



## Review Article

Copyright© Evgeny Pavlovich Sidorov

# Physical Capabilities and Design Features Wastewater Treatment Plants by the Method of Jet Implosion

**Evgeny Pavlovich Sidorov\***

Deputy Director for Research and Technology, Agrostroyservis Research and Production Association, Russia

\*Corresponding author: Evgeny Pavlovich Sidorov, Deputy Director for Research and Technology, Agrostroyservis Research and Production Association, Dzerzhinsk, Russia.

To Cite This Article: Evgeny Pavlovich Sidorov\*. Physical Capabilities and Design Features Wastewater Treatment Plants by the Method of Jet Implosion. *Am J Biomed Sci & Res.* 2024 23(1) AJBSR.MS.ID.003031, DOI: 10.34297/AJBSR.2024.23.003031

Received: 📅 June 04, 2024; Published: 📅 June 19, 2024

## Annotation

The article discusses the concept of using implosion rotation in the process of quantization of microparticles of water molecules in order to purify it from polluting elements by the forces of its internal energy. The article reveals the physical essence of the occurrence of the so-called non-working motion during jet implosion, which is initiated due to inertial forces, maintaining the equilibrium of momentum, radiation and absorption of photons. General views of the structure and installation of domestic wastewater treatment by the method of vortex jet implosion of the water flow of wastewater in a closed pipeline system are presented.

**Keywords:** Quantum effects of water, Excitation forces of the process of quantization of water microparticles, Disintegration of material matter, Reaction pipelines, Gravi electromagnetic monopoles and dipoles, Production of coherent waves, Absorption and emission of photons, Preservation of equilibrium of inertial momentum forces

## Review

History shows that the progress of science is constantly fettered by the tyrannical influence of certain concepts when they began to be considered in the form of dogmas. For this reason, it is necessary to periodically subject to an in-depth study of the provisions that began to be adopted without discussion. Louis Victor Pierre Raymond de Broglie.

Victor Schauburger, an Austrian water researcher, inventor and founder of the concept of using the implosion rotation of the water flow in order to create a process of quantization of microparticles of its molecules, experimentally proved the instantaneous purification of water by the forces of his internal energy. Doctor of Physical and Mathematical Sciences AA Shadrin gave the following scientific presentation of the process of implosion motion: "Implosion is the result of superfluid transfer of water flow by cone (concave) rotation of the narrowing of the jet at one quarter of its wavelength, that is, the movement imitating the movement of atoms along the potentials of the gravitational waveguide." During the implosion of the jet, a mechanical macro vichron (energy cluster of matter) is gen

erated in the form of a technical antigravitational monopole from the grains of potentials of the same sign with the central field of the Earth and the magnetic equally distributed field of the surrounding space. which helps to reduce the resistance of its movement by internal screwing along the tapering line of the flow axis. The real natural potential of the water cluster and its ability to reveal the internal forces of the energy content of the parent energy-mass at the quantum level were used in the design of the polluted wastewater treatment plant [1].

The main essence of the new scientific concept of polluted wastewater treatment is as follows. It is known that water has three main states of aggregation, namely: liquid, solid and gaseous. The modern science of wastewater treatment methods has used and continues to use methods that use the chemical, physical and biological capabilities of these three states. Namely: mechanical, chemical and biological treatment, which have now shown their ineffectiveness in terms of blocking prospects for pollution from the rapidly growing population and rapid man-made activity on our planet. More recently, scientists have made several important dis-



coveries that have shown that under high pressure and tight space, water molecules demonstrate another state and live not according to the classical, but according to the quantum laws of physics. As it turned out, water molecules exhibit quantum effects. Scientists believe that when water molecules are at a very close distance from each other and are "squeezed", due to the small available volume for the formation of associates, protons in them turn into a quantum state. This state of water had not been studied by scientists before, but Viktor Schauberger intuitively used this effect in the designs he developed and manufactured and achieved incredible success. Using the example of the manufactured design, he proved the possibility of exciting the process of quantization of microparticles of water molecules under the influence of implosion rotation of a water body, that is, due to the energies generated at the level of matter. The effect of jet compression is achieved in a narrowing working cavity with an opening, namely, a tube nozzle, which implements the implosion of matter energy in all vortex quantum-wave transitions, both for mechanical (in the SI system) and for electromagnetic vichrons and is always manifested in the wave node. AA Shadrin wrote: "Only the implosion of magnetic energy in the node of a wave makes it possible to extract the internal energy of atoms and molecules by injecting grain-potentials into their internal structure." Today, physicists, relying on the latest and previous measurements of proton size, have accepted the concept that the proton is not an elementary, indivisible particle, since its diameter has changed in the process of successive measurements over several years. Based on this, a conclusion has been put forward that the proton is not an elementary particle, but a composite particle. And the dynamic structure of the proton is formed by positrons with the corresponding charge inverse to the electron direction of axial motion and direction of rotation. Accordingly, the interaction of the proton with both the electron and the magnetic field of the hydrogen atom is described by dynamic means, the technical values of which correspond to the characteristics of positrons. In the hydrogen atom, the dualism of the rotational-translational axial motion of the proton and the electron towards each other is realized under the conditions of de Broglie waves. Moreover, their dynamic structural embodiment corresponds to Bénard's vortices [2,3].

