led to stagnation in physical thinking and to continual returning to out of date ideas. In scientific circles, which take a risk of creation of a "new physics" Tesla's concepts now become increasingly valuable and they are studied. There are experiments with ultra low and ultra high frequencies of oscillations, which have

specific modulation and form the radiation of ionosphere. All possible consequences of it are still unknown. This includes control of meteorological phenomena, especially hurricanes and atmospheric pressure, infusion of thoughts at a distance by means of electromagnetism, i.e. resonance with electromagnetic transmitters. It becomes evident that it is possible in technology to imitate external electromagnetic manifestations of human thinking. It is the position of Tesla's cybernetics. "A man is an "automatic machine" of cosmic forces" – underlined Tesla in his main articles and lectures.

Experimenters can say that it is much easier to excite mass emotions of people by means of corresponding oscillation of ionosphere, which includes harmonics of collective unconscious state of all humankind. Ionosphere is a key to control mass feelings and thoughts. Tesla understood all this yet in far 1899 living in Colorado.

Modern university science and in particular Serbian scientific community reject Tesla's ideas mainly because it cannot understand them. The second reason is the opposition, which Tesla presented to nuclear physics, and his prediction that application of corresponding technology would not be continuos and quantum mechanics has no serious scientific future.

Tesla as cosmologist had his own philosophical and religious position:
Aristotle stated that there is an independent higher spirit in cosmic space enteleheia. This spirit sets mater in motion and a thought is his main attribute. In the
same way, Tesla believed that uniform Cosmos is joint in material and spiritual
sense. There is some nucleus in cosmic space, form from which we take all strength,
inspiration, which attracts us forever. Tesla felt its power and its values, which it
sends all around the Universe and keeps it in harmony. He couldn't guess the secret
of this nucleus but he knew that it exists, and when he wanted to give it some
material attribute, he ascribed that it is LIGHT, and when he tried to understand its
spiritual principle, then it were BEAUTY and sympathy. A man who keeps this religion
in himself, feels strong, works with joy because he feels himself as a part of universal
harmony

Resume on perspectives of Tesla's science

Not only physicists, who continue Tesla's work, but all people who think a lot about scientific problems, are agree that modern physics is really a contradictory system of knowledge. From the one hand, time is relative and depends on the observer. From the other hand, it is stated that time of quantum transfer cannot be measured. Nuclear reactions are studied on cathedras of history of physics. In the course of these reactions transformation of matter into energy goes without a residue. In astrophysics, full transformation of matter into energy is not possible. It is known that mass calculated as an effect of the force of attraction differs from the mass calculated from the speed of rotation of the stars around the center of Galaxy got by means of "Doppler's" shift of lines in spectrums of their radiation. Therefore a significant defect of visual mater or mass can be found, and it amounts to 90%. Instead of changing the theory, scientific schools speak about "defects of mass".

Tesla worked on special "vacuum tube with an open tip", which serves to transmit particles at any arbitrary large distances. The laying was made by electrostatic way

by the lines of electromagnetic layers of atmosphere, which can be distinguished by the naked eye. It is the layer, where clouds float. It became known that multiphase system, inductive motor and generators of alternating current are the less significant Tesla's discoveries. The most important should be those, which relate to his experiments with ether and time. We can underline a perfectly new cosmological physics, which is based on electromagnetic resonance of ether, on resonance effects of time.

Main Tesla's discoveries are the following. The first is transmission of energy at any distances. Really, it is a superconductivity of natural environments. The second one is "fireballs" (synthesis of structural elements of ether and matter), high-frequency resonance oscillator adjusted for waves, which are different from Hertz's waves, waves with the so-called longitudinal modulation. It is a kind of free choice of consciously selecting electromagnetic units, which initially and elementary codify working electromagnetic field of human brain, modulate brain oscillations or change their nature, and in sensitive aspect it leads to various emotions, changes in consciousness, creative impulses, super perception up to super cognition. The third one is dynamic nature of attraction, in which every element of periodic table has its own constant of attraction; in this case Tesla continued the works by Etvesh and derived several universal methods. And finally, Tesla's electromagnetic theory. This theory was not explained or published. This theory does not use the generally accepted notions, such as "energy", "wavelength", and «frequency". Instead of it this theory introduces the notions of "curve of schedule", "vibration of spiral systems", "electrical pressure", "proportion of transmission", "ether", "dynamics of electromagnetic fluid", "geometrical abilities of tube" and so on.

Form modern mathematical arsenal Tesla used only Fourier's ranges to separate electromagnetic oscillations into higher and lower harmonics, since it matched his main supposition on simultaneity of action of all parts of infinite ether. It is clear that infinity cannot be formed with nonsimultaneous parts.

