SCIENCE JAPAN

Science Japan - one of the most advanced in the world. Japan - one of the leaders of world scientific thought . The country has consistently high positions in various fields , including high technology and automotive , energy and robotics , medicine and space exploration .

The Japanese economic miracle 50 - 60s - an unprecedented rise in the country's economy after the defeat in World War II , also largely due to the development of science. Due to the discovery and development of Japanese scientists , as well as large-scale purchases of technologies and patents abroad , the country quickly became one of the most important figures in the world market . Growth of economic indicators in the period amounted to more than 10% per year .

Today science Japan is at the forefront in the field of new technologies. Taking into account the experience of the past , the country is using most of its development to improve the quality of life and environmental protection . Creating and improving new , environmentally friendly engines for vehicles , robots and effective medicines to facilitate the life of handicapped people , saved and re- used energy and precious metals . Modern Japan's approach to science with a particular point of view can be called by the future.

As in most countries of the world , science in Japan it is done in universities . But not only in them. With all the major universities of the country , there are scientific laboratories , which conduct research on funds received mainly in the form of grants . Leading officials of these laboratories is required to teach in universities and students have the opportunity to participate in research projects .

The second type of research organizations - R & D departments of private companies. Large corporations - Honda, Toyota, Mitsubishi, Hitachi - pay considerable attention to research, you can create new technologies and products . For example , Honda is involved in the development of a new generation of humanoid robots and doing research on the creation of neuro-computers .

In corporations , of course , science is applied, but it is based on fundamental research , so the corporation either directly funded research laboratories or allocate special grants on a competitive basis to scientists working in universities or independent research organizations - it is the third type of institution where conducted extensive Scientific research. In scientific terms, Japan - the world's leading technology, research , experiments in the field of bio-robots and robotics.

Each year the state budget allocated no less than 130 billion dollars on research and development, which involves more than 700 thousand of accounting . As the funds involved in the scientific sector , Japan is the third largest in the world , leading in fundamental science (13 Nobel laureates , winner of 3 Fildovskoy Prize , one winner of Gauss) , as well as in the production and use of robots . The most prominent model considered QRIO, AIBO, ASIMO.

RIKEN (Jap . 理 研) - a major research institute in Japan. It is almost entirely funded by the Japanese Government and an annual budget of about 88 billion Yen (760 million US . Dollars) .

RIKEN conducts research in many fields of science:

- Physics
- Chemistry
- Biology
- Medicine
- engineering and computer science

The composition of RIKEN includes several institutions throughout Japan :

- Headquarters RIKEN;
- Institute of Waco (Jap和 光 研究所.);
- Institute of Tsukuba (Jap筑波 研究所.);
- Harima Institute (Jap播 磨 研究所.);
- Yokohama Institute (Jap横 浜 研究所.);
- Institute of Kobe (Jap . 神 戸 研究所).

Overseas Division RIKEN:

- Center Laboratory at RIKEN RAL Rutherford - Appleton (Chilton , United Kingdom) ;
- RIKEN BNL Research Center at Brookhaven National Laboratory (Brookhaven , NY , USA) ;
- Center RIKEN-MIT Neuroscience at the Massachusetts Institute of Technology (Cambridge, MA , USA) ;
- Singapore office RIKEN (Biopolis , Singapore) ;
- Chinese office RIKEN (Beijing, China) .

