

# SCIENTIFIC WORKS

№	Theme of the research	Brief information about the research
1	Summing the differential equalizations and their usage in Engineering	Creation of the mathematical model of linear and nonlinear dynamic issues, on the base of mathematical modeling, algorithm of summing and computer software, including the mathematical model of algebra and complex calculations. On the bases of mathematical modeling is built mathematical model of dynamic processes in the elements of hydraulic structures and created differential equalizations.
2	Mathematical modeling of the process of vibration of viscoelastic pipes through which liquid flows	It consists of creating mathematical models, methods, calculation algorithms and computer programs for the analysis of vibration processes of visco-elastic pipes of the cylindrical shell type, through which liquid flows. Development of calculation algorithms that ensure the stability of the calculation process in models that take into account the necessary accuracy of the solutions of the vibration problems of viscoelastic pipes of the cylindrical shell type and the specificity of the generational viscoelastic theory; Creation of complex computer programs based on the algorithms of the class of problems of modeling the processes of vibration of viscoelastic pipes of the cylindrical shell type.