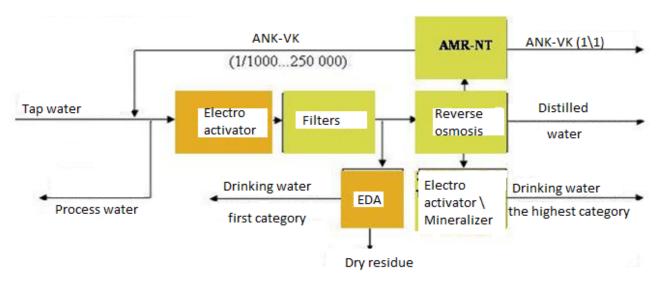




# SOLUTION OF WATER SUPPLY PROBLEM, WATER DRAINAGE, WATER TREATMENT AND PROVIDING THE POPULATION TOP QUALITY DRINKING WATER

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The purpose of the project: obtaining biologically active condensed media AM-RNT (disinfecting, sterilizing and washing solutions, drinking water) of the highest quality based on Resonant Nonlinear Technologies (RNT). AM-RNT technology will provide the population with drinking water of the highest quality and solve the problems of water supply, sewerage, water treatment based on the cleaning and disinfection of water pipes (cold and hot water supply systems), sewerage, reservoirs - <a href="http://h2o.udsu.ru/h2o">http://h2o.udsu.ru/h2o</a>, <a href="http://h2o.udsu.ru/h2o">190511\_udm.pdf</a>, <a href="pr-14.htm">pr-14.htm</a> with minimal costs for today. The development is based on resonant technologies for transferring liquids into a nonequilibrium thermodynamic state with resonant microcluster structures and with increased energy.



It is proposed to develop a pilot universal hybrid module (an alloy of Russian technologies and foreign and Russian experience), which has no analogues on the market.

Advantages: in comparison with other water treatment technologies - treatment and production of non-equilibrium aqueous solutions (AM based on RNT) has a number of advantages in terms of efficiency and cost, safety and storage. In particular, solutions for bactericidal activity exceed sodium hypochlorite by more than 300 times; for cleaning and disinfecting water, water pipes - the addition of AM-RNT to the water is 1: 250000 (for a pipe diameter of ~ 1 ... 2 m, 40-200 km long); 1:20000 (hospitals, schools, farms, industries) 1:1000 ... 1 (reservoirs). The use of RNT does not change the chemical composition of water, does not contribute anything but energy, which creates radiating fields that destroy the mechanisms of cellular and inorganic bonds. On the basis of these technologies, A DISINFECTANT HAS BEEN CREATED THAT REMOVES DEPOSITS AND PREVENTS THEM FROM RE-FORMATION.

Such a module will provide not only disinfection of tap water, but also will allow to obtain (practically using waste-free technology): drinking water of the first and highest category, ionized, biologically active and in its ORP parameters, pH close to mountain melt water and to the parameters of the body's liquid medium; distilled water, as well as disinfectant solutions based on ANK-VK (cathodic treated anolyte of the highest quality). Physics and principles of the phenomenon, technologies, devices, published, protected and set forth in patents RU 2316374, RU 2299859, RU 0074909, as well as a patent for a utility model at the stage of registration.

## **Commercialization perspectives**

Drinking water can significantly affect the quality of your life. The health of the digestive system, cardiovascular system, kidneys, teeth, as well as metabolic processes in the body depends on its composition.

This module will make it possible to receive huge economic benefits due to its versatility and practically waste-free productivity on socially significant national projects for Russia: "Clean Water" and "Health". Alloying a number of technologies will make it possible to obtain highly economical aqueous solutions:

## 1. Technology of water disinfection.

At present, SRC "IKAR" has developed and patented technologies and installations for the production of the highest quality anolyte and catholyte, in particular ANK-VK. After receiving ANK-VK, a small part is added back to the tap water system, thereby disinfecting all industrial water from the consumer (see Block diagram).

#### 2. Obtaining the highest quality drinking water.

After disinfection and cleaning of water pipes in apartment buildings, hospitals, shopping centers, enterprises, it is most advisable to use electrical activation, mechanical and ultrafiltration installations to obtain drinking water of the first category with negative ORP (biologically active water).

Further, post-treatment is carried out by reverse osmosis and mineralization with useful microelements. Drinking water with negative ORP is easily assimilated by the body, imparts its charge to the blood and is carried throughout the body, replenishing the negative charges lost in the course of illness. The development of this direction and understanding of the need to divide water into technological and drinking water will allow solving numerous problems of providing the population with high-quality drinking water and increasing life expectancy.

#### 3. Obtaining disinfectant solutions.

The processing and production of AM-RNT aqueous solutions has a number of efficiency advantages and efficiency, cost, safety and storage. In particular, solutions for bactericidal activity exceed sodium hypochlorite by more than 300 times; for cleaning and disinfecting water, water pipes - AM-RNT additive in water is 1:1000. Below are the specific costs of consumable resources (rub/l), which proves the economic profitability of the project:

Product type	Electricity	Filters	Acid	Salt	Mineral additive	Cost amount
Drinking water 1KK	0,007	0,46	0,025	-	0,20	0,69
Drinking water VK	0,014	0,91	-	-	0,20	1,12
Distillate	0,014	0,91				0,92
Anolyte, ANK-VK	0,012	0,60	0,025	0,16		0,80
Catholyte, K	0,003	0,13	0,005	0,04		0,14

\* - Winner of the first Republican competition of innovative projects under the «UMNIK» program in the Udmurt Republic in 2011.

Translated by Shironosova O. E. Found a mistake?

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