

RUSSIAN SCIENCE AND TECHNOLOGY STRUCTURE

There are around 4000 organizations in Russia involved in research and development with almost one million personnel. Half of those people are doing scientific research. It is coordinated by Ministry of industry, science and technologies, where strategy and basic priorities of research and development are being formulated.

Fundamental scientific research is concentrated in Russian Academy of Sciences, which now includes hundreds of institutes specializing in all major scientific disciplines such as mathematics, physics, chemistry, biology, astronomy, Earth sciences etc.

The applied science and technology is mainly done in Institutions and Design Bureaus belonging to different Russian Ministers. They are involved in research and development in nuclear energy (Ministry of atomic energy), space exploration (Russian aviation and space agency), defense (Ministry of defense), telecommunications (Ministry of communications) and so on.

Russian Academy of Sciences

Russian Academy of Sciences is the community of the top-ranking Russian scientists and principal coordinating body for basic research in natural and social sciences, technology and production in Russia. It is composed of more than 350 research institutions. Outstanding Russian scientists are elected to the Academy, where membership is of three types - academicians, corresponding members and foreign members. The Academy is also involved in post graduate training of students and in publicizing scientific achievements and knowledge. It maintains ties with many international scientific institutions and collaborates as well with foreign academies. The Academy's divisions directed by its Presidium are:

- ✓ Division of mathematics;
- ✓ Division of general physics and astronomy;
- ✓ Division of nuclear physics;
- ✓ Division of physical and technical problems of energy production;
- ✓ Division of machine engineering, mechanics and control process problems;
- ✓ Division of informatics computer technologies and automation;
- ✓ Division of general and technical chemistry;
- ✓ Division of physical-chemistry and technology of inorganic materials;
- ✓ Division of physical-chemical biology;
- ✓ Division of general biology;
- ✓ Division of physiology;
- ✓ Division of geology, geophysics, geochemistry and mining sciences;
- ✓ Division of oceanology, atmosphere physics, geography;
- ✓ Division of history;
- ✓ Division of philosophy, sociology, psychology and law;
- ✓ Division of economics;
- ✓ Division of international relations studies;
- ✓ Division of literature and language;

Founded in St. Petersburg in 1724 by Peter the Great the Academy was then opened in 1725 by his widow Catherine I, as the Academy of sciences and arts. Later known under various names it got its present name in 1925. In its early decades foreign scholars notably the Swiss mathematicians Leonard Euler and Daniel Bernoulli worked in the Academy. The first Russian member in the Academy was Mikhail Lomonosov, scientist and poet, who was elected in 1742 and contributed extensively to many branches of science. The Academy's highest prize, the Lomonosov Medal, bears his name.

Under the tsars, Academy was headed by the Court members and controlled a relatively small number of institutions. After 1917 the Academy started to elect its president and expanded its activities while many new scientific institutions arose throughout the Soviet Union. By 1934, when it was

transferred from Leningrad (now St. Petersburg) to Moscow, it embraced 25 institutes. Before the disintegration of the Soviet Union in 1991 the Academy directed more than 260 institutions including laboratories, naval institutes, observatories, research stations, scientific societies and branches, that were spread throughout the republics of former Soviet Union. Russian Academy is proud of it's members awarded with the Nobel prize, who are: Ivan Pavlov, Nikolai Semenov, Igor Tamm, Pavel Cherenkov, Ilya Frank, Lev Landau, Nikolai Basov, Alexander Prokhorov, Mikhail Sholokhov, Alexander Solzhenitsyn, Leonid Kantorovich, Andrey Sakharov, Pyotr Kapitsa, Zhorez Alfyorov.

Russian Academy of Sciences celebrated its 275 jubilee a few years ago. Still it is the leading force of the Russian science keeping its best traditions, thus maintaining a high level of the scientific, technological, educational and spiritual potential of the country.

As of November 2017, the Academy included 1008 institutions and other units; in total about 125,000 people were employed of whom 47,000 were scientific researchers.

PRESENT STRUCTURE

The Russian Academy of Science (RAS) consists of 13 specialized scientific divisions, three territorial branches and 15 regional scientific centers. The Academy has numerous councils, committees, and commissions, all organized for different purposes.

TERRITORIAL BRANCHES

Siberian Branch of the Russian Academy of Sciences (SB RAS)

The Siberian Branch was established in 1957, with Mikhail Lavrentyev as founding chairman. Research centers are in Novosibirsk (Akademgorodok), Tomsk, Krasnoyarsk, Irkutsk, Yakutsk, Ulan-Ude, Kemerovo, Tyumen and Omsk. As of end-2017, the Branch employed over 12,500 scientific researchers, 211 of whom were members of the Academy (109 full + 102 corresponding).

