



FY 2011 Funding for the NATIONAL SCIENCE FOUNDATION April 2010

Position: The Council for Chemical Research (CCR) supports the President's overall FY 2011 budget request for the National Science Foundation (NSF) of \$7.4 billion, an increase of 8% over the FY 2010 budget. CCR also supports the President's continued commitment to double the NSF budget in ten years, which began with the Bush administration's 2007 budget request.

Who We Are: CCR is a non-profit organization dedicated to advancing multi-sector, multi-disciplinary research in the chemical sciences and engineering. Its member organizations – companies, universities and government laboratories – are represented in CCR by their research leaders.

We recognize the budget constraints faced by Congress but strongly urge that funding for physical sciences research be strengthened as an investment in our Nation's future. Our studies (<http://www.ccrhq.org/publications>) and those of others demonstrate that Federal investments in chemical science research yield significant payback for the US economy. **Every dollar of Federal investment is leveraged by \$5 of private investment; this investment generates ten dollars of operating income for industry (a 17% annual after tax return), the economy gains roughly \$40 in GDP, \$8 in increased tax revenues, and creates 600,000 new jobs over the ensuing 20 year period.**

Rationale

NSF is the heart of the nation's science and technology enterprise. It is the enabler of U.S. basic research, has a primary role in building the nation's technological workforce, and helps to educate the public about science and engineering.

- **NSF accounts for less than 4% of federal R&D spending, but is the principal sponsor of non-medical fundamental research** at more than 2000 colleges, universities, and other organizations throughout the U.S. It is the only federal agency with responsibility for the overall health of academic science and engineering across *all* disciplines.
- **NSF fosters the scientific innovations that promote economic prosperity and growth** and secure a strategic position in the global R&D sector. It stimulates multidisciplinary and multi-sector research, enabling partnerships among government, academia, and industry. Nearly half of the research cited in chemical industry patents is from public science, and NSF has supported a significant portion of that science.
- **NSF carries out its mission with remarkable efficiency.** Approximately 95% of the agency's total budget goes directly to support the actual conduct of research and education. NSF won praise from the Administration for its management.
- **Research productivity is hindered by limited funding.** Only one of five worthwhile proposals is funded, compromising research productivity. Higher funding rates will allow researchers to focus more of their efforts on research and training of future generations of researchers.
- **NSF provides about 40% of federal funding for university-based basic research in the physical and mathematical sciences, including 31% in chemistry.** NSF-supported research in the physical and mathematical sciences provides the backbone for advances in other technical, engineering, and health-related disciplines, and provides a broad basis for industrial and technological development.
- **People represent NSF's most important investment in the physical and mathematical sciences.** To ensure a "diverse internationally competitive and globally engaged workforce of scientists, engineers, and well-prepared citizens," NSF invests in K-12, undergraduate, graduate, and continuing education.

Additional NSF funding will fuel the pace of scientific research and positively impact the US economy.