# ARCHIL ELIASHVILI CONTROL SYSTEMS INSTITUTE

### Scientific Report

2013B

#### **Direction - Control Processes**

### The Department of Information Disclosure Problems

# Scientific-Research Works Planned and Implemented in 2013 Funded by the State Budget of Georgia

| # | Title of the Work   | Work Supervisor    | Work Performers  |
|---|---|--------------------|--|
| 1 | Processing and research of microprocessor system of contactless adaptive control of the sem-positional dynamic object (2012-2014) | O<br>OOtar Labadze | M. Tsertsvadze<br>L. Samuradze<br>G.Kiknadze<br>V.Bakhtadze                                    |
| # | Title of the Work   | Work Supervisor    | Work Performers  |
| 2 | A large constant power source controlled in a wide input range (2013 - 2015)  | OOtar Labadze      | T.Sanishvili D. Purtskhvanidze Z.Buachidze L. Samuradze V.Bakhtadze T. Khutsishvili G.Kiknadze |

### **Department of Optimal Control Problems**

| # | Title of the Work  | Work Supervisor | Work Performers   |
|---|--|-----------------|---|
| 1 | Theoretical and practical aspects of optimization in partially ordered spaces. |                 | F. Maisuradze<br>M. Salukvadze<br>F. Chichinadze<br>N. Jibladze |

|  | B. Shanshiashvili |
|--|-------------------|
|  | F. Gabisonia      |
|  | N. Kilasonia      |
|  | D. Sikharulidze   |
|  | D. Tsintsadze     |
|  | Q. Omiadze        |

## Department of Management Systems and Modeling

# Scientific-Research Works Planned and Implemented in 2013 Funded by the State Budget of Georgia

| # | Title of the Work  | Work Supervisor                                  | Work Performers   |
|---|--|--|---|
|   | Selection and design of control algorithms for some automated objects; Protection from limp home mode  (2012-2014) | T. Tkorashvili (Candidate od Technical Scienses) | Urushadze Guram<br>Shengelia Nodari<br>Tsintsadze Dudukhana<br>Geliashvili Lia<br>Gegechkori Mery |

#### Direction - Informatics

### V. Chavchanidze Artificial Intelligence Problems Department

# Scientific-Research Works Planned and Implemented in 2013 Funded by the State Budget of Georgia

| # | Title of the Work | Work Supervisor | Work Performers |
|---|-------------------|-----------------|-----------------|
|   |                   |                 |                 |

| Miqeladze Vadim Radzievski |
|----------------------------|
| Nora Jaliabova             |
| Dimitri Radzievski         |
|                            |
|                            |
|                            |
|                            |
| 1a                         |

### Department of Language and Speech Systems

# Scientific-Research Works Planned and Implemented in 2013 Funded by the State Budget of Georgia

| # | Title of the Work  | Work Supervisor  | Work Performers   |
|---|--|------------------|---|
| 1 | Computer analysis of Georgian sentense in interactive mode (2013-2015)                         | Giorgi Chikoidze | Nino Amirezashvili<br>Liana Lortkipanidze<br>Liana Samsonadze<br>Ana Chutkarashvili<br>Nino Javakhishvili |
| # | Title of the Work  | Work Supervisor  | Work Performers   |
| 2 | Research of interconnection<br>between biometric signs of<br>hearing and speech<br>(2012-2014) | Giorgi Chikoidze | G.Kapanadze, A.Tushishvili, M.Tushishvili   |

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# Scientific-Research Works Planned and Implemented in 2013 Funded by the State Budget of Georgia

| # | Title of the Work               | Work Supervisor | Work Performers      |
|---|---------------------------------|-----------------|----------------------|
| 1 | Modern tendencies of power      | T.Magraqvelidze | Archuadze Irma       |
|   | engineering development and     |                 | Bantsadze Nicholas   |
|   | problems of optimal utilization |                 | Gadzelishvili Nodari |
|   | of Georgia's energy resources   |                 | Lomidze Khatuna      |
|   |                                 |                 | Mirianashvili Nodari |
|   |                                 |                 | Miqashavidze accents |
|   |                                 |                 | Khatashvili Venus    |
|   |                                 |                 | Janikashvili Manana  |