In the microcosm of particles there are: an electric charge with a constant value, a gravitational monopole with a constant mass or a rest charge, a magnetic monopole (a charge of energy in the form of a sphere of electromagnetic grain-potentials, the parent of electric and gravitational monopoles), as well as a specific degree of charge of the motion of particles - spin (angular momentum of its own rotational motion). As in the macrocosm (SI system), these characteristics determine the signs of the existence of elements structure and vital activity of the microcosm. These are the external fields of stationary microsources of energy-mass charge, i.e. grain-potentials, or intrinsic gravielectromagnetic monopoles, mechanical and electromagnetic microchrons, generated by the discharge of stationery and vortex triads of energy charges. There are always mutual transitions between mechanical and electromagnetic microchrons. Electromagnetic vichrons excited by external fields, at a certain stage of intensity, give rise to gravitational vichrons,

which turn into the form of mechanical vortex and axial motion, and in our case, water flow. For example, if two particles, a proton in positrons, and an electron are moving in space towards each other. These particles, which have the same de Broglie wavelength, are capable of combining in the form of a hydrogen atom, and when the energy indices of the external field and the interaction of particles change, they are separated (ionized). The mechanism of ionization of an electron by a photon is due to the implosion of its charge of the energy of the positive grain-potentials of the atomic shells and the negative grain-potentials of the waveguides. Different polarity destroys the binding energy in the atom by interference of coherent, but opposite in charge sign, magnetoelectric monopoles. Such a concept of the process of ionization of the electron became possible after the discovery by AA Shadrin of the absence of the mechanism of orbital motion of electrons in atoms around nuclei, which scientifically confirms the conclusions of physicists about the structure of elementary particles (protons), hydrogen atoms and water molecules. Such a structure is called Bénard vortices.

Bénard water vortices (corresponding to the dynamic state of hydrogen particles in the de Broglie wave state) exist in two modifications that transform into each other: ortho and para protons, which, when interacting with dipole charges, create fluxes of motion in a field of electrons and positrons according to the laws of ortho and para modification of the hydrogen molecule. And the water molecules form a structure in which the electrons of the outer ring can move in a tunnel of proton positrons. Vortices are such dynamic formations that must be constantly moving. In the internal flow of the Bénard vortex there is the most mobile ortho modification of hydrogen molecules. And in the external flow of steam there is a modification of hydrogen molecules, which moves very slowly. In the interaction of ortho and para modifications of hydrogen, due to the induced torsion force, the ortho modification of hydrogen is squeezed out of the internal flow into the external one and takes the place of the hydrogen vapor molecules. Thus, there is an oscillation in the concentration of the water flow in the direction corresponding to the entropy of its ortho and para state. Each energy state corresponds to its own equilibrium concentration of ortho water vortices and a pair of modifications. However, if the ratio of concentrations of ortho and para modification of hydrogen molecules, which meets the norm of interaction with the environment, is violated, namely: 75% / 25%, critical processes of water ejection into the surrounding space due to torsion forces may occur. It should be noted that the constant compression of the structure of hydrogen molecules and, accordingly, water molecules due to the action of torsion forces, as well as the lack of free movement, the vortex is stretched in the axial direction and tries to shrink, and condensing it tries to jump out, but under normal energy conditions, the state of the magnetic monopole continues the field molecular motion inside, since the implosion charge of particles does not have critical energy values. The forces of the implosion charge of the wave motion of electrons and positrons in the Bénard vortex can be characterized as the forces contained in closed microchrons - the builders of the structure of phase volumes of stable atoms, atomic nuclei of chemical elements and the birth of their characteristics of

dynamic motion in the SI system. Responding to the law of determinism, they are summed up and transferred to the macro-level of the dynamic functioning of energy-mass (in our case, water flow). The analysis of the dynamic state of the Bénard vortex structure of the water flow allows us to assert that under the external impact on the elements of the vortex structure by the forces of mechanical and energy initiation of the organization of ortho and steam modification of hydrogen molecules, it is possible to induce an implosion flow of water in the confined space of the pipeline of the required speed of spiral vortex and axial motion in order to destroy the structure of the constituent particles of the molecules. For example, Professor F. Ehrenhaft from Austria calculated that in W Schaubberger's installation, implosive forces are approximately 127 times greater than expansive forces. In order to implement the induction of mechanical and energy forces capable of initiating the processes of ionization and synthesis of water molecules, it is necessary to use the primary reduction of the water flow to left-hand rotation with an angular velocity of 600-1000 rpm, and for the energy effect to use the mechanism of ionization of hydrogen molecules and water molecules in the magnetic field of the planet "Earth" during the interference of magnetic coherence waves, during the resonance of electromagnetic processes and, in particular, the initiation of the precession resonance effect by inducing joint oscillations of the change in the forces of the Bénard vortex.

