

PROGRESS AND PLANS OF NATIONAL NANOTECHNOLOGY INITIATIVE (NNI) AGENCIES

April 2019

Department of Justice (DOJ)¹

National Institute of Justice (NIJ)

Summary

The NIJ investment in nanotechnology furthers DOJ's mission through the sponsorship of research that provides objective, independent, evidence-based knowledge and tools to meet the challenges of crime and justice. New projects are awarded on a competitive basis; therefore, total investment may change each fiscal year. However, NIJ continues to view nanotechnology as an integral component of its research and development portfolio as applicable to criminal justice needs.

Key Technical Accomplishments by NNI Goal

Goal 2. Foster the Transfer of New Technologies into Products for Commercial and Public Benefit

NIJ's scientific investments in nanotechnology-related activities have been in support of research and development for forensics applications to meet criminal justice needs. While NIJ does not have a dedicated program devoted to nanoscale research, NIJ does fund several grants and cooperative agreements each fiscal year through its competitive solicitations that explore using nanoscale approaches and emerging nanotechnology-enabled advances to address challenges in forensic science in novel ways. For example, two grants awarded by NIJ in fiscal year (FY) 2018 involve the development of surface-enhanced Raman spectroscopy substrates for rapid optical characterization of human biofluids.

Goal 4. Support Responsible Development of Nanotechnology

NIJ administers the Compliance Testing Program (NIJ CTP), a voluntary conformity assessment program for the testing and certification of body armor used by law enforcement. In FY 2018, the NIJ CTP published program requirements for ballistic-resistant and stab-resistant body armor submitted to the program for testing that contain carbon nanotubes or other nanomaterials.² These requirements focus on protecting the health of workers involved in the manufacturing, testing, handling, and wearing of body armor submitted to NIJ's program who may be exposed to nanomaterials.

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² <https://www.justnet.org/pdf/CTP-Administrative-Clarification-CTP-2018-01.pdf>