



**FY 2011 Funding for the U.S. DEPARTMENT OF ENERGY
OFFICE OF SCIENCE
April 2010**

Position: The Council for Chemical Research (CCR) **supports the President's proposed \$5.121 billion increase** in the budget for the DOE Office of Science and more specifically the \$200 million increase in the Basic Energy Sciences (BES) program to \$1.835 billion. We support the President's proposed increased funding for the Office's **high priority research areas, such as solar, nuclear energy systems, carbon sequestration, biotechnology and nanotechnology**. CCR also supports the President's commitment to double the budget of the Office of Science in the next 10 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

Funding in the materials sciences, chemical sciences, and engineering research areas within DOE's non-defense research portfolio has been stagnating for many years. Strategic support for non-defense related research in chemistry, engineering and physical sciences at DOE is necessary to maintain international competitiveness of the energy, chemicals and materials industries and to develop an unequalled competitive energy portfolio for the nation. Consistent, focused support will:

- **Contribute to the nation's scientific and technological prowess** by providing a robust scientific base in a broad array of fields dedicated to making energy reliably available throughout the nation.
- Enhance energy security and availability of sustainable energy sources, which is a critical need for our nation's future.
- **Produce and sustain well-trained, talented and dedicated** researchers which are required for the shift in fuels utilized in the US and to help improve the security of the nation. CCR urges DOE-OS to develop additional ways to support and increase the number of PhD students produced in the U.S.A. in the physical sciences.
- **Allow access to modern instrumentation**, ranging from advanced computers to synchrotrons and radiation sources. These instruments enable researchers to advance fundamental chemical and physical processes and to gain much-needed insight into the chemistry, physics and engineering of new products and processes.
- **Provide discoveries** that lead to new chemical processes, novel new materials and new types of energy resources to reliably and securely supply energy to the nation for the foreseeable future.
- Promote and enable innovation by funding fundamental and applied energy research to enhance U.S. innovation capacity.