



P2 Bulletin

the newsletter of the New York State Pollution Prevention Institute (NYSP2I)

JUNE 2012

GREEN INITIATIVE PROGRAMS: 1

Technology and Supply Chain

EARTH DAY EVENTS: 2

Recognition

WET CLEANING: 2

Demonstration in Farmingville

PARTNERSHIP: 3

Finger Lakes Food Processing Cluster Initiative

R&D AWARDS: 3

Clarkson, RIT and RPI

STUDENT R&D COMPETITION: 4

Winners Announced

We have had quite a busy year! NYSP2I launched two new programs, held its first Annual R&D Student Competition, hosted a Wet Cleaning Demonstration in Long Island, and continued to work with NYS businesses and Partner Universities in making NYS more sustainable. Read about the exciting events that occurred this spring in this edition of NYSP2I's P2 Bulletin! Have a great summer! – Anahita

Green Initiative Programs Unveiled

On April 26, 2012, NYSP2I formally announced the launching of the **Green Initiative Programs**. The Green Initiative Programs will foster a new era of manufacturing competitiveness by creating opportunities for innovation, environmental stewardship and production efficiency. Together, the programs will not only accelerate the introduction of green technologies into the market, but also assist manufacturers and suppliers to take advantage of the global demand for green products and green supply chains. The **Green Technology Accelerator Center** and the **Sustainable Supply Chain & Technology Program** will provide assistance to New York State businesses in order to grow business and expand into new markets!

Green Technology Accelerator Center

New York State companies can take advantage of emerging market opportunities for environmentally preferable products by receiving assistance from the GTAC program. As New York State's leading technical resource, companies are able to take advantage of GTAC's engineering resources and matchmaking with external resources. Whether it's technology testing and validation, market viability assessments or design engineering support, GTAC will work to expedite the commercialization of green technologies.

To date, 24 companies have expressed interest in the NYSP2I GTAC initiative, with several projects identified for pilot programs and 2 projects currently under-way.

"The GTAC initiative provides Complemar the opportunity to utilize the expertise of NYSP2I and the RIT team to accelerate the growth of Complemar's Food Processing Equipment Division. Our CiderSure equipment, with its low energy consumption, provides an economic solution for the apple industry. The GTAC project fast tracks our products into larger markets, creating new opportunities for employment in the Rochester community."

— Ann Wood, Vice President of Operation and Client Solutions, Complemar

Complemar Partners Inc., the first company to utilize the GTAC program, manufactures equipment that uses ultraviolet light technology for cider pasteurization. The company will use the GTAC program to conduct a study to validate and quantify its product's significant energy savings using a NYSP2I partner university as a technical resource.

continued on page 3

Sustainable Supply Chain & Technology Program

The NYSP2I's Sustainable Supply Chain and Technology Program provides NYS companies with assistance and guidance on becoming green suppliers for our economy's growing demand for sustainability. By greening their operations and meeting voluntary 'green' standards, companies can become preferred suppliers to numerous manufacturers that are striving to meet the demands of their customers. In addition to providing sustainability assessments to evaluate current operations and assistance in determining steps needed to reach green market requirements, the Program will assist companies through marketing and awareness in the green marketplace. Whether it is a NYS manufacturing company seeking environmental

standards or a smaller businesses trying to establish their own environmental management system so they can report to their clients, this program will streamline the company's efforts in reaching their goals.

continued on page 4



Earth Week Events

Governor Cuomo held an Earth Week Cabinet meeting on April 26th to discuss many exciting environmental initiatives throughout New York State. NYSP2I was praised for launching the Green Initiative Programs in order to accelerate environmentally friendly (“green”) technologies and products to the next step in commercialization and provide expertise in developing a more sustainable manufacturing supply chain. In addition, DEC Commissioner Martens discussed NYSP2I’s 1st Annual R&D Student Competition, “Greening Your Campus,” and reviews NYSP2I’s environmental metrics and key programs over the past year. Gov. Cuomo also highlighted NYSP2I’s director, Anahita Williamson, for receiving the Environmental Quality Award from the US Environmental Protection Agency for promoting sustainability and innovation at companies across the state.



