ARCHIL ELIASHVILI CONTROL SYSTEMS INSTITUTE

Scientific Report

2016B

Direction - Control Processes

The Department of Information Disclosure Problems

I. Scientific-Research Works Planned and Implemented in 2016 Funded by the State Budget of Georgia

(concerns scientific-research institutes)

	Implemented work with the		
#	indication of scientific field and	Work Supervisor	Work Performers
	direction		
1	Development of equipment for converting information by using modern technologies Field of science and direction: Processing of electromagnetic transformers for control systems		G.Kiknadze M. Tsertsvadze D. Furtskhvanidze T. Saanishvili P. Stavrianid L. Gvaramadze
	Task 1 Processing and research of microprocessor system of contactless adaptive control of sem-positional dynamic object		P. Stavrianid G.Kiknadze

Task 2 Processing of calibrator control device - large constant optothyristor power source.	T. Saanishvili P. Stavrianid L. Gvaramadze G.Kiknadze
Task 3 Development and construction of multi-sector non-inertial contactless half-spherical inductive and inter-inductive primary transformer of angular displacement of 3D-type.	M. Tsertsvadze D. Furtskhvanidze G.Kiknadze

Department of Optimal Control Problems

I. Scientific-Research Works Planned and Implemented in 2016 Funded by the State Budget of Georgia

(concerns scientific-research institutes)

	Implemented work with the		
#	indication of scientific field and	Work Supervisor	Work Performers
	direction		
1	Research of the identification of		Besarion Shanshiashvili
	control systems and vector	Besarion Shanshiashvili	Mindia Salukvadze
	optimization problems on the		Vladimer Gabisonia
	basis of modern information		Soso Gogodze
	technologies		Victor Khutsishvili
	Control theory,		Nugzar Dadiani
	Identification of control systems,		Nely Kilasonia
			Dali Sikharulidze
			Dudukhana Tsintsadze

Optimal control.	Ketevan Omiadze

Department of Management Systems and Modeling

I. 2. Scientific-Research Works Planned and Implemented in 2016 Funded by the State Budget of Georgia

(concerns scientific-research institutes)

	Implemented work with the		
#	indication of scientific field and	Work Supervisor	Work Performers
	direction		
1	Construction and testing of the	T. Trokashvili	1. Urushadze Guram
	sample of the control device for		2. Shengelia Nodari
	the frequency regulator of the		3. Gegechkori Mery
	Hydro Power;		4. Doghonadze Nino
			5. Geliashvili Lia
	Study of the problem of using		
	noise oscillations of movable		
	mechanisms in control and		
	diagnostics (2015_2017)		
	Scientific field:		
	Engineering science		
	Scientific direction:		
	Control in technical systems		

Direction - **Informatics**

V. Chavchanidze Artificial Intelligence Problems Department

I. 2.

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
1	Title: Establish an intellectual system designed to diagnose, predict and select ways of treatment for a certain class of diseases (2014-2016). Field: Informatics Direction: Artificial intelligence, models of information systems	Maia Mikeladze	Vadim Radzievski Nora Jaliabova Gela Besiashvili Papuna Karchava Dimitri Radzievski

Department of Language and Speech Systems

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
1	Project:	Giorgi Chikoidze	Nino Amirezashvili
	Computer analysis of Georgian sentense in interactive mode		Liana Lortkipanidze Liana Samsonadze

(2015-2017)	Ana Chutkerashvili
Field:	Nino Javakhishvili
Exact and natural sciences,	Mikheil Tushishvili
	Ala Tushishvili
Direction:	
Computational linguistics	

Direction - Power Engineering Problems V. Gomelauri Department of Power Engineering Problems

I. 1. Scientific-Research Works Planned and Implemented in 2016 Funded by the State Budget of Georgia

(concerns scientific-research institutes)

#	Implemented work with the indication of scientific field and direction	Work Supervisor	Work Performers
1	The study of optimization of structures of Georgia's power stations and increasing the efficiency of energy equipment		N. Bantsadze Kh. Lomidze M. Janikashvili I. Archuadze A. Miqashavidze N. Mirianashvili N. Gdzhelishvili V. Khatashvili