On the basis of the design developments of W Schaubberger and the scientific prerequisites of AA Shadrin, a project was carried out for the design of a pilot plant for wastewater treatment by the force of the internal energy of water, extracted from its body in an explosive way at the intramolecular and intraatomic energy levels. The design plans to achieve this physical process by implosion screwing of mobile matter (water) to the central axis of the flow through a quantum-wave coherent waveguide node. This motion initiates the emergence of the dualism of centripetal and centrifugal rotation of the water flow, as well as the torsion force of the vortex motion of the ortho and the steam of hydrogen molecules and water molecules. And the forces of these rotations create conditions for breaking molecular and atomic bonds, which leads to the destruction of the building essence of the elements of chemical compounds and impurities dissolved in wastewater. At the same time, there is a real possibility of atoms dissociating into nuclei. In an unstable energy state, the electrons of atoms are constantly absorbing and emitting photons. At the same time, inertial forces of momentum conservation arise, which create a critical bond voltage between the electron and the nucleus of the atom (proton positrons), and its rupture leads to the destruction of the structure of the atom. At the same time, in the process of vortex implosion movement of water, due to the breaking of chemical bonds and the formation of new ones, the deformation of the energy state of molecules occurs, with the release of additional environmental energy from the body of the water flow to correct the created deformations. This phenomenon makes it possible to transfer the vortex motion of the medium into a spontaneous process without the expenditure of external energy of mechanisms. After the water flow leaves the reaction zone of the implosion circulation, the water regains its building essence as well

as its original quality. In general, these physical transformations create conditions for the disintegration of material matter (water) and the splitting of substances, which disintegrate, and the aqueous solution is purified of the chemical elements dissolved in it. This process occurs at a speed of 10-12-10-13 seconds.

It should be noted that the design of the facility was carried out on the basis of the assumptions of theoretical science, since in the world practice (in the open media) there is no information about scientific research and testing of this technology at pilot facilities. The tests were carried out in laboratory conditions by enthusiasts such as W Schaubberger, mainly with the aim of imparting medicinal properties to the water. Modern science in the field of studying the implosion spiral screw rotation of the water flow in a closed system of pipelines is at the stage of putting forward scientific theoretical assumptions. From my point of view, the lack of state tasks for the practical application of this physical process entails the lack of scientific research and experimental designs. At the present stage, in order to implement this concept of wastewater treatment, it is necessary to develop a mathematical model of the process of practical application of the extracted impulse mechanical forces from the implosional torque of water.

In order to release the bound internal energy of water, in order to obtain energy transformations that transform the molecular and atomic structure, it is necessary to initiate a critical interaction of gravi-electromagnetic energies of destruction and formation of elementary particles of chemical elements. AA Shadrin suggests that by implosion of the energy charge in the form of vortex fields of the magnetic monopole, the outer shells of the primary nuclei of atoms are unpacked. Molecules and atoms can be associated to nuclei, as a result of which, the compounds disintegrate and the aqueous solution is purified. He proved that in systems of moving masses of macromatter exceeding the value of the Planck value, gravitational interactions begin to be bound through the induction of free mechanical macrochrons and gravi-electromagnetic monopoles and dipoles to the excitation of bipolar nuclear vichrons (or, more simply, the excitation of internal fields by external fields), which creates conditions for the reproduction and renewal of closed atomic-electronic shells. At the same time, in the process of interaction of gravi-electromagnetic energies, inertial and gravitational photons and neutrons can be introduced to elementary water particles, which can be generated into a magnetic field of a high form of vibrational energy under the inertial influence of the response impulses of their motion. And as a result of this process, resonant phenomena of sound coherent waves arise. Thanks to these actions, the ability to transform the material base of the atoms of chemical substances that make up the structure of wastewater appears.

The design of the facility took into account the conditions for the creation of physical processes of the transition of gravi-electromagnetic energies into wave and materialized entities, which, as a result of his experiments, were discovered by W Schaubberger and scientifically substantiated by AA Shadrin. It was proved that the moment of atomic transformations of the elements of the structure of water subjected to implosion helical rotation with a critical

angular velocity occurs at the moment of a “jet implosion” or an explosion inward. This occurs when particles of water elements on the working sections of the path, enclosed by a half-wave at a point corresponding to  $1/4$  of the length of the sound wave, move from the anti-node to the node in the phase of compression of the sound wave. For this purpose, a structure is created inside the reaction pipeline of the unit, which initiates the production of coherent waves in this section, and due to the addition of the incident and reflected waves, their resonance. The role of such a device should be played by a Laval nozzle. It has proven itself in many such designs. Then, at this moment, the implosion flow of water will acquire the ability of superfluidity, as well as the speed and size of the sound wave, and the splitting of the internal molecular energy of the jet will begin.

The design of the facility is aimed at understanding the determinism of the external implosion effect of a substance (water flow) on its internal molecular and atomic structure. The main axis in all the processes of physical transformations under consideration is the law of interaction and conservation of gravielectromagnetic energy, the parent and creator of our world.

