National Science and Technology Council (NSTC)
Committee on Technology
The Interagency Working Group on NanoScience, Engineering and Technology (IWGN)

Nanostructure Science and Technology
A Worldwide Study

Prepared under the guidance of the IWGN, NSTC

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About the National Science and Technology Council

President Clinton established the National Science and Technology Council (NSTC) by Executive Order on November 23, 1993. This cabinet-level council is the principal means for the President to coordinate science, space and technology policies across the Federal Government. NSTC acts as a "virtual" agency for science and technology (S&T) to coordinate the diverse parts of the Federal research and development (R&D) enterprise. The NSTC is chaired by the President. Membership consists of the Vice President, Assistant to the President for Science and Technology, Cabinet secretaries and agency heads with significant S&T responsibilities, and other White House officials.

An important objective of the NSTC is the establishment of clear national goals for Federal S&T investments in areas ranging from information technologies and health research, to improving transportation systems and strengthening fundamental research. The Council prepares R&D strategies that are coordinated across Federal agencies to form an investment package that is aimed at accomplishing multiple national goals.

To obtain additional information regarding the NSTC, contact 202-456-6100 or see the NSTC Web site at
http://www.whitehouse.gov/WH/EOP/OSTP/NSTC/html/NSTC_Home.html.

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THE WHITE HOUSE

WASHINGTON

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Dear Colleague:

As our Nation enters the new millennium, strategic investments in science and technology will be critical to meet the many challenges that will face us. In the next 10 to 20 years, new discoveries at the nanoscale promise revolutionary commercial applications across a wide range of areas, with relevance to manufacturing, healthcare, the environment, and national security. To ensure that the Federal government is evaluating ways to make strategic research and development (R&D) investments in this emerging field of nanoscale, the National Science and Technology Council's Interagency Working Group on Nanoscale Science and Technology initiated a study to provide a basis for formulating national R&D priorities and devising a strategy for state, local, and Federal government support.

The working group's report, *Nanostructure Science and Technology*, reviews the status of R&D in nanoparticles, nanostructured materials, and nanodevices, including innovative approaches to synthesis and characterization. The report highlights applications in dispersions, high-surface area materials, electronic and magnetic devices, nanostructured materials, and biological systems. It includes a comparative review of research programs around the world – the United States, Japan, Western Europe, and other countries – to help provide a global picture of the field.

This document will serve as a basis for continued dialogue among our Nation's nanoscale R&D stakeholders and will begin to harness our resources to shape and advance the understanding and advancement of discoveries in nanoscale applications in the coming decades.

Sincerely,

Neal Lane

Neal Lane
Assistant to the President
for Science and Technology