

R&D in Russia and the possibility of cooperation with the EU in the framework of European and international programs

D. sc., prof. S. Serebriannikov
Rector of NRU "MPEI"

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Sources of financing of scientific researches in Russia

| | 2008 | 2010 |
|-------------------------|--------------|--------------|
| Budgetary funds | 51,4% | 49,4% |
| Off-budget funds | 44,7% | 47,9% |
| — The industry | | |
| — Private businessmen | | |
| — Banks | | |
| — Investors | | |
| Foreign sources | 3,9% | 2,7% |
| — Firms | | |
| — Foundations | | |
| — Programs | | |



Priority areas of development of a science, technologies and techniques in Russian Federation

1. Safety and counteraction to terrorism.
2. The industry of nanosystems.
3. Information-telecommunication systems.
4. Life sciences.
5. Perspective kinds of special techniques.
6. Rational nature management.
7. Transport and space systems.
8. Energy efficiency, energy saving, nuclear power engineering.



Sample of the List of critical technologies of the Russian Federation

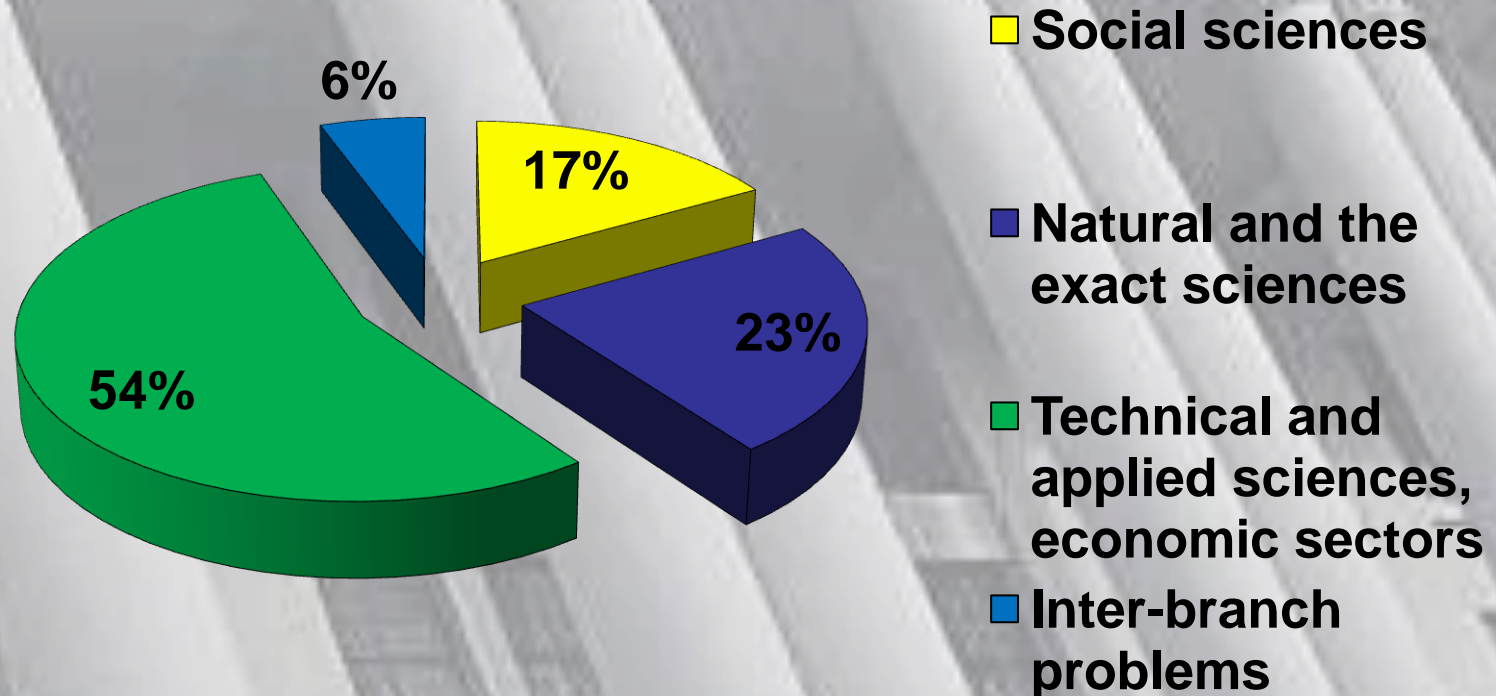
/In total in the List – **27** technologies/

- Base technologies of power electronics;
- Biocatalytic, biosynthetic and biosensor technologies;
- Computer modelling of nanomaterials, nanodevices and nanotechnologies;
- Nano-, bio-, information, cognitive technologies;
- Technologies of atomic engineering, nuclear fuel cycle, safe handling with a radioactive wastes and the spent fuel;
- Technologies of access to broadband multimedia services;
- Technologies of new and renewed energy sources, including hydrogen power;
- Technologies of monitoring and forecasting of environmental conditions, prevention and elimination of its pollution;
- Technologies of creation of energy saving systems of transportation, distribution and energy use;
- Technologies of energetically effective manufacture and energy transformation on organic fuel.