As a result of the initiation of the rotation of the water flow by a mechanical system of counterclockwise vortex (implosion rotation) with an angular velocity of 600 to 20,000 revolutions per minute, a critical regime occurs, at which intramolecular and intraatomic transformations of the energy and material state of matter (water) begin. First of all, the thrust is induced in the direction of the gravity vector. At the same time, there is a change in weight towards its decrease, as well as a decrease in ambient temperature and a change in pressure in the flow body. At the same time, the mechanism of ionization of hydrogen molecules and water molecules is induced, which leads to the destruction of the energy-mass structure due to the deflation of the volume of the electric micro space of atoms and molecules. Along with the dissociation of molecules, a decrease in pressure in the water flow occurs during the synthesis of water molecules, due to the transition of oxygen from a gaseous state to a liquid state. The oxygen atom in the water molecule reduces its volume. Simultaneously with the dissociation of water molecules, the resulting hydrogen ions, hydroxide ion and hydronium ion are recombined with the release of two water molecules.

In a swirling water flow, two vortices are formed: a peripheral, free vortex and a central (axial) forced vortex. At the same time, all energy processes consist of the movement and transformation of elementary particles of water molecules. The main difference between the macrocosm and the microcosm is that in the macrocosm it is possible to observe the form of energy transfer and the state of matter. For example: temperature can be considered as an indicator that there is a certain level of quantum transformations in the system, and its numerical value reflects the intensity of quantum transformations. In a spiral water vortex, the dualism of centripetal and centrifugal rotation of water particles is manifested. With centripetal rotation, the pressure at the point on the axis of flow drops proportionally to  $V^2/2g$  and a pressure gradient increases towards the center due to the vacuum in the central part of the pipe

in the direction of the axis of flow movement, hence an increase in flow energy. The speed increases, the kinetic energy increases, and the potential energy of elementary particles of water molecules and their bonds is accumulated. Peripheral water masses are pressed against the walls by centrifugal force. The difference between the values of centripetal and centrifugal force in the body of the vortex determines its desire to make up for the loss of energy lost by it by emitting force in the direction of the vortex's helical motion. And this aspiration is realized in maintaining the linear velocity of the flow due to the excess of the centripetal force over the centrifugal force and allows the vortex to receive energy from the sucked mass of the medium. The movement of the flow through the curved pipeline creates an additional pressure difference at the bend, which causes a new additional movement within the flow in the axial sections of the pipe. At this moment in time, the state of the so-called non-working motion is manifested when the initial energy of water is preserved. This happens due to the preservation of the energy potential of water molecules during the exchange of energy of chemical bonds between water and an external factor, which are aimed at correcting deformations in the structure and state of elementary components of matter. The interaction of the elementary components of a molecule, atoms, particles and energies with matter is determined by the basic law of nature, namely: “Magnetomechanical relations for any rotating systems with mass are a constant value.” The rapid rotation of the cylinder leads to the appearance of magnetization along the axis, and the rotation of the magnetic monopole leads to the induction of an electric field, which activates the gravimagnetic vortex field. With further rotation, eddy electric currents accumulate, which develop from the axis to the periphery, which leads to the reaction of splitting the internal energy of the working fluid substance. quantum transition of it into the electromagnetic macrochron. There is a relationship between the mechanical and magnetic moments of molecules (atoms), namely, the forced rotation of the mass around the axis is capable of inducing the mechanical macrochrone of rotation and vice versa, the mechanical macrochron, excited by the microchron, can initiate the rotation of the mass of matter, with the resulting non-working centripetal, centrifugal and axial motions. This confirms the determinism of all processes of the macro and microcosm. All elements of the structure of the macrocosm and microcosm have a homogeneous essence and differ only in the degree of density. In turn, all matter is in a state of eternal indestructible motion and change, as well as decompression and condensation at the quantum probabilistic level. The concept of the compaction value of any structure is extremely relative and is felt depending on the degree of intrinsic compaction of the meter. It can be argued that the content of the world is in a probabilistic state and the degree of probability depends on the degree of condensation. Science considers clusters of matter in macromatter, like individual atoms, in a single and inseparable equilibrium system of interaction. When massive clusters rotate, a gravitational monopole is generated into a magnetic monopole, and, as a result, a gravimagnetic-electric vortex field is activated, consisting of gravimagnetic-electric dipoles, which are gravimagnetic-electric grains. Such formations exist in the form of energies

and waves at the same time and form the space of our matter, including us. The density of grains depends on the energy charge and the material carrier. The law of the relationship between mass and energy states that there is not, and cannot be, "pure energy" in nature separated from mass. All energy has its material carrier. If we take the nucleus of an atom as the source of the flow of grain-potentials, then the higher the density of the grain-potentials and the smaller their distance from each other and the stronger the closure of the circuits, the denser the material space.

