



ИИКТ

ИНСТИТУТ ПО ИНФОРМАЦИОННИ И
КОМУНИКАЦИОННИ ТЕХНОЛОГИИ
БЪЛГАРСКА АКАДЕМИЯ НА НАУКИТЕ



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Institute of Information and Communication Technologies (IICT – BAS)



1. Strategic targets and mission
2. Structure of the research and development activities
3. International projects
4. Sustainable development: opportunities and threats

1. Strategic targets and mission

Strategic targets:

Sustainable development of the institute as a national leader in the information and communication technologies, with internationally visible and recognized results.

Mission:

To perform basic and applied research in the fields of computer science and information and communication technologies, as well as to develop interdisciplinary innovations.

2. Structure of the R&D activities

The research and development activities of IICT during 2013 are performed into the framework of the following main projects:

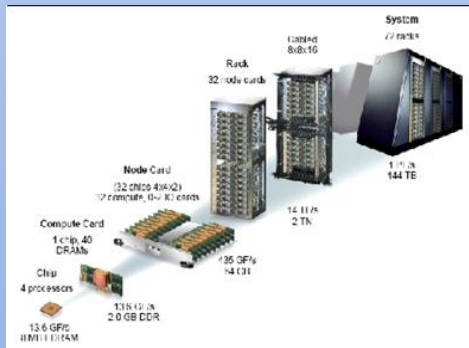
- 15 funded by the budget subsidiary
- 16 supported by the Bulgarian Science Fund (BSF)
- 15 funded by the Operational Programs: 13 by OP „Development of the Competitiveness of the Bulgarian Economics“ and 2 by OP „Human Resources Development“
- 17 international projects: 14 funded by EC
- 11 R&D contracts directly with industrial enterprise

Center of Excellence on Supercomputing Applications: SuperCA++,BSF Grant DCVP 02/1

Consortium: IICT – BAS (coordinator), SU, TU – Sofia, MU – Sofia, IM – BAS, NIGGG - BAS

Infrastructure: Supercomputer IBM Blue Gene/P at NSCC, HPC Cluster at IICT – BAS

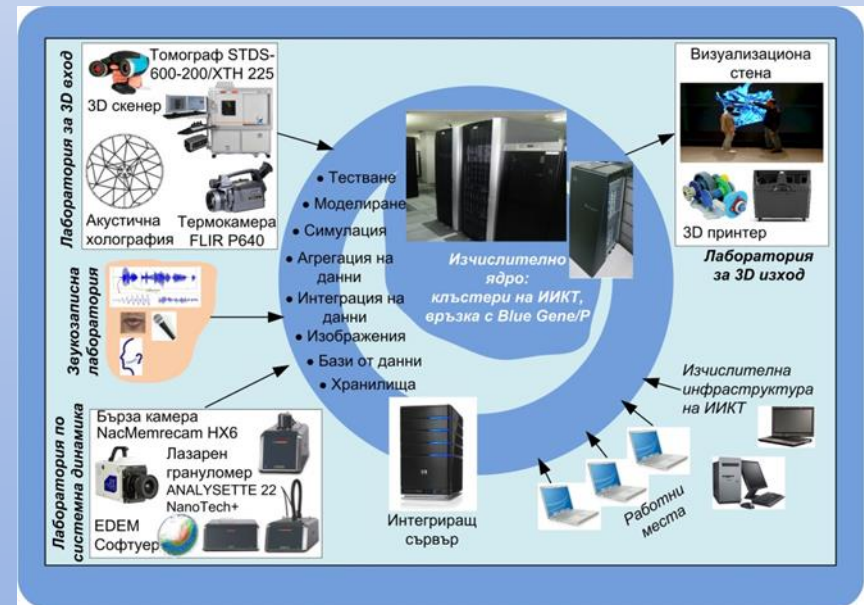
The project creates a critical mass of highly qualified scientists. The core team consists of more than 80 people: about 56% of them are PhD students and young researchers.



Advanced Computing for Innovations: AComIn, FP7-REGPOT-2012-2013-1, GA 316087

Major Objectives:

- Strengthening the human potential
- Setting up Smart Periphery Lab
- Organization and training of user communities