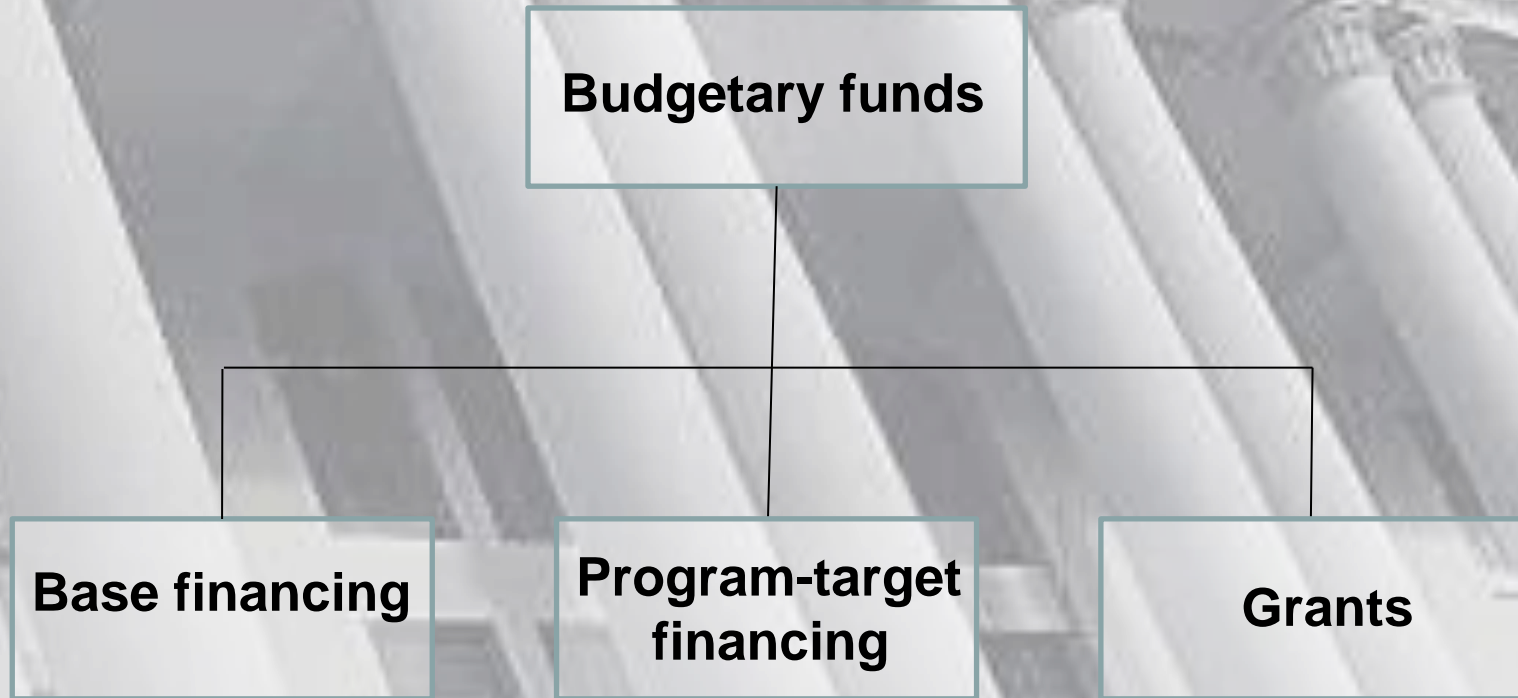


Scientific researches on Fields of knowledge
(dates of Ministry of Education and Science of Russia)

2010



Government financing of scientific researches



The largest research programs

1. National technological base (Ministry of industry and trade of RF).
2. Researches and developments in priority directions of development of science and techniques (Ministry of Education and Science of RF).
3. Scientific and academic teaching staff of the innovative Russia (Ministry of Education and Science of RF).
4. Development of nanotechnology infrastructure (Ministry of Education and Science of RF).



Program: Scientific and academic teaching staff of the innovative Russia

1. Stimulation of youth fixing in sphere of a science, education and high technologies – **58,5%**.
 - Researches of collectives of the scientifically-educational centers, scientific groups under the direction of candidates, doctors of sciences and the invited researchers, young scientists and post-graduate students.
 - Development of young scientists mobility inside Russia.
2. Development of scientific researches infrastructure and youth attraction in sphere of a science, formation and high technologies – **5%**.
 - Conferences and workshops, the organization of the Olympiads and competitions, development of an information infrastructure and scientific and technical creativity of youth.
3. Investments into housing construction (hostels) for young scientists, students and the invited scientists – **36,5%**.



Sources of grants

The Russian
Foundation
for Basic
Researches
(RFBR)

The Russian
Foundation
for Humanities

The Russian
Foundation
for Technologic
Development

Foundation
of Assistance to
Development of
Small form
Enterprises in
Scientific and
Technical sphere



National research university “MPEI”

- Established in 1930
- Total number of **students** (in Moscow) - > **11 000 persons**
- Academicians – **3**, corresponding members – **8** and professors – **245** persons
- Number of Institutes – **7 (technical)+3 (humanities and economic)**
- Branches – **3**
- Total volume of R&D financing per year - > **28 000 000 \$**
- Member of International Association of Universities since 1987

2010 R&D financing



Partners of NRU “MPEI” in Europe and directions of cooperation

(Some samples)

| | |
|--|--|
| TU Berlin (Germany) | Energetic |
| Wroclaw Technical University (Poland) | IT, turbines |
| Technical University of Ilmenau (Germany) | Electrical engineering, 2 diploma |
| Technical University of Karlsruhe – KIT (Germany) | Physics |
| Technical University of Grenoble (France) | Electrical engineering |
| Czech Technical University in Prague (Czech Republic) | Electrical engineering, power mechanical engineering |
| University of Lappeenranta (Finland) | 2 diploma |



Thank you for your attention!



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