



19 May 2008

The Honorable Nancy Pelosi
Speaker of the House
U.S. House of Representatives
235 Cannon House Office Building
Washington, DC 20515

Dear Madam Speaker:

I am writing on behalf of the IEEE-USA to urge the House of Representatives to act quickly to pass H.R. 5940, the *National Nanotechnology Initiative (NNI) Amendments Act of 2008*. This legislation reauthorizes the National Nanotechnology Initiative, a program established to coordinate federal nanotechnology research and development. H.R. 5940 was passed by the House Science and Technology Committee on May 7, 2008.

Since the U.S. National Nanotechnology Initiative was announced in 2001, and the 21st Century Nanotechnology Research and Development Act (Public Law 108-153 [2]), was signed into law in 2003, we have seen significant payoff from our investment in nanotechnology. According to the Project on Emerging Technologies, new nanotech products become commercially available at a rate of 3-4 per week and the number of consumer products using nanotechnology has grown from 200 to over 600 in the last two years alone. Nanotechnology is now used in everyday items such as cell phones, computers, appliances, and even clothing. Nanotechnology is also being used for medical breakthroughs like quantum dots used in medical imaging for cancer detection. Nanotechnology promises to become an economic engine of the future that will create thousands of jobs and generate billions of dollars in our economy.

Nanotechnology is also transforming U.S. education. The recent U.S. focus on improving science, technology, engineering and math (STEM) education as well as increasing student interest in STEM careers is directly supported by activities within the NNI. Because STEM understanding is inherent in nanoscience opportunities, the two are strongly linked. Therefore the support and continuation of the NNI will directly build the STEM aspects of education in America.

Through the NNI, over \$100M has supported formal and informal education resulting in over 10,000 graduate student and faculty being involved in nanoscience study and research at over 500 universities. Public meetings, traveling exhibits and museum displays reach tens of thousands of people with information about nanoscience and STEM subjects. Funding from the NNI directly supports STEM career pathways for K-12 students through outreach activities that are a portion of many NSF programs. For example, in 1 small National Science Foundation-funded nanoscience program lead by a Two Year College over 3,000 high school students are reached annually through classroom visits, exhibits, presentations and summer camps with information about nanoscience, math and engineering careers. This outreach activity is a direct result of the National Nanotechnology Initiative.

The United States faces strong competition in the field of nanotechnology from other countries in Europe and Asia, who have also initiated well-funded programs in nanotechnology research. Nanotechnology research and development efforts require sustained support from federal and state governments, the universities and industry. On behalf of our members, we applaud the bipartisan efforts of the House Science and Technology Committee to put the national nanotechnology research and development programs on a firm footing, and we urge the full House to follow suit.

IEEE-USA advances the public good and promotes the careers and public policy interests of more than 215,000 engineers, scientists and allied professionals who are U.S. members of the IEEE. IEEE-USA is part of the IEEE, the world's largest technical professional society with 370,000 members in 160 countries. See <http://www.ieeeusa.org>. For more information, please contact Bill Williams at (202) 530-8331, or at Bill.Williams@ieee.org.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell J. Lefevre". The signature is written in a cursive style with a large initial "R".

Russell J. Lefevre, Ph.D.
President, IEEE-USA

RJL/bw:bc

[Similar letter was sent to all Members of the U.S. House Leadership.]