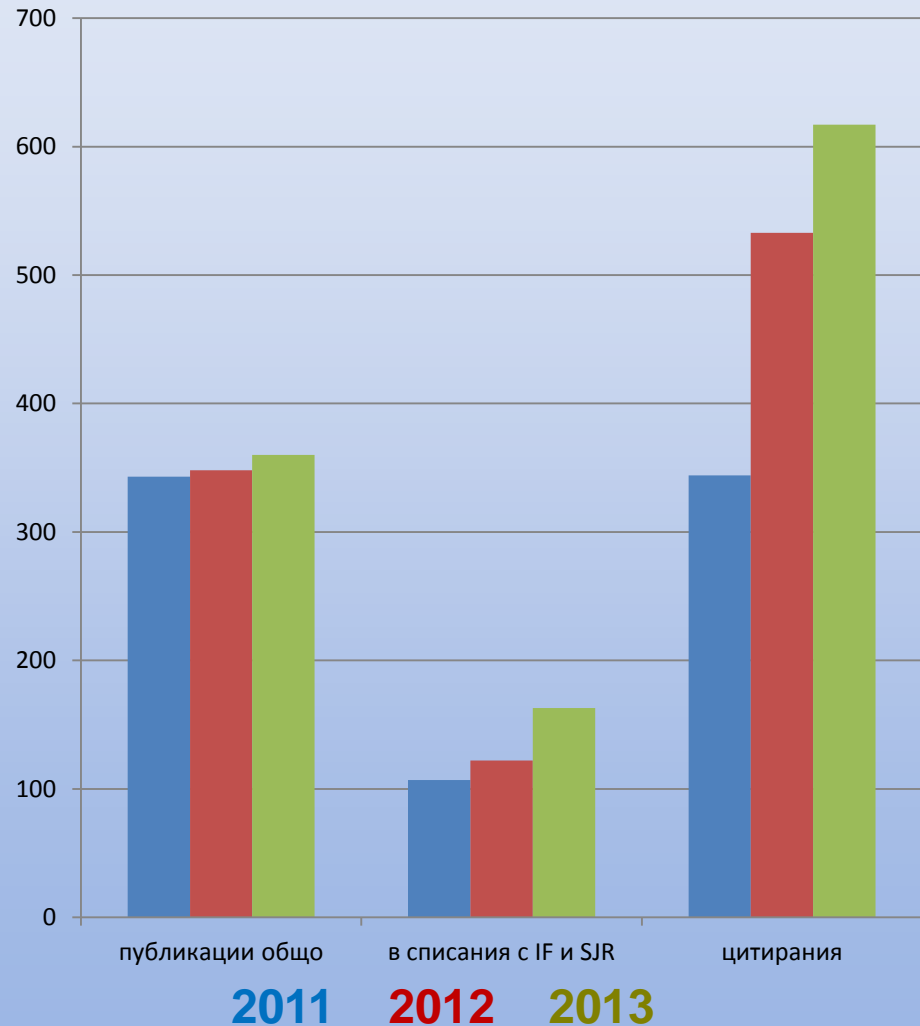


2013

Total number of publications: 360

Publications with IF or SJR IR: 163

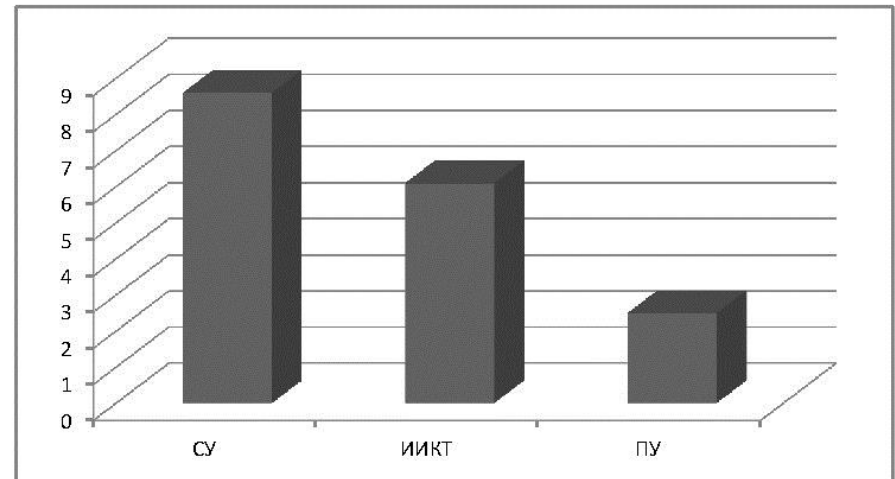
Citations: 617



3. International projects

The successful participation of IICT in the EC Framework Programs has a strategic role for the sustainable development of the human potential and research infrastructure.

During 2013, the research teams from IICT ИИКТ have worked on 17 international projects, including 14 EC projects.



