

ship of academia, industry and government with all of these points of view reflected in its 18-member board. The Commission's strategy for economic development depends on building the technology infrastructure at research universities and on providing long-term support for R&D - to encourage industry and the federal government to match New Jersey's investments. These investments are targeted to four scientific fields identified as New Jersey's strengths:

- biotechnology
- telematics (informatics)
- advanced materials
- environmental protection technologies

TECHNOLOGICAL STRENGTHS

The four scientific fields that have been identified as New Jersey's strengths reflect the industrial structure of the state in key areas such as pharmaceuticals, chemicals, food processing, rubber and plastics, and electronic equipment. To support its mission of generating economic growth through science and technology, the New Jersey Commission on Science and Technology has funded a network of eleven Advanced Technology Centers (ATC's) with the following research foci:

- A. Biotechnology
 - human health - (molecular genetics; structural biology; cell and developmental biology; molecular pharmacology)
 - food technology - better food processing technologies
 - agriculture - application of tools of molecular biology to improve quality/productivity of plants, animals and environmental systems
- B. Telematics - advanced computing devices geared to (informatics) improving industrial design, productivity and quality control

C. Advanced Materials - ceramics, fibre optic materials, optoelectronic materials, superconductors

D. Environmental Protection Technologies - hazardous waste reduction, recycling and recovery of waste plastics

The Commission has also founded Technology Extension (TEX) Centers to facilitate the transfer of information and new technologies from university laboratories into industry. These centers have been established in:

- polymer processing
- information services
- food processing
- fisheries/aquaculture
- cancer diagnosis and treatment

KEY ORGANIZATIONS

As previously mentioned, there are over 700 industrial and academic R&D laboratories within the state of New Jersey. One of the better known is the David Sarnoff Research Center located in Princeton, New Jersey. New Jersey is also home to a number of academic institutions with recognized expertise in technological areas of importance to the state. Among them are Princeton University, Rutgers University, the New Jersey Institute of Technology, the University of Medicine and Dentistry of New Jersey, the Stevens Institute of Technology.

The Princeton Plasma Physics Laboratory, funded by the U.S. Department of Energy, conducts research into magnetic fusion energy. Its research and development in the field has led to advances in the state-of-the-art of numerous physics, engineering and technological disciplines with potential for non-fusion applications e.g., plasma technology, vacuum technology, neutral beam technology.