

New York State Pollution Prevention Institute

December 19, 2011

Research & Development Program

Request for Proposals

Funding Opportunity Number: 2011-01

Eligible applicants: NYSP2I Partner Universities

Introduction

The New York State Pollution Prevention Institute (NYSP2I) is a statewide research and technology transfer center funded by the New York State Department of Environmental Conservation (NYSDEC). Rochester Institute of Technology and its partner universities, Rensselaer Polytechnic Institute, Clarkson University, and the University of Buffalo, along with the state's ten regional technology development centers (RTDC) together comprise the NYSP2I.

The vision for the NYSP2I is to foster the transformation and development of sustainable businesses and organizations in New York State in a collaborative program committed to making the State a leader in environmental stewardship.

The mission of the NYSP2I is to provide a state-wide, comprehensive and integrated program of research, technology development and diffusion, outreach, training and education aimed at making New York State more sustainable for workers, the public, the environment and the economy through:

- Reductions in toxic chemical use
- Reductions in emissions to the environment and waste generation
- The efficient use of raw materials, energy and water

Background

Targeted research and development is a fundamental element of NYSP2I. Specific R&D needs are identified through the NYSP2I Advisory Board, NYSDEC, RTDCs, and gaps identified through NYSP2I's Direct Assistance and Priority Sector projects. Research conducted under the NYSP2I effort is driven by customer needs, and is intended to solve specific problems where the solution results in *transferable practices and technologies applicable in New York State*.

In addition to receiving input from various stakeholders, to ensure that the NYSP2I addresses high priority areas, a targeting study was conducted to identify sectors of greatest concern that are significant contributors to the New York State economy and/or generate significant quantities of toxic and hazardous wastes. Based on this information, current research and development priorities include the use, elimination or substitution of toxic chemicals, overall waste reduction, energy and water efficiency opportunities in the following priority manufacturing sectors (identified by NAICS):

- Chemical manufacturing (325)
- Food manufacturing (311)
- Primary metal manufacturing (331)
- Fabricated metal product manufacturing (332)
- Paper manufacturing (322)

The purpose of this Request for Proposal (RFP) is to solicit projects to be undertaken by NYSP2I Partner University faculty, students, and staff that will focus on these R&D priorities. Examples include:

- Improving the efficiency and performance of processes to reduce chemical usage, worker exposure risk and waste generation, while maintaining or improving product quality
- Changing to alternative “green” chemistries that can meet process requirements while reducing or eliminating the use and generation of hazardous materials
- Utilizing more energy efficient equipment or modifying manufacturing processes to increase efficiency and reduce energy consumption
- Developing waste-to-alternative energy conversion applications so they are a feasible option (practical and economically feasible) for food processors
- Reducing overall waste generation in processes and/or developing processes to convert a waste stream into a raw material for another product

The project must meet the following criteria to be considered:

- Have a pollution prevention and/or green engineering focus
- Have the potential to have a positive environmental impact in New York State

Preference will be given to projects that:

- Show collaboration with one or more NYS manufacturer(s)
- Have a broad potential impact

The established NYSP2I Technical Advisory Committee will have the responsibility of prioritizing the project needs, selecting R&D proposals and overseeing the project progress, results, and reporting.

Additional information regarding NYSP2I and the R&D program can be found at http://www.nysp2i.rit.edu/r_and_d.html.

Funding Period: Awards will be granted for up to 12 months.

Award Information: Individual grant awards are expected to be approximately \$50,000. The amount of grant funding is dependent on the NYS budget and the quality of proposals received. The amount of the award will be commensurate with anticipated results and impact to NYS.

RFP Contacts:

Administrative:

Kathleen Kosciolk
Business Manager
Rochester Institute of Technology
111 Lomb Memorial Drive
Rochester, NY 14623
Phone: (585) 475-4325
email: kxkasp@rit.edu

Technical:

Nabil Nasr, PhD
Assistant Provost & Director
Golisano Institute for Sustainability
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Proposal Deadline

Friday, February 17, 2012, 5:00pm EST.

Please submit proposals by mail (postmarked by February 17, 2012) or email to the administrative contact listed above.

Anticipated Award Notification Date

Award notification anticipated 60 days after proposal deadline.

Other Important Information:

Reporting - Quarterly progress reports will be required and are due on the 5th of the month following each calendar quarter. A final report, including the actual and/or potential improvements to the environmental metrics, will be due within 30 days of project completion.

NYS Standard Terms and Conditions will be applicable to projects funded under this R&D program and can be found at: <http://www.ogs.state.ny.us/procurecounc/pdfdoc/appendixa.pdf>

Intellectual Property - The following terms will be applicable to projects awarded under this R&D program:

Intellectual property developed with funding from NYSP2I is meant to advance the state of the art in pollution prevention for the benefit of the citizens of New York State. Those who create, will own any intellectual property they develop through NYSP2I funding. Any intellectual property developed with NYSP2I funding will be available to the New York State Department of Environmental Conservation through a perpetual, non-exclusive, royalty free, transferable license. In addition, the NYSP2I shall have a non-exclusive, royalty free license to use intellectual property for non-commercial research and educational purposes. Furthermore, the owner of intellectual property will not charge any company based in New York State for the right to use such intellectual property.

Questions should be directed via email to the administrative contact listed above.

Proposal Requirements

1. Proposal Identification
 - a. Title of proposal
 - b. Name of principal investigator
 - c. Name of co-principal investigator (if applicable)
 - d. Name of university / institution affiliations - College and Department
 - e. Physical address and phone
 - f. Principal investigator(s) email address(es)
2. Summary
 - a. Project duration
 - b. Summary project description
 - c. Summary of deliverables - expected outcomes, reports etc.
3. Project Description
 - a. Description of the problem and its importance
 - b. Current state of research in this field
 - c. Basic research hypothesis to solve this problem
 - d. Promising preliminary results
4. Research plan and technical approach
 - a. Expected results or impact if successful, include defined metrics that will be used to measure the potential positive environmental impact in New York State
5. Required resources
 - a. Project personnel (Include CV of Principal Investigators)
 - b. Items required for project success, provided by the university (ex: laboratories, computers, software, equipment, background IP, etc)
 - c. Items required for project success, requested of NYSP2I (ex: technical expertise, specialized materials, access to computing resources, access to equipment, etc.)
 - d. Non-NYSP2I funding related to this proposal (please detail funding agency, whether funds are confirmed or expected, and what is required to secure funds)
6. Research Management Plan and Schedule
 - a. Research schedule - include key research milestones
 - b. Project management and communication plan (for example, periodic review meetings, publications, phone or video conferences)
7. Budget
 - a. Direct expenses, including personnel costs and non-personnel costs
 - b. Indirect costs including any overhead – Note: F&A (overhead) not to exceed 40.5%

Proposal Length and Format: Proposals must be no more than 10 single spaced pages (i.e., a page equals one side). CVs should be attached as an Appendix and are not included in the page limit.