



SECOND INTERNATIONAL NANOTECHNOLOGY CONFERENCE ON COMMUNICATIONS AND COOPERATION

Abstract

Nanotechnology in food, agriculture and forestry

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Nanoscale science, engineering and technology have begun to revolutionize materials used for many traditional scientific and engineering applications (including electronics, chemical processing, mechanical structures, medical applications, etc.). However, the use of nanotechnology in biological applications, especially in food, agriculture and forestry remains at its infancy. USDA, as a contributing member of the National Nanotechnology Initiative (NNI), is in a concerted effort to promote and advance knowledge of nanoscale science and technology to address important issues in agricultural and food systems. Current challenges facing U.S. agriculture include increasing agricultural biosecurity, enhancing food safety, improving food and nutrition for better human health, developing biotechnology for sustainable agricultural production and product quality, expanding markets for new products and novel uses of agricultural products, harmonizing agricultural production with environmental quality and biodiversity, and supporting rural and community prosperity. This presentation will give a brief overview of USDA nanotechnology program. Examples of current research projects will be highlighted.