The processes of molecular and atomic transformations of water under the influence of implosion rotation are subject to the law of conservation of the average energy of the equilibrium mass of clusters. At the molecular level, the process of unpacking matter occurs as follows. Due to the fact that water has a dipole structure with (+) in the hydrogen zone and minus (-) in the oxygen zone, during vortex implosion rotation there is a concentration of (+) in the vacuum zone and (-) in the zone of maximum pressure. At the inner surface of the pipe. The dipoles line up in a strict orientation radially along the entire inner surface of the pipe. As a result of such movement, the molecular bond is strained and begins to interact with the vacuum, which was formed due to the confrontation of centripetal and centrifugal rotation of the flow. When the molecular structure of water is stretched, there is a change in the angular structure of the molecule, that is, a decrease in the angle of 104.5 degrees. The isosceles triangle of oxygen interaction with two hydrogen atoms is stretched, straining the bonds of hydrogen and oxygen atoms in the process. When the bonds are stretched, energy flows from the vacuum to the zone of interaction between oxygen and two hydrogen atoms. In a state of constant stretching of the bond, the energy increases by giving off into the medium, that is, the tension of the bond increases its energy potential and temperature. When the bond is broken, a process occurs with a decrease in temperature at the pipe axis. Thus, when creating forces that exceed the structural strength of water, the values of which range from 280 kg/cm<sup>2</sup> (for contaminated water) and 1500 kg/cm<sup>2</sup> (for distilled water), the bond is broken (it breaks). At the same time, there is an instant absorption of heat from the aqueous medium (to correct the deformation) and an instant decrease in temperature, up to absolute zero. As a result of the pressure difference and the temperature difference, which reaches extremely high values, all biological components of wastewater disintegrate and die. Scandinavian scientists conducted studies of wastewater turbulence. The number of bacteria in wastewater before and after its vortex was checked. Wastewater originally contained 640,000 bacteria per 1cm<sup>3</sup>. After the vortex, 5000 bacteria per 1cm<sup>3</sup> remained. In addition, after 15 minutes of treatment, its bad smell disappeared. Simultaneously with the breaking of the bonds of the molecular structure of water, the bonds in the chemical compounds of water molecules with dissolved elements are broken. Oxygen in water, under conditions of low temperature, significantly reduces its oxidizing ability. As a result, the solution is disintegrated into independent components. Disintegration is not only the destruction or breakdown of complex substances into simpler components. This is the bringing of the components to disunity, to the independent state of each ele-

ment, which in the future will act according to its own program. For example: according to the results of experiments conducted by scientists, it is known that metals dissolved in water subjected to implosion rotation at a critical angular velocity undergo diffusion into the surface layers of reaction pipelines. As a result of the impact of implosion rotation on the water flow, there is a transition of water molecules from one energy state to another with the restoration of their original energy potential. New water structure is being renewed with the formation of a new information and energy field. This occurs when the ratio of the percentage volume of ortho and a couple of modifications of water molecules is redistributed.

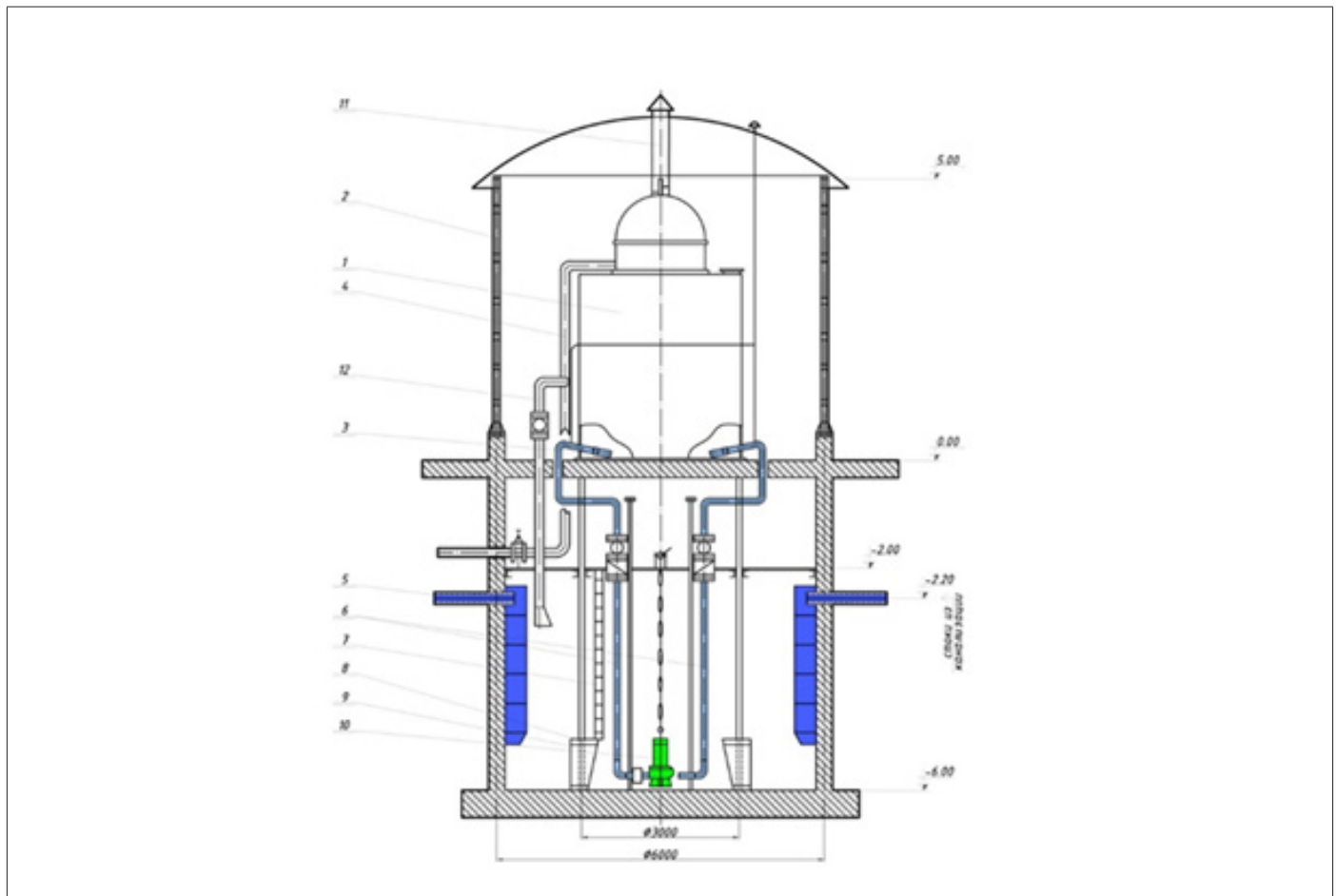
At the atomic level, the processes of unpacking the structure of atoms and elementary particles occur in a similar way. When a cluster of masses rotates by a jet-vortex implosion to the axis of the water flow, energy is accumulated, the excess of which, in order to preserve the average energy of the system, is discharged through a quantum transition into the splitting of chemical and nuclear bonds in molecules and atoms. and compounds break down into individual elements and elementary particles. Just as at the molecular level, as a result of the implosion rotation of particles, the processes of abrupt decrease in temperature and pressure change occur. The decrease in temperature occurs as a result of vortex twisting and, as a consequence of this twisting, a reduction in the diameter of the quantum circuits of particles. At the same time, when the temperature decreases and the volume of atoms decreases, electrons and atomic nuclei move away from each other, which weakens internal bonds. A decrease in the energy content of the bond to a critical value contributes to the ionization of the electron from the hydrogen atom (if we consider the structure of water) and thereby initiates the deflation of the volume of electric microspace consisting of the ether of the hydrogen atom to a volume 10-15 times less than the initial one. Thus, a deep vacuum is created already at the level of quantum transformations of atoms and electrons.

