EEngineering Institute of Membrane Technologies

Scientific Report

2015

I. 1. Scientific-Research Works Planned and Implemented in 2015 Funded by the State Budget of Georgia

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
1	Relevance of the water supply system of Kakheti region wine factories to water sanitary-hygienic standards **Engineering sciences – nano and membrane technologies**	Giorgi Bibileishvili	Department of processing of nanocomposite materials and membrane processes

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
2	Designing and processing of membrane technology of final sterile filtration and high productivity, manufacturing machines for Gurjaani wine factory. **Engineering sciences – nano and membrane technologies**	Giorgi Bibileishvili	Department of processing of nanocomposite materials and membrane processes

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
3	Accepting various geometric membranes on the universal filler and studying their morphology. **Chemistry and materials science – processing of nanocomposite materials**	N. Gogesashvili	N. Gogesashvili G. Butkhuzi A. Gasitashvili J. sulkhanishvili Q. Khutsishvili

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
4	PCreation of a laboratory tool for studying the phase inversion of polymeric material and research of the mentioned process **Engineering sciences – nano and membrane technologies**	N. Gogesashvili	N. Gogesashvili A. Gasitashvili G. Butkhuzi Q. Khutsishvili L. Tananashvili

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
5	Report and analysis of responsive rectangular and paraboloid surfaces with equal capacity bases **Mathematical sciences – geometry, mathematical analysis**	L. Kufaradze	L. Kufaradze J. Sulkhanishvili Z. Javakhishvili

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
6	Determine the critical value of the tilt angle to the vertical of the volume of the responsive bodies having different configurations **Mathematical sciences – geometry, mathematical analysis**	L. Kufaradze	L. Kufaradze J. Sulkhanishvili Z. Javakhishvili

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
7	Study of solutions obtained from cellulose base **Chemistry and materials science – processing of nanocomposite materials**	M. Kezherashvili	M. Kezherashvili

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
8	Swelling kinetics of modified cellulose diacetate **Chemistry and materials science – processing of nanocomposite materials**	M. Kezherashvili	M. Kezherashvili

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
9	Lead migration in the environment and its impact on living organisms	Nino Mumladze	Nino Mumladze

	Chemistry and materials science – processing of chemocal protection problems of human and biosphere		

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
10	Make a device for measuring of membrane pore size **Engineering sciences – nano and membrane technologies.**	Elene Kakabadze	E.Kakabadze V.Gvachliani T.Todadze Q.Khutsishvili G.Butkhuzi