What is a Nanotechnology Signature Initiative?

Nanotechnology Signature Initiatives (NSIs) are multiagency initiatives designed to spotlight technology areas of national importance that may be more rapidly advanced through enhanced interagency coordination and collaboration.

Four current signature initiatives:

- Sustainable Nanomanufacturing
- Nanoelectronics for 2020 & Beyond
- Water Sustainability through Nanotechnology
- Nanotechnology for Sensors & Sensors for Nanotechnology

Water Sustainability through Nanotechnology
Nanoscale Solutions for a Global-Scale Challenge

Aiding the development of technological solutions to alleviate current stresses on the water supply and provide methods to sustainably utilize water resources in the future.

Nanotechnology for Sensors and Sensors for Nanotechnology
Improving and Protecting Health, Safety, and the Environment

Enabling and overcoming barriers to the next-generation of biological, chemical, & nanoscale sensors.

Sensors are part of our everyday world. Nanotechnology is enhancing the detection, sensitivity, specificity, and portability of physical, chemical, and biological sensors.

Thrusts:
- Using nanotechnology and nanoscale materials to build more sensitive, specific, and adaptable sensors in order to overcome the technical barriers associated with conventional sensors
- Developing new sensors to detect engineered nanomaterials across their life cycles, in order to assess the potential impact on health, safety, and the environment

Participating agencies:

- NIST
- NASA
- USDA
- NSF
- HHS
- AITI

Engage with the NSI Community

- Public webinars
- Collaborative networks
- Informational sessions & town hall gatherings at technical meetings & conferences
- Federal/Industry/University partnerships

Sensors NSI Webinar Series

- Nanotechnology for a New Generation of Gas Sensors: An Industrial Perspective on Fundamental, Applied, and Commercialization Aspects
  Dr. Radisav Potyraj - GE Global Research
  October 2, 2019
  1:00 PM – 2:00 PM EDT

For more information on how to engage, go to nano.gov. For more information on the public webinars, go to nano.gov/PublicWebinars.