



**FY 2009 FUNDING FOR THE NATIONAL SCIENCE FOUNDATION
APRIL 2008**

Position: The Council for Chemical Research (CCR) supports the President's overall FY 2009 budget request for the National Science Foundation (NSF) of \$6.85 billion, an increase of \$822 million (14%) over the FY 2008 level. CCR also supports the President's commitment to double the NSF budget in ten years. CCR studies have clearly demonstrated that chemistry and chemical engineering are enablers for other scientific research technologies. Chemical research should be emphasized in order to increase US competitiveness.

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 top research leaders.

We recognize the budget constraints faced by Congress, but strongly urge that funding for physical sciences research be strengthened. Our studies and those of others demonstrate that for every dollar of Federal investment in chemical sciences research, the economy gains roughly \$40 dollars in GNP growth and \$8 dollars in increased tax revenues over the ensuing 20 year period. That works out to an annual return of 20% for GNP and 11% in tax revenues, on the Federal investment; returns which are very favorable compared to the government's cost of capital.

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.
- **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, as well as outreach activities.
- **Multi-year NSF grants are critical to the nation's science and technology enterprise.** Currently, an institution needs to write more than five grant proposals to win one, with success rates continuing to decline, makes future faculty retention problematic. As NSF funding dwindles, the number of grants diminishes in order to keep multi-year commitments constant. Additional NSF funding will fuel the pace of scientific research, positively impact the US economy and help NSF keep the number of grants it awards at least constant.

The Council for Chemical Research, 1730 Rhode Island Avenue, NW, Suite 302, Washington, DC 20036

Phone 202-429-3971, Fax 202-429-3976, ccrmail@ccrhq.org