As noted earlier, under conditions of forced implosion rotation, there is a decrease in the temperature and volume of atoms, and electrons and nuclei move away from each other. At the same time, the orbits of electrons become less extended and more inert, which occurs due to greater "flickering". As a result, electrons have to move less vacuum around them, which gives them the ability to do so with more energy. Such behavior of the electron disrupts the conservation of the average energy of the equilibrium mass system of the cluster. With an increase in the speed of motion, a critical tension of the bond between the electron and the nucleus is created, and in order to maintain the level of the equilibrium average energy of the system, it becomes necessary for it to discharge excess energy. And for this purpose, it emits photons. However, in order to generate a photon of a certain energy, an appropriate force must be applied that can cause the electron to emit a photon. And this force is induced by the rotation of the mass cluster of the jet-vortex implosion. It should be noted that we live in a world of photons, much denser than the world of air, which is around us, and photons, by their movements in the elements of material bodies and space, contribute to the redistribution of energy and mass for the birth

and maintenance of the balanced energy state of our world. However, in order to carry out the motion of photons, it is necessary to have a pair of energy objects, which, when emitting and absorbing photons together, would generate an inertial force of momentum, which is capable of transforming and condensing energy potentials in these objects. Obeying this law, our electron emitted a photon, and immediately the inertial force of the photon's emission pulse appeared, which transferred the energy to the rotating mass cluster to maintain the equilibrium average energy of the system. Thus, the force of the pulse of the photon radiation (or the inertial forces of maintaining the equilibrium of the momentum) is the force circulating the additional energy of the external medium to correct the arising deformations of the energy state of the motion of the flow subject to implosion rotation. Consequently, the processes that occur at the level of elements of atoms and elementary particles initiate the mechanism of the so-called non-working motion.

All these scientific prerequisites were used in the presented design of the wastewater treatment plant. However, in the complete absence of mathematical models of these processes in world science and technology, the design was carried out on the basis of the assumptions of theoretical science and the results of W Schauburger's research. Therefore, the design requires scientific research during testing, in the conditions of existing autonomous sewerage systems. The plant involves the treatment of wastewater from urban-type settlements with a population of up to 10,000 people.

The structure of domestic wastewater treatment by the method of screw spiral implosion rotation of the water flow consists of an underground and aboveground part. The underground part is a monolithic concrete tank with a diameter of 6 meters and a height of 6 meters, in which there is an equalizer of wastewater coming from the main sewerage system and a sewage pumping station (Figure 1).



**Note\*:** 1. Wastewater treatment plant. 2. Construction of the building. 3. Effluent supply ejector designed by KORTING. 4. Purified water pipeline. 5. Wastewater supply pipeline from the sewerage system. 6. Wastewater supply pipeline from the sewage pumping station. 7. Sewage pumping station. 8. Average. 9. Device for supplying wastewater to the sewage pumping station. 10. Submersible pump, TSM 622D. 48 m<sup>3</sup>/h, HOMAPUMPTTECHNOLOGY. 11. Deflector for discharging gases from the unit. 12. Discharge into the equalizer.