A team from Clarkson University, which included students Jeannie Piekarz, David Illig, Gregory Mesagna, Roy Berger, and faculty/staff advisor Professor Thomas Ortmeyer, took first place with its project titled “Dormitory Motion Sensor Lighting” in NYSP2I’s first “Greening Your Campus” student competition. The project aimed at reducing lighting use in the dorm hallways using motion sensors. The students projected energy and cost savings to be around \$600,000 per year with a three-to-five year payback on the investment.

A team from RIT took second place with its project titled “Saving the Environment and Money with Natural Gas.” Third place was awarded to University at Buffalo for its project titled “Plastics: Start the Ripple of Sustainability.”

“We were very impressed with the enthusiasm of the students as they presented their project concepts,” says Anahita Williamson, director of NYSP2I. “The competition was very close. All of the students did a great job of identifying and addressing issues of sustainability on their campuses.” (Photos by NYS DEC.)



(left to right) Honorable Dana L. Redd, Mayor, Camden, N.J.; Anahita Williamson, Director, NYSP2I; Judith Enck, EPA Regional Administrator

Anahita Williamson was nominated by Senator Kirsten Gillibrand for the 2012 Environmental Protection Agency’s (EPA) Region 2 Environmental Quality Award. Environmental Quality Award recipients are recognized for the high level of their accomplishments in improving environmental quality in EPA Region 2, which includes N.Y., N.J., Puerto Rico, the U.S. Virgin Islands and seven Tribal Nations. Anahita accepted the award at EPA Region 2 Headquarters on April 27, 2012 in NYC. (Photo by EPA.)

What’s the next big week? Pollution Prevention Week! September 17–23, 2012

NYSP2I Partners with the Center for Integrated Manufacturing to Advance Sustainability in Food Processing

Rochester Institute of Technology's Center for Integrated Manufacturing Studies (CIMS) received a federal *Jobs and Innovation Accelerator Challenge* grant to support its Finger Lakes Food Processing Cluster Initiative — a coordinated, cluster-based effort aimed at economic development and job creation.

Leveraging NYSDEC funding to assist with the initiative, NYSP2I was instrumental in securing federal funds for this initiative of over \$1.5M. Three programs were developed for the Initiative. The Training Program, sponsored by DOL ETA, was designed to build the cluster's workforce to meet the demands of the businesses in the growing cluster. The Small Business Assistance Program, sponsored by SBA, promotes inclusion of small businesses in high-unemployment or low-income areas of the region and provides additional assistance to these companies. The Advancement Program, supported by the DOC EDA and NYSP2I provides assistance to area food processing and agricultural businesses, which includes identifying and implementing technical improvements and sustainable manufacturing process technologies to reduce operating costs, minimizing environmental impacts, opening market opportunities, starting new

businesses, and retaining and growing jobs. The program also provides networking and match-making opportunities to help unify the cluster and hosts workshops to transfer knowledge to regional businesses, such as export opportunities and money-saving sustainability practices.

The next event is scheduled for July 25, 2012 at RIT. For more information, please visit www.rit.edu/gis/flfpci.



R&D The NYSP2I Research and Development Program

As part of its 2011-2012 research and development grant program, NYSP2I has awarded four R&D grants totaling approximately \$200,000 for studies to be conducted at Clarkson University, Rochester Institute of Technology, and Rensselaer Polytechnic Institute.

Two grants were awarded to RPI. Dr. Joel Plawsky from the Chemical Engineering Department will focus his research on development of a new photocatalyst for green processing applications to reclaim, reuse or recycle air and water without the use of toxic chemicals. Dr. James Kilduff, of the Civil and Environmental Engineering Department, will research a low-cost bioreactor module for treatment of food wastes and simultaneous electricity production.

