

Small Business Innovation Research (SBIR) Opportunities for Environmental Technology

***EPA* SBIR Environmental Technology Opportunities Solicitation Closed. Next Solicitation Opens March 15, 2010**

The EPA SBIR Program assists small businesses with no more than 500 employees develop and commercialize new environmental technologies. Phase I awards of up to \$70,000 over 6 months are used to investigate the scientific merit and technical feasibility of the proposed technology. Only Phase I businesses compete for Phase II awards of \$225,000 - \$345,000 over two years to continue technology development toward successful commercialization. Through this two phased approach, EPA can determine whether the research idea, often on high-risk advanced concepts, is technically feasible, whether the firm can do high-quality research, and whether sufficient progress has been made to justify a larger Phase II effort.

EPA's next Phase I Solicitation will open on March 15, 2010. However, there are opportunities for funding of environmental technologies in the National Science Foundation (NSF) Phase I Solicitation closing on December 3, 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 3, 2009**

There are current opportunities for SBIR funding of environmental technologies in the **National Science Foundation (NSF)** SBIR Phase I Solicitation that closes on December 3, 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 descriptive 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 carefully read the solicitation and comply with the proposal instructions, electronic FastLane application submission procedures, administrative requirements and technical issues. The NSF SBIR Solicitation is not identical with 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 (jfigueroa@nsf.gov) for IC4 Components, Bill Haines (whaines@nsf.gov) for Nanotechnology (N) and Cheryl Albus (calbus@nsf.gov) for Manufacturing (M). Communication via email is strongly encouraged.

EPA and NSF TECHNOLOGY NEEDS 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. The crosswalk is as follows:

<u>EPA TECHNOLOGY NEEDS (TOPICS)</u>	<u>Corresponding NSF TOPICS</u>
Green Building	NSF Topics CT4
Innovation in Manufacturing	NSF Topics M2, N2
Nanotechnology	NSF Topics N1, N2
Greenhouse Gases	NSF Topics CT1
Drinking Water and Wastewater	NSF Topics BT1, BT3, BT5
Water Infrastructure	NSF Topics IC4, AM4
Air Pollution	NSF Topics BT3, CT3, CT5
Vehicle Emissions and Biofuels	NSF Topics BT6, CT1
Waste Management	NSF Topics BT7, CT4, AM4
Homeland Security	NSF Topics BT3, BT5
Monitoring and Remote Sensing	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 SOx/NOx 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.