

Small Business Innovation Research (SBIR) Opportunities for Environmental Technology

***EPA* SBIR Environmental Technology Opportunities Solicitation Closed. Next Solicitation Opens in March 2010**

The EPA SBIR Program assists small businesses (500 or fewer employees) develop and commercialize new environmental technologies. Phase I awards of \$70,000 for 6 months are used to investigate the scientific merit and technical feasibility of the proposed technology. Phase I businesses can then compete for Phase II awards of \$225,000 - \$345,000 for two years to continue technology development and commercialization. Through this two phased approach, EPA can determine whether the research idea is technically feasible, whether the company can do high-quality research, and whether sufficient progress has been made to justify a larger Phase II effort.

EPA's Phase I Solicitation closed on May 20, 2009. The next EPA Solicitation opens in March 2010. However, there are funding opportunities for environmental technologies in the National Science Foundation (NSF) Phase I Solicitation closing in December 2009. Most EPA technologies are eligible under this NSF Solicitation. EPA technology needs are described in last year's EPA SBIR Solicitation which is posted at www.epa.gov/ncer/sbir. EPA topics include green building, innovation in manufacturing, nanotechnology, air and water pollution control, waste management, environmental monitoring and homeland security. Questions about SBIR and EPA environmental technologies should be addressed to Jim Gallup (gallup.james@epa.gov) or April Richards (richards.april@epa.gov) or James Gentry (gentry.james@epa.gov).

***NSF* SBIR Environmental Technology Opportunities Solicitation Closing Date December 2009**

There are current opportunities for SBIR funding of environmental technologies in the **National Science Foundation (NSF)** SBIR Phase I Solicitation that closes in December 2009. NSF Phase I awards are \$150,000 over 6 months and Phase II awards are from \$500,000 to \$1 Million. EPA technology topics and the corresponding NSF Topics are summarized below. In many cases EPA needs do not correspond exactly to NSF Topics but almost all EPA needs can find a corresponding NSF Topic. NSF Topics are very broad and include the phrase "technologies include but are not limited to ..." to allow small businesses to submit proposals that stimulate technological innovation. Information about the NSF SBIR Program and the NSF Phase I Solicitation closing in December 2009 are available at www.nsf.gov/eng/iip/sbir.

Small businesses should read the solicitation carefully and comply with the proposal instructions, electronic FastLane application submission procedures, administrative requirements and technical issues. The NSF SBIR Solicitation is not identical to the EPA SBIR Solicitation. Businesses submitting proposals to NSF must comply with NSF (not EPA) application requirements. Please address questions about NSF opportunities to: Greg Baxter (gbaxter@nsf.gov) for Biotechnology (BT), Cynthia Znati (cznati@nsf.gov) for Chemical Technologies (CT), Juan Figueroa (jfiguero@nsf.gov) for IC4 Components, Bill Haines (whaines@nsf.gov) for Nanotechnology (N), Joseph Hennessey (jhennes@nsf.gov) for Advanced Materials (AM) and Cheryl Albus (calbus@nsf.gov) for Manufacturing (M). Communication via email is strongly encouraged.

EPA and NSF TECHNOLOGY TOPICS CROSSWALK

The EPA SBIR Solicitation provides detailed descriptions of EPA technology needs. The NSF Solicitation lists NSF Topics. In many cases EPA needs do not correspond exactly to NSF Topics but nearly all EPA needs can find a corresponding NSF Topic.

EPA TECHNOLOGY NEEDS (TOPICS)

Green Building
Innovation in Manufacturing
Nanotechnology
Greenhouse Gases
Drinking Water and Wastewater
Water Infrastructure
Air Pollution
Vehicle Emissions and Biofuels
Waste Management
Homeland Security
Monitoring and Remote Sensing

Corresponding NSF TOPICS

NSF Topics CT4
NSF Topics M2, N2
NSF Topics N1, N2
NSF Topics CT1
NSF Topics BT1, BT3, BT5
NSF Topics IC4, AM4
NSF Topics BT3, CT3, CT5
NSF Topics BT6, CT1
NSF Topics BT7, CT4, AM4
NSF Topics BT3, BT5
NSF Topics BT1, BT3, BT5

The following list summarizes environmental aspects of selected NSF Topic Codes identified in the above crosswalk. Visit the NSF Website for complete descriptions of all NSF SBIR Topics.

- Topic BT1** Agricultural Biotechnology including pathogen and toxin diagnostics.
- Topic BT3** Environmental Biotechnology and Environmental Technologies including methods to reduce human ecological and environmental impacts, microbial contamination sensing & control, removal of toxic compounds, bioremediation, water and wastewater treatment, pollutant monitoring and improvement of the environment and decreasing environmental impacts of humans on the planet.
- Topic BT5** Biosensors including real-time sensors, nanobiotechnology-based sensors, and tracking of microbial contamination in wastewater treatment.
- Topic BT6** Bioenergy Technologies including biomass conversion, biodiesel products and improvements, processing of biofuels waste streams.
- Topic BT7** Biobased Materials including chemicals/polymers from biobased feedstock.
- Topic CT1** Energy Supply and Use including reduction of engine emissions, reduction of Greenhouse Gases.
- Topic CT3** Energy Transportation and Fuels including SO_x/NO_x reduction.
- Topic CT4** Technologies for Sustainability including better recycling methods, novel products from recycled materials and Green Building technologies.
- Topic CT5** Separation Technologies - environmentally benign liquid and gas separation.
- Topic IC4** Components – Smart transportation and infrastructure sensors.
- Topic N1** Nanoelectronics – Use of devices with nanotubes, nanowires, quantum dots.
- Topic N2** Nanomanufacturing – Transfer of nanotechnology to industrial applications.
- Topic AM4** Materials for Infrastructure and Sustainability – Corrosion-resistant materials, coatings, improvements to life-cycle performance of infrastructure materials, new materials for purifying air & water, systems using recycled materials.
- Topic M2** Manufacturing Processes – Emphasis on environmentally benign techniques.