At RIT, Dr. Jinwei Gu of the Center for Imagining Science will collaborate with Dr. Gabrielle Gaustad of the Golisano Institute for Sustainability to develop and characterize novel computational imaging systems that can automatically and efficiently sort scrap materials. Finally, Dr. Sulapha Peethamparan of Clarkson's Department of Civil and Environmental Engineering will work with The Hoskie Company of Brooklyn, NY, to research conversion of waste conch shells as a partial substitute for limestone or calcium carbonate raw material in cement manufacturing.

The research funding through NYSP2I is designed to advance research efforts in the broad category of sustainability and pollution prevention, resulting in transferable practices or technologies in New York State.

Green Technology Accelerator Center...continued from page 1

Epiphergy LLC has been identified as the second company supported by the GTAC program in 2012. This project, initiated in June, will validate the biomass/food waste process, utilizing Life Cycle Analysis methodologies. Epiphergy has developed a proprietary process for the conversion of food waste to fuel, compost and animal feed. The company will utilize the GTAC program to validate the energy savings and environmental impact of this new process.

Welch Allyn Inc., a medical device manufacturing company based in Skaneateles, NY, is also seeking assistance from GTAC for applying sustainable design methodologies. A partnership with NYSP2I inspired Welch Allyn to produce an entire line of environmentally friendly medical devices. The company has recognized a positive return on its investment with increased product sales offsetting the investment costs incurred in the development of environmentally friendly products. Ian Edwards, Senior Director in the Corporate Technology Office of Welch Allyn, noted that "progressive programs like the Green Technology Accelerator Center can help offset these costs and bring environmentally friendly products to market faster and competitively."

Wet Cleaning Demonstrations held at All Fabric Cleaners, Farmingville

Two wet cleaning demonstrations were held on April 24, 2012 at All Fabric Cleaners, 2316 North Ocean Avenue, in Farmingville, N.Y. All Fabric Cleaners is a participant in NYSP2I's wet cleaning conversion program. Their wet cleaning system was installed in September 2011 and their perc machine

was disconnected in December 2011. The owner, Yong Choi, chose wet cleaning to reduce the environmental burden of his shop and eliminate the health risks associated with dry cleaning.

The morning demonstration attracted 15 interested stakeholders from 7 organizations, including NYSDEC



NYSP2I's Kate Winnebeck (center right) listens as Yong Choi, All Fabric Cleaners owner (center left) discusses spot cleaners used in wet cleaning.

Regions 1 and 2, USEPA Region 2, and the Suffolk County Department of Health. Attendees learned the difference between laundering and wet cleaning, and the financial and quality benefits of wet cleaning. NYSP2I staff spoke with attendees about ways to continue and expand the current wet cleaning conversion and demonstration program in NYS.

The afternoon demonstration attracted 25 participants from cleaners interested in learning more about wet cleaning. At the demo, attendees saw the wet cleaning process from start to finish, were able to touch and smell cleaned garments, and spoke directly with Yong and NYSP2I technical staff.

Demonstrations at All Fabric Cleaners and Rainbow Cleaners, Manhattan, are currently being scheduled for fall 2012. Contact NYSP2I for more information.

Sustainable Supply...continued from page 1

Areas of need may include:

- Development of Sustainable Production goals and metrics collection
- Sustainable Production Advisement
- Technical Assistance
- Life-Cycle Strategies
- Technology Application, Demonstration, Deployment and Validation

Adopting Sustainable Manufacturing practices has the potential to:

- Reduce costs
- Reduce risk
- Improve sustainability
- Grow revenue
- Reduce environmental impact

Through:

- Efficient utilization of energy and resources
- Reduction or elimination of waste generation, disposal and/or regulatory fees
- Competitive positioning as an environmentally conscious business

NYSP2I is launching a web-based Sustainable Supply Chain Knowledge Clearinghouse for NYS suppliers to learn about sustainable market opportunities and business requirements.

NYSP2I seeks to work hand-in-hand with purchasers to assist in meeting corporate sustainability goals by linking them with green suppliers. Purchasers can identify NYS green suppliers through the program's website and by attending match-making/networking events. Purchasers are also encouraged to refer existing suppliers to the program for assistance.

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