

LONG-TERM FEDERAL SUPPORT FOR SCIENCE AND TECHNOLOGY R&D

SPIE, the International Society for Optics and Photonics urges Congress to implement full funding of the COMPETES Act of 2010 for key science agencies. We support the 2012 Presidential Budget Request and urge Congress to approve appropriation levels for FY 2012 consistent with the America COMPETES Act of 2010. We must begin to reduce the deficit and begin to live within our means, but we must be smart about it. Federal support for science will spur economic growth and help restore a firm fiscal foundation for our nation. SPIE supports full funding of the COMPETES Act of 2010 for the following agencies — the National Science Foundation (NSF), the Department of Energy's Office of Science, the Department of Commerce's National Institute of Standards & Technology (NIST) and passage of the SBIR/STTR Reauthorization Act of 2011.

- **NSF at \$7.8 Billion**, a 13% increase over the 2010 enacted level.
- **DOE Office of Science at \$5.4 billion**, a 10.7% increase over the 2010 enacted level.
- **NIST intramural laboratories at \$764 million**, a 10.7% increase over the 2010 enacted level. SPIE also supports funding the NIST Technology Innovation Program (**TIP**) at **\$89 million**, and the NIST Manufacturing Extension Partnership (**MEP**) **\$141.1 million**.
- Passage of the **SBIR/STTR Reauthorization Act of 2011 (S.493)** which has been extended multiple times without resolution.

Sustained Funding: Who is investing in our nation's science and technology R&D for the long-term? More than fifty years of experience shows that a strong federal commitment to scientific research is key to building a better America. With industry and investors focused on short-term returns, we need sustained federal support for science and technology R&D to maintain U.S. innovation and job creation while enhancing our energy security and standard of living.

National Science Foundation (NSF): SPIE recommends NSF funding of \$7.8 billion in FY 2012 – a 13% increase over the FY 2010 enacted level. The increased funding will support more researchers, students, post-doctoral fellows, and technicians who will contribute to America's innovation ecosystem and help create jobs for the future.

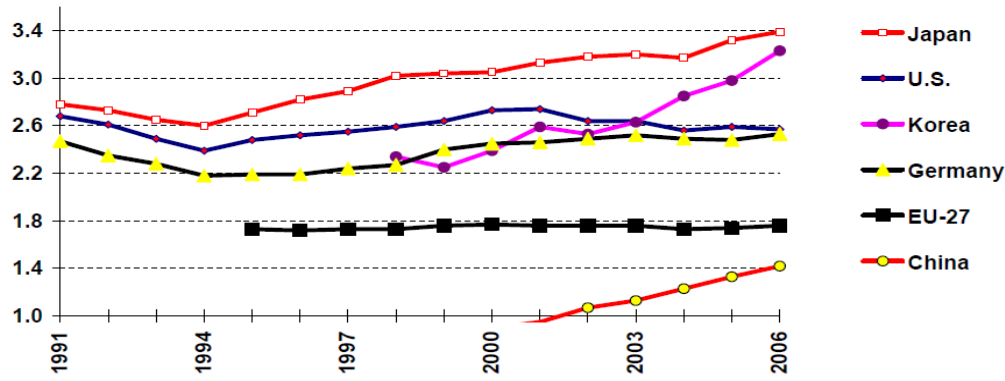
Department of Energy Office of Science: SPIE recommends DOE Office of Science funding of \$5.4 billion for FY 2012 – a 10.7% increase over the FY 2010 enacted level. DOE's Office of Science conducts research in economically critical areas such as nanotechnology, high-end computing, energy generation, and climate change.

Department of Commerce's National Institute of Standards & Technology (NIST): SPIE recommends funding NIST Research at intramural laboratories (\$764 million), the Technology Innovation Program (**TIP**) at \$85 million, and the Hollings Manufacturing Extension Partnership (**MEP**) Program at \$141.1. This will improve NIST's research capabilities for areas like advanced manufacturing, health information, cybersecurity, smart grid, and advanced solar technology. There is a need for real and visible support for advanced manufacturing programs in the U.S.

National Aeronautics and Space Administration (NASA): SPIE supports NASA’s new Office of the Chief Technologist function as the focal point for technology development and the Presidential Budget Request for NASA, which totals \$9.821 billion, a 6% increase from the FY 2010 enacted level. A significant shortfall exists between proposed Administration spending and Congressional goals for NASA that will need to be addressed.

Department of Defense: SPIE supports a long-term DoD commitment to R&D funding of \$76.663 billion for FY 2012, in line with the Administrations’ Budget Request.

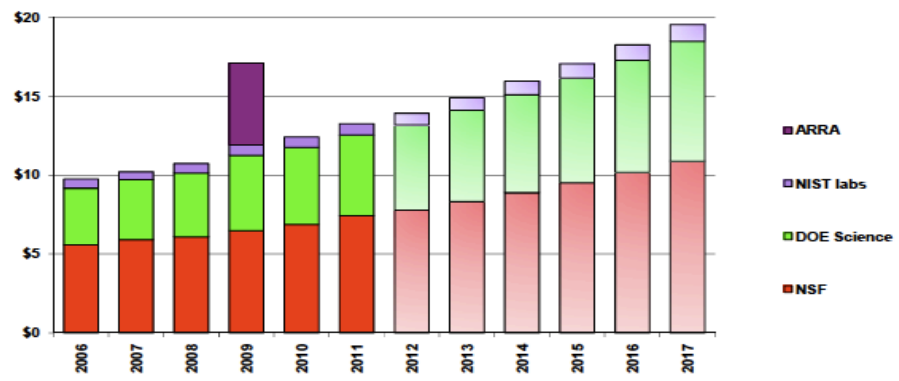
Total National R&D as % of GDP, 1991-2006



Source: National Science Foundation, National Patterns of R&D Resources and OECD, Main Science and Technology Indicators. Data not available for all nations for all years. AUGUST '08 © 2008 AAAS



President's Plan for Science and Innovation, FY 2006-2017
(budget authority in billions of current dollars)



2006-2010 figures are enacted budget authority; 2012-2017 figures are projections in the 2011 budget. FEBRUARY '10 OSTP

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