



SECOND INTERNATIONAL NANOTECHNOLOGY CONFERENCE ON COMMUNICATIONS AND COOPERATION

Abstract

NSF and NNI: Long-term View for Nanotechnology Research and Development

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The U.S. National Nanotechnology Initiative (NNI) is a long-term research and development program announced in January 2000 that coordinates 25 departments and independent agencies with a total budget of about \$1.2 billion in fiscal year 2006. The genesis of NNI, its vision and long-term strategy, main outcomes after five year, current status and likely evolution will be presented. The NSF activities on fundamental research, developing a balance infrastructure and education will be outlined in this framework.

Today, nanotechnology is expanding from passive nanostructured components to active nanosystems; from scientific discovery to technological innovation in areas such as advanced materials, electronics, and pharmaceutical; to new areas of relevance such as biomedical, energy, environment, agriculture and food systems, and controlled molecular architectures for manufacturing; at the global level and on an accelerating path. For this reason, it is essential to have a robust R&D program, select most suitable investments, anticipate possible scenarios, and address societal aspects from the beginning of large R&D investments.