Tesla's cosmology is cosmology of a general type, which relates to isotropic and infinite Universe. At the same time, Maxwell's electromagnetism can be applied at comparably small distances. In essence, Maxwell made a mathematization of Faraday's experiments, but he didn't build a concept of this problem up to an end. Due to the incompleteness of Maxwell's theory, great difficulties in Special theory of relativity appeared (interrelation of speed of propagation of energy and speed of light). Einstein himself ignored relativist changes of space and time with motion in photoeffect, since if energy changes together with speed, then there are no effect, when energy equivalent of electron trajectory split out by photon is absent. In general theory of relativity shortcomings of Maxwell's theory led to an idea of "world line" (in essence, it is a pancosmic extrapolation of magnetic force lines, which are visualized by iron filings on laboratory tables) an, finally, to the notion of Cosmos finiteness, which alternately shrinks up to the "point", which is located out of measurements, or explodes...unlikely development.

It could be surprising not only for Tesla, but also for many antique philosophers and scientists, Pythagoras, Plato, Euclid and others.

Nikola Tesla and his science are very significant for the modern world of telecommunicational systems and find a way out of crisis of scientific and technical civilization, which needs philosophical ontology. During hundreds and thousands years, we had many great scientists, but nobody has a temple built in his honor. Such temple is built in California, in San Diego, in the one of centers of world scientific and technical power. Neither Plank, Einstein, Bor, Pauli, Torichelli nor Newton in spite of their interest in alchemy, theology and mystics, none of them could convince people of transcendental significance of their scientific views.

Christian civilization is based on suffering, sacrifice and atonement of Christ, on the mystery of christening, resurrection and the other world. It is full of human feelings and emotions. Technical epoch under the badge of Tesla is a humane symbol of spirit and matter unity and establishes not a religious belief, but belief in scientific principles, and gives a discernment in fundamental laws of Cosmos. Historically, Tesla radically changes the form of religious belief on the planetary level. That's why he is not only a scientist but also a universal and historical phenomenon of a higher level. He changed spirituality of theology to the spirituality of science. Besides, modern physics already became a philosophy of new times, since it openly works with the structure of mater, genesis of Cosmos and, recently, Ethics.

Quantum mechanics of Copenhagen circle including Bor, Heisenberg and Pauli does not give an answer on the question about structure of main unit of matter. Theory of relativity doesn't solve the problem of time substantiality and doesn't explain the essence of force concept. Tesla's physics relating to the real physical space or ether, and his scientific thought derived from positions of antique cosmology and Pythagorean mathematics (not from electromagnetism of XX century) couldn't be continued as long as appeared other limits on the way of creation of general physical theory, which includes events of physical reality. After Chernobyl all people understood that nuclear reaction is nothing more than irresponsibility without real understanding of matter structure. And tragedy of spaceship Challenger reminds us that humankind still does not have enough experience in long space travels and jet engines cannot solve the problem. It is better not to speak about medical aspects of interstellar travels. Tesla's physics gives answers and instruments to use it in cosmology.

Sometimes expressions that we use to denote some physical notion didn't exist in times of Tesla. The same is with the method of introduction of mathematical symbols to make calculations. It gives a great benefit to a young electrical engineer, who many a time heard that Julius Mayer never used the word "energy"; that Archimedes and Galileo calculated all by mathematical method but had no signs for calculations, which can be used now; Newton, who opened infinitesimal quantities, nevertheless made all proofs by means of geometrical symbols as well as Euclid and all other scientists lived in period between them.

To understand Tesla it is necessary not only to read his works in original, but also to explain meaning of terms in his scientific account, not to mention the coded part of his archive, where the same notion is used in different contexts has a lot of senses. Tesla's theory cannot be understood without a clear hypothesis and method of thinking, which is similar to his own.

Advanced modern science gradually begins to study Tesla's heritage. We do not speak about commercial or university aspects of scientific knowledge, but about summits of scientific thought unknown to wide intellectual community, about the knobs of separated net of worldwide global informational space for humankind, in which everybody is connected with the others by the channels of planetary telecommunicational net. This connection is made by two main coincident parameters, conformity of ideas and intellectual level. However, the thing that joins all is a time comprehension as a basis for new civilization. All early civilizations originate only from their attitude to space.

According to Tesla, in planetary community of the future all energy will be taken from inexhaustible and free sources. He pointed out that the Earth is a nucleus of a huge generator, which in rotation creates a difference of potentials equal to billions volts with a slowed ionosphere, that humankind really lives in a spherical condenser of big capacity, which continuously self-charges and self-discharges. In this condenser ionosphere is a phase, atmosphere is a dielectric and the Earth is zero. Thus, a global electrical process proceeds on our planet. Electrical energy does its work and then return to the natural environment of the planet Earth.

