

SCIENTIFIC WORKS

The department conducts the planned scientific work on the topic "Increasing the Electrotechnology Processes` Efficiency in Water Economy" from 2016 to 2020.

s/n	Project name	The purpose and objectives of the project
1	Practical: Increasing the Electro technology Processes` Efficiency in Water Economy	<p>Purpose and objectives of the work. The theoretical and experimental study of the effect of ozone on the parameters of the electrosynthesis process is investigated. Weeds and plant diseases are based on the parameters of electropulse processing.</p> <p>Short description. The efficiency of drinking water equipment, electrical processing of plants will be improved and recommendations will be developed</p>
2	Practical: Increase of efficiency of Ozone Electro synthesis process	<p>Purpose and task of work. Theoretical study of barrier dielectric properties of ozone in the process of electrosynthesis, the effect of the barrier on the electrosynthesis process is experimental and materials are selected.</p> <p>The generator of periodic pulses is designed and manufactured. The selected barrier material and the periodic pulse generator are investigated for ozone during electrosynthesis.</p> <p>Short description. Processing of agricultural products before and after storage, disinfection of drinking water, disinfection of live-stock farms, processing of greenhouse plants and others.</p> <p>Economic indicators and efficiency are determined on the basis of research.</p>
3	Practical. Extension of motor-life by Processing the Impeller. of Recommendations Development for Ensuring the Efficiency of the Electricity and Resources Use	<p><u>The purpose and the task of the work. The mechanical treatment of the pump, the optimum distance between the workpiece. As a result, the pressure drops and the electromagnetic voltage is protected. Humidity and power consumption are limited, the voltage drop is eliminated, and the quality of electricity is increased. Damage to other consumers in the electrical network can be avoided. Recommendations based on the results of the research will be developed.</u></p> <p>Short description. The tool axis for the pump will be designed to extend the life of the motor, spare parts, electrical energy and save costs. The final report and articles are published.</p>

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- 4 Practical.
- Conducting the consultative and methodological manual on filters electric cleaning for melioration and irrigation wells; saving energy and costs in electronic units.
- The purpose and the task of the work: Melioration, drainage and irrigation wells are stopped in the winter. High concentrations of water are covered with corrosion holes. As a result, the ability of wells decrease drastically. At present, the compressor is injected into the well using a high-pressure air purification method to clean the filter, enter the electrode into the well, generate a resonance of the electrocardiogram pressure in the water, and clean the filter holes and walls.
- Short description. Work out methodical manual on the electro-repelling of melioration filters and irrigation wells, energy and economy in electronic units. Final report, articles, recommendations.