

Golisano gift funds green goal

Support from Rochester businessman positions RIT as global leader in sustainable manufacturing initiatives

Approximately 60 percent of the ecosystems that support life on earth are currently being degraded or used unsustainably, according to a United Nations study.

The 2005 report specifically stated that the ongoing degradation of 15 of the 24 ecosystems studied will increase the likelihood of abrupt environmental changes that will seriously affect human well-being on this planet.

RIT, with the help of Rochester businessman B. Thomas Golisano, is taking steps toward addressing this global problem.

Through the new Golisano Institute for Sustainability, RIT offers a platform for universities, corporations and governments around the globe to collaborate in the creation of innovative curricula and technology related to sustainable design, life-cycle engineering, remanufacturing and pollution prevention.

The initiative also paves the way for RIT to become the first technological university to provide a full spectrum of career-focused, integrated and interdisciplinary programs that embody the principles of sustainability in product development.

Creation of the Golisano Institute is being made possible by a \$10 million commitment from Golisano, founder and chairman of Paychex Inc. and an RIT trustee. Golisano's first large donation to RIT, which totaled \$14 million, resulted in the creation of the B. Thomas Golisano College of Computing and Information Sciences in 2001.

"It is imperative that we accelerate strategies to promote a sustainable society and ensure future generations the opportunity to address their own needs," Golisano stated at the Sept. 12 news conference announcing the gift. "For that reason, it is my desire for the Golisano Institute for Sustainability to produce the first generation of profes-



Michael Haselkorn, senior staff engineer at the Golisano Institute for Sustainability, left, explains a current project involving alternative fuel vehicles to RIT President Bill Destler, center, and B. Thomas Golisano.

sionals with the vision and know-how to deliver on the promise of sustainability, and I am very proud to be associated with this exciting endeavor."

"The Golisano Institute for Sustainability is a natural extension for us," says RIT President Bill Destler. "It expands our initiatives in education, research and technology transfer that build upon some of RIT's strongest academic programs and the internationally respected research of the Center for Integrated Manufacturing Studies (CIMS)."

Golisano's investment will fund new academic programs and additional faculty as the university works toward creating one of the world's first doctoral degree programs in sustainability, focusing on sustainable

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What is sustainability?

Asked for a definition of sustainability, Tom Golisano gave a one-line response: the preservation and re-utilization of natural resources.

The World Commission on Environment and Development, one of the first organizations to identify the concept, defines sustainability as meeting the needs of the present without compromising the ability of future generations to meet their own needs.

A sustainable process can be carried out over and over without negative environmental effects.

Research developed at RIT's Golisano Institute for Sustainability will advance alternative energy development, industrial recycling, remanufacturing and reuse, as well as manufacturing competitiveness. Graduates of the program will have skills in life-cycle engineering, environmental risk and impact assessment, and environmentally benign design. The program will emphasize knowledge of corporate strategies for sustainability and government policies for promoting sustainability.

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B. Thomas Golisano
Founder and chairman, Paychex Inc.

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production. Formation of this interdisciplinary degree program is supported by a \$465,000 development grant from the Henry Luce Foundation.

Nabil Nasr, RIT assistant provost, CIMS director and Earl W. Brinkman Professor of Engineering, will lead the Golisano Institute for Sustainability. Nasr is a world-renowned expert in the field of sustainability and environmental issues, and he has been the catalyst in building RIT's expertise in sustainable product design and environmentally conscious manufacturing.

"Here at RIT, we have focused on projects that reduce the use of hazardous materials

in production and expand the quality and implementation of remanufacturing processes and we have worked to design production systems that are completely closed loop with no waste product and feature

the complete reuse of all materials," notes Nasr. "Through our partnerships with industry, government, non-governmental agencies and other universities, we will seek to develop new technologies and processes that will assist in implementing sustainable processes in industry while also disseminat-



A video message from President Bill Clinton was played at the news conference.

ing knowledge, education and training in the field."

Albert Simone, RIT president emeritus and chair of Greater Rochester Enterprise, emphasizes the importance that the new institute brings to enhancing RIT's student research opportunities while advancing local economic development initiatives.

"The Golisano Institute for Sustainability will be vital to developing and maintaining competitive advantages for existing Rochester businesses," says Simone. "Those who aren't part of the sustainability movement may well be left behind in the global economy, and having this institute here at RIT provides invaluable knowledge and assistance to this region."

Establishing this institute is consistent with Golisano's ongoing support of the William J. Clinton Foundation. Golisano is a sponsor of the Clinton Global Initiative.

"For the past few years, I have been very proud to have Tom's support for the Clinton Global Initiative, which works to inspire innovative solutions to some of the world's most pressing challenges," President Clin-



Monroe County Executive Maggie Brooks discusses research with RIT President Bill Destler, center, and Nabil Nasr, director of the new Golisano Institute for Sustainability. The new institute is assessing the performance of the county's fleet of alternative-fuel vehicles.

ton stated in a video message during the announcement event.