There are linear "accelerators" by Tesla in the form of open vacuum tubes, i.e. tubes working in room temperature without energy losses, since while laying at "target", electrostatic properties of the "target" itself are used; that's why it is possible to transmit any quantity of energy at any distance by means of induction. Kenneth Corum, who repeated Tesla's experiment in America and achieved some results, still didn't understand the essence. Tesla's "particles" do not travel in space as other known particles or Hertz's waves, but they are self-generating from inductive field like "fire balls". The question is about an original Tesla's theory, which is related with cosmic radiation and was proved by him experimentally.

Tesla's reversible magnetic field has a universal significance. It is a mathematical idea, which is realized directly in every echelon of cosmic being.

I make bold to state that even Tesla's inductive motor, the so-called asynchronous motor, is not studied enough in conceptual sense. There is an undiscovered mystery of heavenly bodies rotation and rotation in general. Acceleration of motion of "Tesla's egg" is based on the change of field's geometry, but not on the properties of magnetic induction (actio in distans) or increasing of force (electricity input is permanent).

Among other Tesla's mysteries there are unstudied ones: in radio engineering there are some transmissions on the same frequency, which cannot be jammed (Twenty unused patents); in the structure of matter ("I used to split the atoms, without releasing any energy" – it is Tesla's statement of 1933); concerning attraction force there is a model of gravitational motor with tin engine and glass stator working once a year under the influence of certain planet arrangement; in the theory of ether (matter is structured from ether and dissolves in ether again following simple mathematical laws, but if generated energy is more than disappeared one, then cosmic catastrophes take place); Tesla's medical devices and influence of low-frequency waves on the brain operation, which calls contractile motions and change of subjective "second".

This is Tesla's attitude to the idea of Buddha that "I" is illusionary. "Really, we are some different, like waves in subjective time and space, and when these waves disappear, nothing remains from us. There is no personality. We cannot saw that waves in the ocean have individuality. There is only an illusionary sequence of waves, which go one after another. We are not the same that was yesterday; I am only a sequence of relatively existences, which are not similar. This sequence is that thing, which create an effect of continuity, but not my subjective and mistaken understanding of my real life."

I cannot imagine Tesla smiling. I see him to be sad, since I see what a man could draw, when he gave all his essence to the power of natural laws.

Most important dates of Nikola Tesla's life

1856 – on July 10, at the midnight Nikola Tesla was born in Smilyan, in Lika (province of Austrian monarchy) in the family of Serbian priest.

1875-1878 – he studied in Polytechnic Institute in Graze (Austro-Hungary).

1882 – in Budapest, have been walking around the park, Tesla made a discovery relating to the reversible magnetic field.

1883 – in Strasbourg he was employed in Edison's Continental Company and built a model of the first inductive motor.

1884 – he left for New York and began to work in Edison's laboratory.

1885 – he left Edison, established his own company and started to produce motors and generators of multiphase alternating current.

1888 – on May 16 he read a lecture in American institute of electrical engineers on the topic "New system of motors and transformers of alternating current".

1890 – he announced his results on physiological influence of high-frequency electricity.

1891 – he read lectures on the topic "Experiments with alternating current of very high frequency and its application in artificial wireless lighting"; registered patents of "spark oscillator with resonance transformer".

1892 – he came to London and read lectures in Royal scientific society on the topic "Light and other high-frequency phenomena", in the institute of electrical engineers he read lectures on the topic "Experiments with alternating current of high voltage and high frequency"; then the same lectures he read in Paris.

1893 – attracted public attention on the World Exhibition in Chicago. He skipped a high-frequency current through his body and demonstrated a model of reversible magnetic field, the so-called "Tesla's rotating iron egg".

1895 – on May 13 Tesla's laboratory in New York was burnt with fire.

1897 – he registered twelve patents in radio engineering.

1898 – registration of the paten for teleautomatic control (experiment with the ship on the lake in New York, Central Park. Tesla made a wireless control of the ship and staggered all witnesses).

1899 – a construction of hydroelectric power station at Niagara was finished.

1899-1900 – experiments in Colorado Springs.

1901-1905 – construction of Wardenclyffe Tower at Long Island, near New York.

1909-1922 – he registered patents only in mechanical engineering (pumps, tachometers, bladeless turbines).

1943 – on January 7 Tesla died in New York, in "New Yorker" hotel. At first, he was read the burial service according to Orthodox tradition, and then his body was burnt according to Buddhist ceremony. My question is if he was truly burnt.... Or transfigured and conveyed...not as mere ashes... His main unexplored scientific legacy is in Tesla Museum in Belgrade City, Yugoslavia.