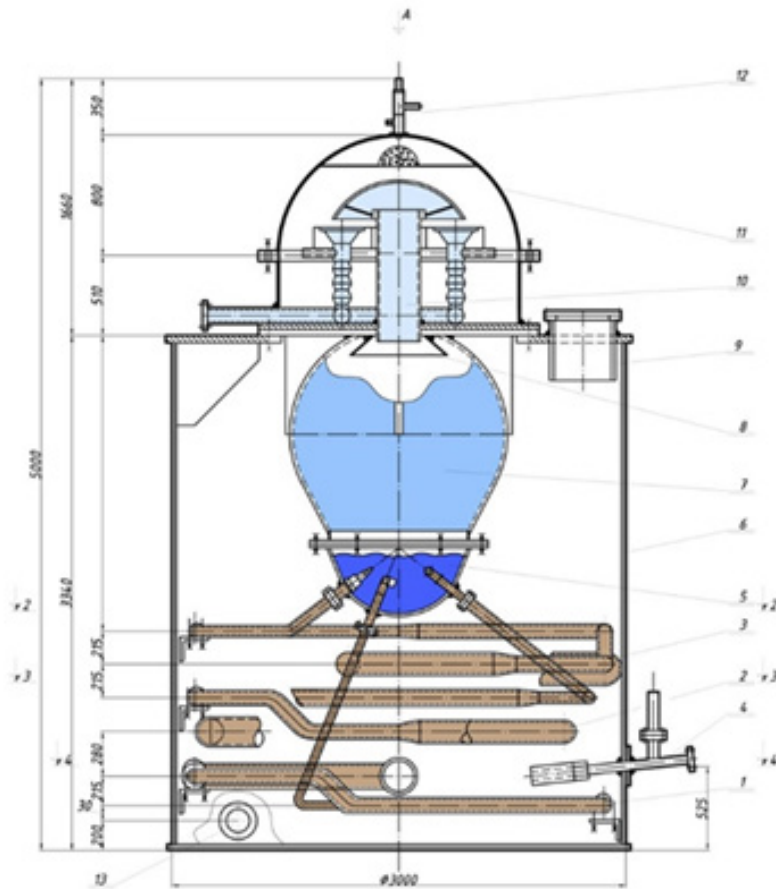
**Figure 1:** Domestic wastewater treatment plant.

Above the underground part there is a collapsible building made of metal structures, which has a round plan and is covered with a spherical roof. A wastewater treatment plant (SEP) is being

installed in the building. The UOS consists of a metal tank with a diameter of 3 meters and a height of 3 meters, with a hatch with a diameter of 500 mm for the maintenance of equipment that is locat-

ed inside the tank and drain pipe. Reaction pipelines are mounted inside the tank, in which there is an electric motor with a water

flow vortex device. As well as a water flow converter with inlet and outlet chambers. Above the camera (Figure 2).



Note\*: 1, 2, 3. Reaction pipelines. 4. Effluent supply ejector of KOPTING design. 5. Stabilizer of the flow that has been purified in reaction pipelines by disintegrating dissolved impurities of wastewater. 6. Storage and flow tank for wastewater coming from the sewage pumping station. 7. Flow turbulence conversion chamber. 8. Intake funnel for displacement of flow from the stabilizer. 9. Inspection hatch. 10. Pipe for supplying treated wastewater to the clean water discharge chamber. 11. Clean water discharge chamber. 12. Pulse safety valve. 13. Tank emptying fitting.

Figure 2: Vortex Jet Implosion Wastewater Treatment Plant.

water flow outlet installed a stabilizer chamber for the discharge of purified water, which is equipped with a pontoon-type level and a pulse safety valve. The valve is designed to normalize air pressure and gases formed during the reaction.

Averaged sewage from the sewage pumping station enters the reaction tank of the UOS by means of Korting ejectors, which are designed for installation through the wall. At the time of preparation of the UOS for start-up, wastewater enters the reaction pipelines according to the law of communicating vessels to the level of their filling. After filling, the level sensors located on the inside of the tank walls are activated and the water supply is stopped. At

the same time, electric motors are turned on, which, by means of swirlers, bring the water into implosive rotation and acquire linear movement along the axis of the reaction pipeline. Simultaneously with the switching on of electric motors, the pumps of the sewage pumping station are turned on. The process of setting the unit to the operating mode begins. At this time, the streams of treated water from the discharge chamber flow back to the equalizer through the bypass pipeline. An automatic computer system for determining the quality of treatment supports this process to the planned level of treated water quality. When the required indicators are reached, the discharge of clean water is transferred to the operating mode (Figure 3).