**Funding in MEUR for the whole FP7 of most successful Bulgarian participants:
Sofia University – 8.6, IICT – 6.1, and Plovdiv University – 2.5**

The following FP6 and FP7 institutional projects have a particular role for the sustainable development of IICT – BAS:

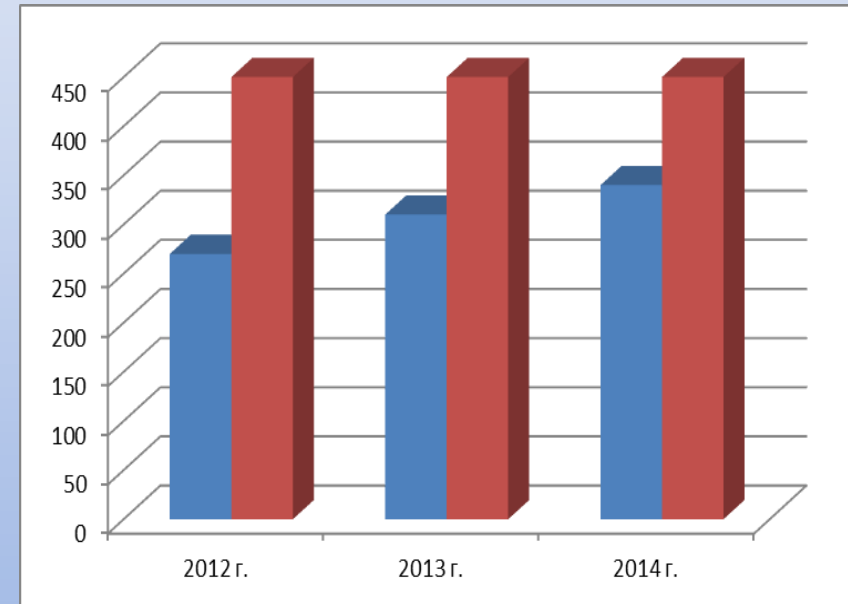
- **BIS21:** Bulgarian Information Society Centre of Excellence, FP6-ICA1-2000-70016
- **BIS21++:** Bulgarian Information Science and Technology Centre of Competence, FP6-2004-ACC-SSA-2
- **EVALIPP:** Evaluation of IPP – BAS, FP7-RAGPOT-2007-2
- **AComIn:** Advanced Computing for Innovations, FP7-REGPOT-2012-2013-1

Having their specific conditions and targets, all they strongly supported the strengthening of scientific and administrative human potential, providing also considerable contribution to the sustainable development of research infrastructure.

4. Opportunities and threats

Sustainable development of human potential:

- Below critical level of public funding of R&D as % of GDP: 0.37 in 2009 and **0.24 in 2012** (Eurostat).
- Strongly demotivating **PhD scholarships**
- Absence of national strategy for **brain drain** prevention.



■ - minimal salary

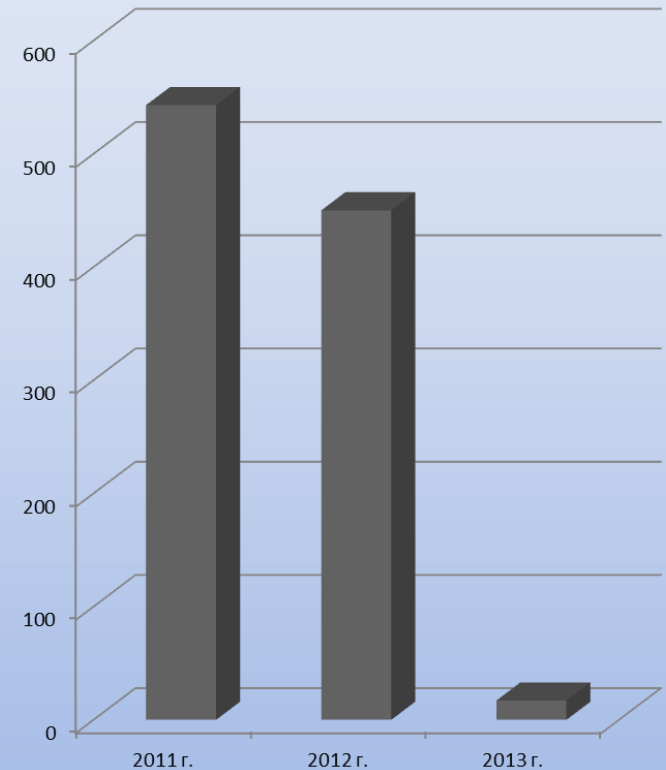
■ - scholarship of PhD students

Sustainable development and maintenance of the research infrastructure:

- Postponement of planned funding of the **National Roadmap for research infrastructure** 7 priorities: ИИКТ is scientific and technical coordinator in two of them.
- There are restrictions in the eligibility to spend **project money for maintenance or up-grade** of existing equipment, e.g., bought through some other project.
- Some economically committed system is needed to provide better **access to high tech e-infrastructure** for students, e.g., for PhD students or students internships.

Further development of the role of project funding:

- The **low institutional funding** of science can't be compensated by instruments of external projects.
- A second **consecutive 0 year of the Bulgarian Science Fund** is a big threat.
- There is some **regular delay of the planned national co-funding** for on-going FP7 projects. This problem could be solved today. Why not?



Thank you!