SCIENCE AND TECHNOLOGY PROGRAM - USA

This Program was established in 1991 through an agreement between NSF and the National Governors Association. The Centers receive basic support in equal amounts from NSF, the State government, and their industrial partners. NSF invested \$.9 million in 3 centers during Fiscal Year 2000. The Program is phasing down with no new proposals being accepted.

Centers of Research Excellence in Science and Technology

(<u>http://www.ehr.nsf.gov/EHR/HRD/Crest.asp</u>): These awards to universities with high minority enrollments expand their capabilities for research and research training. The Program was established in 1987; in Fiscal Year 1999 \$9 million was invested in 10 centers. Some of these centers have long-term partnerships with selected Engineering Research Centers, to foster collaboration among faculty and students.

Materials Research Science and Engineering Centers:

(MRSEC, <u>http://www.nsf.gov/mps/dmr/mrsec.htm</u>): MRSECs address problems that are beyond the scope of more traditional individual investigator or small group projects in virtually all areas of materials research. The Centers also have an educational mandate, and an expectation for industrial cooperation. Many MRSECs have advanced instrumentation capabilities, and serve some of the same functions as a user facility. The Program was established in 1994; during Fiscal Year 2000 \$51 million was invested in 29 centers. In addition, NSF awards \$350,000 per year to the Materials Computation Center at the University of Illinois, for the analysis, prediction, and understanding of the properties of materials (<u>http://www.mcc.uiuc.edu/</u>).

National Facilities for Materials Research:

(<u>http://www.nsf.gov/mps/dmr/natfacil.htm#facility</u>) National Facilities for Materials Research include center-like research and education activities located at an international user facility that is open to outside researchers through merit-based competition for access: the High-Energy Synchrotron Source (CHESS) at Cornell University; the Synchrotron Radiation Center (SRC) at Wisconsin; the Center for High-Resolution Neutron Scattering (CHRNS) at NIST in Maryland; and the National High Magnetic Field Laboratory (NHMFL) at the University of Florida. In Fiscal Year 2000 these four facilities received \$26.0 million.

Institute for Theoretical Physics: (ITP, http://www.itp.ucsb.edu)

The Institute for Theoretical Physics, at the University of California, Santa Barbara, brings together groups of researchers to work on problems that cut across the traditional sub-fields of physics. The Institute supports visiting researchers who remain in residence, in general, for periods of six months. The Institute hosts approximately six conferences per year on topics related to the group research programs. NSF invested \$2.8 million per year in the ITP.

Chemistry Centers: In partnership with the Department of Energy, the NSF supports three Environmental Molecular Science Institutes (EMSIs, <u>http://www.nsf.gov/mps/chem/emsi98.htm</u>) devoted to collaborative multidisciplinary research in chemistry on the natural environment, and to solving environmental