"One of our most significant challenges is the threat of climate change, and I'm very glad Tom is continuing to look for a solution through the creation of this institute for sustainability."

Funding for the future construction of a "green" facility to house the Golisano Institute for Sustainability is being sought.

Paul Stella '03

About B. Thomas Golisano

Rochester entrepreneur and philanthropist B. Thomas Golisano is the founder of Paychex Inc. and chairman of the company's board of directors.

Golisano started Paychex in 1971 at age 30. In 1983, Paychex became a public company and was named to the Inc. magazine list of "The Fastest Growing, Privately Held Companies in the U.S." In fiscal 2006, Paychex generated nearly \$1.7 billion in revenues. The Rochester-based company, which provides payroll and human resources services to small- and medium-sized companies, has nearly 11,500 employees serving approximately 543,000 clients.

Golisano has often been recognized for his entrepreneurial, civic, and philanthropic achievements and endeavors. In 2006, he was presented with the 70th Annual Rochester Rotary Award. In 2005, he was awarded Catholic Family Center's 2005



B. Thomas Golisano

CFC Award for his many contributions to human service organizations throughout greater Rochester. He was named Outstanding Philanthropist for 2004 by the Association of Fundraising Professionals.

His philanthropic activities include contributions to numerous civic, health care and educational organizations.

In 2001, his \$14 million gift to RIT launched the B. Thomas Golisano College of Computing and Information Sciences.

A strong advocate for the reduction of substance abuse and teen pregnancy, Golisano serves on the executive committee of Prevention Partners, a Rochester coalition designed to combat illegal drugs and alcohol abuse. He is founder of the B. Thomas Golisano Foundation, which awards grants to organizations dedicated to providing opportunities for those with disabilities and offering support to their families.

Golisano's concern for political reform led him to become a founding member of the Independence Party of New York state. As a candidate of that party, he ran for governor of New York in 1994, 1998 and 2002.

In 2003, Golisano purchased the Buffalo Sabres of the National Hockey League, noting that the team was an economic and community asset that should remain in Buffalo.

A native of the Rochester suburb of Irondequoit, he is a graduate of the State University of New York at Alfred.

Work in progress at the new Golisano Institute for Sustainability



Here are some examples of projects now underway:

- A partnership with Monroe County (N.Y.) to assess the performance of its fleet of ethanol and bio-diesel vehicles. The Golisano Institute will work with the county's Department of Environmental Services to analyze the environmental and economic impact of these vehicles and assist in determining a future course for the integration of additional alternative energy technologies into county operations.
- A collaboration with Rochester Genesee Regional Transportation Authority to evaluate its diesel-fueled bus fleet. This joint research project will integrate state-of-the-art vehicle monitoring technology into current vehicle sensor packages to assist in increasing energy efficiency, improving vehicle performance and increasing safety.
- Work with RIT's Facilities Management Services to deploy alternative fuel vehicles for use on campus. This effort will seek to integrate biodiesel and hydrogen fuel vehicles into Facilities Management's operations and will test the performance, emissions and efficiency of these alternative-fuel technologies.
- Creation of a pollution prevention (P2) pilot initiative to assist New York state companies in implementing P2 technologies. The pilot will leverage the Golisano

Institute's existing research in alternative cleaning technologies; remanufacturing; sustainable product and process development; green product assessment; and health and safety training to assist companies in preventing pollution. The project will also enhance economic efficiency and productivity as well as provide input for future statewide pollution prevention efforts.

- Partnering with a New York state company to develop and commercialize two scientific testing devices to enhance remanufacturing processes and reduce waste. The project has assisted in recovering more than 600 tons of metal and urethane to date, which would have otherwise gone to landfills. For these efforts, the Golisano Institute was presented with the National Pollution Prevention Roundtable's 2006 MVP2 Award.
- A collaboration with Lockheed Martin Corp. to enhance the development of its Embedded Platform Logistics System, which is designed to improve the performance and efficiency of large vehicle fleets. This technology package will be installed on existing platforms to enhance operational readiness and logistics actions.
- Enhancing dissemination of sustainable techniques through collaborations with the National Science Foundation and National Research Council as well as the countries of

RIT hosted the Fifth Global Symposium on Sustainable Product Development in September. Participants toured the Golisano Institute and got info on work in progress from Michael Haselkorn, senior staff engineer. (Photo by Laura Nelson '94, '97.)

South Korea and the Dominican Republic. For example, the Golisano Institute recently hosted the Fifth Global Symposium on Sustainable Product Development sponsored in part by the National Science Foundation and General Motors. The event sought to advance cooperation and collaboration between researchers working in sustainable production and follows previous symposia held in China, Germany and Brazil.

Will Dube

Web extras:

To learn more about the Golisano Institute for Sustainability, go to www.sustainability.rit.edu

To see a video of the news conference, go to www.rit.edu/videos.

To hear a podcast, go to www.rit.edu/news/podcasts

To view a photo gallery of the event, go to www.rit.edu/news/gallery