



## FY 2012 Funding for the NATIONAL SCIENCE FOUNDATION April 2011

**Position:** The Council for Chemical Research (CCR) **supports the goal of doubling the budget of the NSF by FY17** (which began with the Bush administration's FY07 budget request). Therefore, CCR urges FY12 funding of at least \$7.8 billion, a 5.4% increase over FY11 requests and 13% over FY10 appropriations to stay on this growth path and to ensure predictable and sustainable support for ongoing research projects

**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 strongly urge the important components of funding for physical sciences research be maintained. 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 \$10 of operating income for industry (a 17% annual after tax return), the economy gains roughly \$40 in GDP and \$8 in increased tax revenues. A highly regarded CCR study showed that for 2001 the overall \$1B Federal investment in chemical R&D will create 600,000 new jobs over the following 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, underpinning a strong US technological sector.
- **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.
- **Research productivity is hindered by limited funding.** Limited NSF funding prevents development of excellent research ideas, limiting US innovation and technological and economic development.
- **NSF provides more than 20% of federal support for basic research at academic institutions.** NSF supports roughly 10,000 awards per year. Every year, 200,000 individuals, from undergrads to senior faculty, participate directly in NSF research and education programs.
- **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.