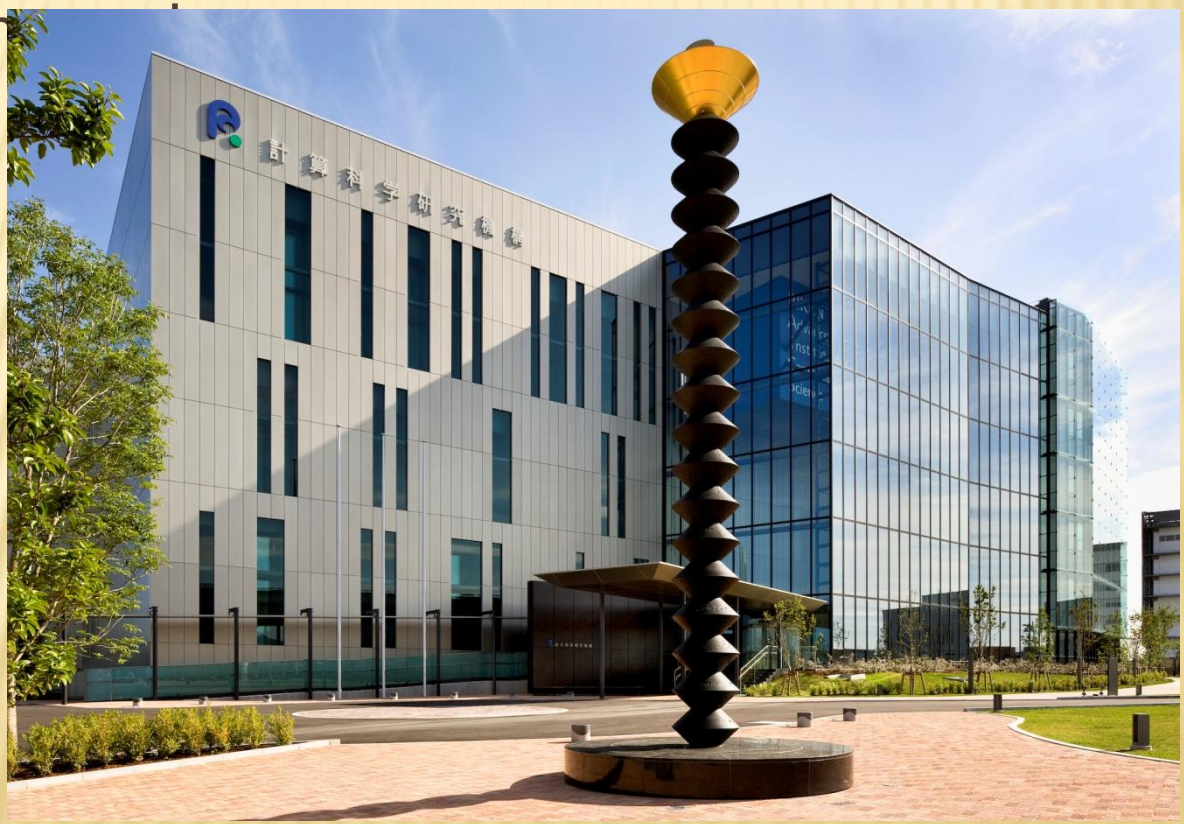
Founded in 1917, RIKEN has a long and successful history of progressive and innovative scientific endeavor.

Today, RIKEN encompasses a network of world-class research centers across Japan, with main campuses in Wako, Tsukuba, Yokohama, Kobe and Harima offering state-of-the-art facilities that rank among the best in the world. This high-quality, high-performance research environment, combined with a uniquely bottom-up approach to scientific innovation, has enabled RIKEN to foster an environment in which researchers are able to thrive.

RIKEN is a high-profile institute at the heart of scientific research in Japan, and a distinguished world leader in a diverse array of scientific disciplines. Its state-of-the-art research infrastructure and unique research environment make it one of the most advanced research institution in the world, a truly international research hub leading research in basic and applied research in physics, biology, medical research and engineering.

RIKEN's activities can be divided into four main categories: **Strategic Research Centers**, **Research Infrastructure Centers**, **Chief Scientist System, etc.** and **Cluster for Industry Partnerships**. These four groupings interact within an integrated research system, bringing together pioneering science and top-class research facilities to meet national and social needs, and are further enhanced by active collaborations both within and outside RIKEN, and Japan.

Supercomputers have become indispensable for research and development in many fields of science and engineering, where high-order computational simulations can be pivotal in unearthing leads to the next scientific breakth



RIKEN's award-winning supercomputer, the K computer, was officially made available for use by researchers in September 2012. Developed in partnership with the electronics firm Fujitsu since 2006, the K computer is one of the three most powerful computer systems in the world.

The K computer boasts a computational power of 10 petaflops, or 10 quadrillion operations per second.