

- bio-engineering (e.g. production of recombinant micro-organisms, transgenic plants and animals, bio-leeching processes for mining and pollution control, construction of peptides and proteins for diagnostic and therapeutic uses, development of extra-cellular proteins, and production of bio-catalysts).
- high-speed non-polluting transport (e.g. development of naval transport technologies such as high speed trains, mag-lev vehicles and non-polluting automobiles)
- clean energy (e.g. from safer nuclear power stations, non-polluting thermal power stations using low grade fuel, solar/wind/geothermal sources, and more efficient forms of fuels based on more extensive processing of coal and natural gas)
- resource-efficient and non-polluting metallurgical and chemical processes (e.g. development of new technologies concerned with rolled metal manufacture, turbulent flow reactors in chemical processes, non-polluting cellulose manufacture, and membrane processes for concentrating products and clarifying waste water in small scale chemical plants)
- high-efficiency food manufacturing processes (e.g. development of safe means of soil enhancement, of integrated systems of plant protection using environmentally safe biological and chemical agents, production of high yield plants and animals, manufacture of food and fodder protein, development of biological and physio-chemical storage and transportation mechanisms for farm produce, and development of mariculture technologies for cultivating saltwater fish, etc., and for the combined processing of the animals and plants cultivated with the aim of producing high quality food products, biologically active substances and feed items)
- prevention, diagnosis and treatment of widespread diseases (e.g. atherosclerosis, oncological diseases, viral infections, alcohol/drug/toxic substance abuse and AIDS)
- advances in building technology and materials (e.g. development of new structural materials and members)

TECHNOLOGY STRENGTHS

The Soviet Union is well recognized in space research, space technology, laser technology and thermonuclear fusion.

KEY ORGANIZATIONS/SUPPORT PROGRAMS

The principal technology-related organizations are:

- *Gosplan USSR*
Gosplan is responsible for all aspects of economic planning in the USSR. Its main role in relation to R&D is in the planning of the introduction of innovations into the economy, but it also plays a part in the allocation of resources and suppliers for use in science.

Organizationally, it is divided into two main types of departments which include those concerned with particular industries. The department most closely concerned with innovation is the Department of Aggregate Planning for the Introduction of the Achievements of Science and Technology into the National Economy. It works closely with the State Committee for Science and Technology and the Academy of Sciences.