Ural Branch of the Russian Academy of Sciences (UB RAS)

The Ural Branch was established in 1932, with Aleksandr Fersman as its founding chairman. Research centers are in Yekaterinburg, Perm, Cheliabinsk, Izhevsk, Orenburg, Ufa and Syktyvkr. As of 2016, 112 Ural scientists were members of the Academy (41 full + 71 corresponding).

Far East Branch of the Russian Academy of Sciences (FEB RAS)

The Far East Branch includes the Primorsky Scientific Center in Vladivostok, the Amur Scientific Center in Blagoveschensk, the Khabarovsk Scientific Center, the Sakhalin Scientific Center in Yuzhno-Sakhalinsk, the Kamchatka Scientific Center in Petropavlovsk-Kamchatsky, the North-Eastern Scientific Center in Magadan, the Far East Regional Agriculture Center in Ussuriysk and several Medical institutions. As of 2017, there were 64 Academy members in the Branch (23 full + 41 corresponding).

Regional centers

- Kazan Scientific Center
- Pushchino Scientific Center
- Samara Scientific Center
- Saratov Scientific Center
- Vladikavkaz Scientific Center of the RAS and the Government of the Republic Alania- Northern Ossetia
- Dagestan Scientific Center
- Kabardino-Balkarian Scientific Center
- Karelian Research Centre of RAS
- Kola Scientific Center
- Nizhny Novgorod Center
- Scientific Center of the RAS in Chernogolovka
- St. Petersburg Scientific Center
- Ufa Scientific Center
- Southern Scientific Center
- Troitsk Scientific Center

INSTITUTIONS

The Russian Academy of Sciences comprises a large number of research institutions, including:

- Budker Institute of Nuclear Physics
- Central Economic Mathematical Institute CEMI
- Dorodnitsyn Computing Centre
- Engelhardt Institute of Molecular Biology
- Institute for Medical Science (Russia)
- Institute for African Studies (Moscow)

- Institute for Economic Strategies (Moscow)
- Institute for the History of Material Culture (St Petersburg)
- Institute for Informatics and Control of Regional Problems
- Institute for Physics of Microstructures
- Institute for Slavic Studies of the Russian Academy of Sciences
- Institute for Spectroscopy
- Institute for System Programming
- Institute of Applied Physics
- Institute of Cell Biophysics
- Institute of Biological Instrumentation
- Institute for Biomedical Problems (IMBP, also IBMP) (ru:Институт медико-биологических проблем РАН), known in the West particularly for the MARS-500 experiment simulating manned flight to Mars
- Institute of Ecology and Evolution
- Institute of Economy (RAS)
- Institute of Human Brain (St.-Petersburg)
- Institute of Gene Biology
- Institute of Silicate Chemistry
- Institute of High Current Electronics
- Institute of Linguistics
- Institute of Oriental Studies (Moscow)
- Institute of Oriental Manuscripts (St Petersburg)
- Institute of Philosophy
- Institute of Radio-engineering and Electronics
- Institute of Solid State Physics
- Institute of State and Law
- Institute of the US and Canada (ISKRAN)

- Institute of World Economy and International Relations (IMEMO)
- Institute of World Literature (Moscow)
- Ioffe Physico-Technical Institute
- Keldysh Institute of Applied Mathematics
- Komarov Botanical Institute
- Komi Science Centre
- Kutateladze Institute for Thermal Physics
- Landau Institute for Theoretical Physics
- Laser and Information Technology Institute
- Lebedev Institute of Precision Mechanics and Computer Engineering
- Lebedev Physical Institute
- N.N. Miklukho-Maklai Institute of Ethnology and Anthropology
- Nesmeyanov Institute of Organoelement Chemistry
- Northeast Science Station (Северо-Восточная научная станция РАН)
- Obukhov Institute of Atmospheric Physics
- Paleontological Institute
- Program Systems Institute
- Prokhorov General Physics Institute
- Schmidt Institute of the Physics of the Earth
- Space Research Institute
- Shemyakin and Ovchinnikov Institute of Bioorganic Chemistry
- Shirshov Institute of Oceanology
- Special Astrophysical Observatory
- State Public Scientific & Technological Library
- Steklov Institute of Mathematics
- St. Petersburg Department of Steklov Institute of Mathematics
- Sukachev Institute of Forest

- Vernadsky Institute of Geochemistry and Analytical Chemistry
- Vingoradov Russian Language Institute
- Institute of Scientific Information on Social Sciences
- Zelinsky Institute of Organic Chemistry
- Zoological Institute

Russian universities and technical institutes are not under the supervision of the Russian Academy of Sciences as (they are subordinated to the Ministry of Education of Russian Federation), but a number of leading universities, such as Moscow State University, St. Petersburg State University, Novosibirsk State University, and the Moscow Institute of Physics and Technology, make use of the staff and facilities of many institutes of the RAS (as well as of other research institutions);

THANKS

