

mechanisms, or programs to be established to achieve the Program's stated goals;

(9) recommendations on policy, program, and budget changes with respect to nanotechnology research and development activities;

(10) recommendations for improved metrics to evaluate the success of the Program in accomplishing its stated goals;

(11) a review of the performance of the National Nanotechnology Coordination Office and its efforts to promote access to and early application of the technologies, innovations, and expertise derived from Program activities to agency missions and systems across the Federal Government and to United States industry;

(12) an analysis of the relative position of the United States compared to other nations with respect to nanotechnology research and development, including the identification of any critical research areas where the United States should be the world leader to best achieve the goals of the Program; and

(13) an analysis of the current impact of nanotechnology on the United States economy and recommendations for increasing its future impact.

**(b) Study on molecular self-assembly**

As part of the first triennial review conducted in accordance with subsection (a), the National Research Council shall conduct a one-time study to determine the technical feasibility of molecular self-assembly for the manufacture of materials and devices at the molecular scale.

**(c) Study on the responsible development of nanotechnology**

As part of the first triennial review conducted in accordance with subsection (a), the National Research Council shall conduct a one-time study to assess the need for standards, guidelines, or strategies for ensuring the responsible development of nanotechnology, including, but not limited to—

- (1) self-replicating nanoscale machines or devices;
- (2) the release of such machines in natural environments;
- (3) encryption;
- (4) the development of defensive technologies;
- (5) the use of nanotechnology in the enhancement of human intelligence; and
- (6) the use of nanotechnology in developing artificial intelligence.

**(d) Evaluation to be transmitted to Congress**

The Director of the National Nanotechnology Coordination Office shall transmit the results of any evaluation for which it made arrangements under subsection (a) to the Advisory Panel, the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Science upon receipt. The first such evaluation shall be transmitted no later than June 10, 2005, with subsequent evaluations transmitted to the Committees every 3 years thereafter.

(Pub. L. 108-153, § 5, Dec. 3, 2003, 117 Stat. 1928.)

CHANGE OF NAME

Committee on Science of House of Representatives changed to Committee on Science and Technology of House of Representatives by House Resolution No. 6, One Hundred Tenth Congress, Jan. 5, 2007. Committee on Science and Technology of House of Representatives changed to Committee on Science, Space, and Technology of House of Representatives by House Resolution No. 5, One Hundred Twelfth Congress, Jan. 5, 2011.

**§ 7505. Authorization of appropriations**

**(a) National Science Foundation**

There are authorized to be appropriated to the Director of the National Science Foundation to carry out the Director's responsibilities under this chapter—

- (1) \$385,000,000 for fiscal year 2005;
- (2) \$424,000,000 for fiscal year 2006;
- (3) \$449,000,000 for fiscal year 2007; and
- (4) \$476,000,000 for fiscal year 2008.

**(b) Department of Energy**

There are authorized to be appropriated to the Secretary of Energy to carry out the Secretary's responsibilities under this chapter—

- (1) \$317,000,000 for fiscal year 2005;
- (2) \$347,000,000 for fiscal year 2006;
- (3) \$380,000,000 for fiscal year 2007; and
- (4) \$415,000,000 for fiscal year 2008.

**(c) National Aeronautics and Space Administration**

There are authorized to be appropriated to the Administrator of the National Aeronautics and Space Administration to carry out the Administrator's responsibilities under this chapter—

- (1) \$34,100,000 for fiscal year 2005;
- (2) \$37,500,000 for fiscal year 2006;
- (3) \$40,000,000 for fiscal year 2007; and
- (4) \$42,300,000 for fiscal year 2008.

**(d) National Institute of Standards and Technology**

There are authorized to be appropriated to the Director of the National Institute of Standards and Technology to carry out the Director's responsibilities under this chapter—

- (1) \$68,200,000 for fiscal year 2005;
- (2) \$75,000,000 for fiscal year 2006;
- (3) \$80,000,000 for fiscal year 2007; and
- (4) \$84,000,000 for fiscal year 2008.

**(e) Environmental Protection Agency**

There are authorized to be appropriated to the Administrator of the Environmental Protection Agency to carry out the Administrator's responsibilities under this chapter—

- (1) \$5,500,000 for fiscal year 2005;
- (2) \$6,050,000 for fiscal year 2006;
- (3) \$6,413,000 for fiscal year 2007; and
- (4) \$6,800,000 for fiscal year 2008.

(Pub. L. 108-153, § 6, Dec. 3, 2003, 117 Stat. 1929.)

**§ 7506. Department of Commerce programs**

**(a) NIST programs**

The Director of the National Institute of Standards and Technology shall—

- (1) as part of the Program activities under section 7501(b)(7) of this title, establish a program to conduct basic research on issues related to the development and manufacture of