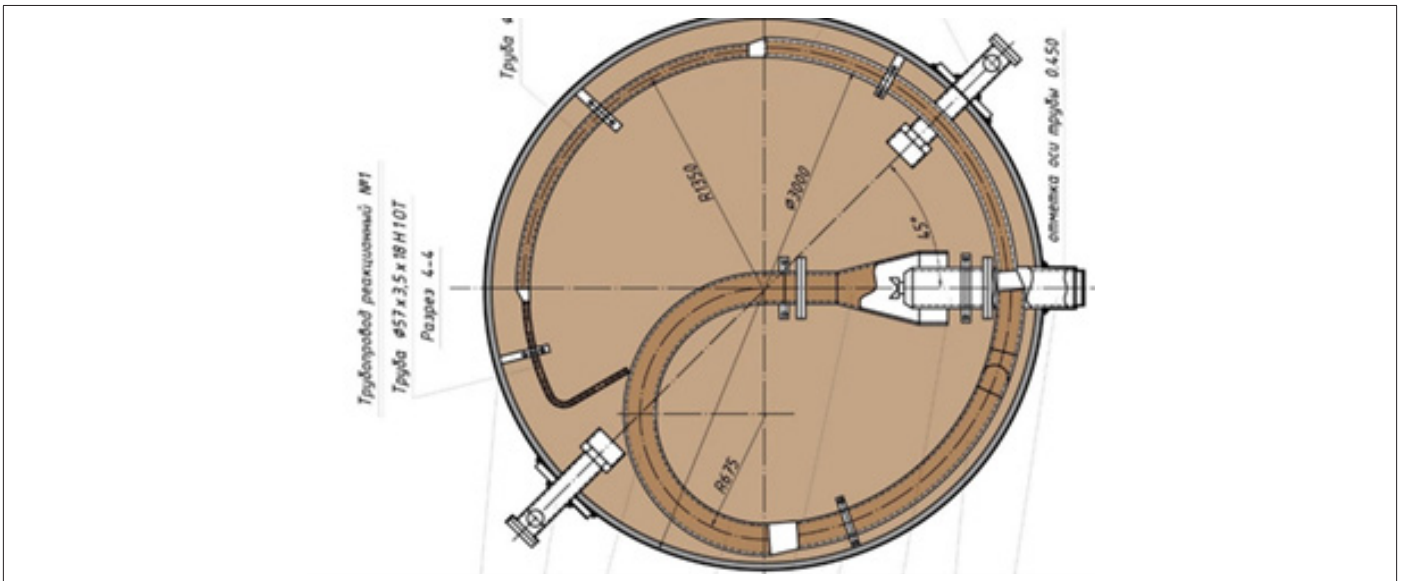


Figure 3: Reaction Pipeline with Lava Nozzle.

## Afterword

The end of the 20th and the beginning of the 21st centuries were marked by the birth in physics of new modern concepts and theories of the structure and vital activity of the universe of the Universe and man, which, in general, do not fully correspond to the "Modern Academic Concepts". However, the scientific discoveries of physicists, including Doctor of Physical and Mathematical Sciences AA Shadrin in terms of the magnetic nature of matter of elementary particles, which prove that the building material of the universe is the structureless grain-potentials of the discrete space-field, which manifest themselves on the Earth's surface as electric charges in the form of energy-mass and invisible charges of motion, carry out the construction of material matter at the micro and macro levels of its condensation by pulsating vortex fields. And also, Doctor of Physical and Mathematical Sciences FM Kanarev, who developed a new theory of the microcosm, which, in contrast to the medieval theory of SAP, allows you to understand and calculate the parameters of all processes generated by molecules, ions, as well as the formation of associations by water molecules in the form of clusters and the binding energy between the valence electrons of water molecules, exceeding the similar bond energies between the valence electrons of metals, which break during the freezing of water. A group of physicists from Kuban University, who presented a scientific substantiation of a new characteristic of the magnetic field - energy emissivity, that is, the energy of the magnetic field  $W$  m solenoid acting on a certain surface  $S$ , during the interference of magnetic coherent waves. Theoretical physicist ET Kulin made the discovery of previously unknown nanoparticles of water. He theoretically substantiated and experimentally confirmed the existence of water nanoparticles, which are characterized by an unlimited generation of an electrostatic field in time. Taking into account the leading role of ions in the formation of nanoparticles, he called them ionic dipoles of water. He significantly developed the theoretical basis of the ionic theory of the electret state of water, which

makes it possible to explain the totality of the basic properties of electrets. It is worth noting the work of the author of alternative vortex physics, VS Bukreev, who was the first to put forward the concept of replacing rectilinear motion with vortex motion in the microcosm of elementary particles, which is confirmed in the theories of electron motion, AA Shadrin. VS Boukreev put forward three hypotheses, namely: an electron and a positron are one and the same object of nature, an electron differs from a positron only in the direction of motion and the direction of rotation, and this phenomenon characterizes an alternating electric current; nature does not divide charges in an atom into a nucleus and an electron shell, since it is impossible to separate the same object, electrons moving in the same direction are attracted to each other, just as electrons and positrons rotating in opposite directions are attracted, and the forces that make an atom an atom are created only by electrons with positrons; and finally, the proton is not an elementary, but a composite particle consisting of positrons, in the form of a Bénard vortex structure. Bénard vortices are the defining construct of energy-mass at the mini and macro levels of matter compaction. All the processes of the life of the universe of the Universe, including all biological organisms, take place in the dynamics of ortho and a pair of states of Bénard vortices.

## Acknowledgement

None.

## Conflict of Interest

None.

## References

1. AA Shadrin The Structure of the Universe of the Universe. Part 1. Microcosm. Part 2. Macrocosm. Part 3. Hyperworld. Ridero Publishing House. Vichrons.
2. Yauza Jaxmo (2007) Energy Evolution/ Viktor Schauburger/.
3. Quanta and pftons. You Tube.