

Keeping Michigan On the Cutting Edge

Science, Technology
Leaders at Heart of
New Economy

BY JOSÉPH P. CABADAS

Michigan has a well-deserved reputation as a center of heavy manufacturing, but perhaps less known is how well-equipped the state is to prosper in the new economy.

Corp! Magazine will acknowledge cutting-edge companies with headquarters or a strong presence in the state with its inaugural Business of Science and Technology Awards breakfast, to be held April 20 at the Michigan State University Management

Education Center in Troy.

Fifty-seven organizations — ranging from software companies to research and development (R&D) firms, consultants and schools — are being honored for their contributions in Michigan.

It is an important time to recognize the innovations occurring within the state as an indicator of a brighter future. A recent University of Michigan economic forecast predicted that the state's unemployment

rate will exceed 15 percent for most of 2010 and remain high into 2011 after heavy job losses in the manufacturing, construction, trade and utilities industries.

Yet, Michigan has one of the world's largest concentrations of educated and highly experienced engineering and technological workers, as well as the infrastructure and facilities in place to accommodate emerging industries, notes Nabil F. Grace, interim dean of Lawrence Technological University's College of Engineering. LTU is one of the award winners.

"The task is to seek out and encourage those industries and attract more here, and to retool that work force as needed to take advantage of new opportunities before this work force goes elsewhere," Nabil says.

There is a range of opinions by the science and technology award winners on the future — such as whether to move away from the automotive industry which traditionally built Michigan up or to continue embracing it while working on new solutions — but all seem to agree that the state needs to harness its immense talent and resources to correct the current problems.

"Despite the recent economic turmoil and the resulting bad press, Acro Corp. is very positive about the future of Michigan and its suitability for science and technology fields," says Ron Shahani, chief executive officer of Acro Service Corp., a Livonia information technology and engineering services business. "Michigan is blessed with world-leading educational institutions, ... technical manpower — including thousands of engineers — and a strong industrial base."

When World War II broke out, Michigan "retooled" itself in a matter of weeks to provide 20 percent of all the war materials needed to preserve democracy, notes Ron Harwood, president and founder of Illuminating Concepts of Farmington Hills.

"Michigan can again retool itself, and in fact is retooling itself to be the leader in alternative energy production and storage," Harwood says. "We have one of the most experienced and educated populations in the fields of manufacturing and medical research as well as environmental preser-

vation at our core. Coupled with one of the world's greatest water supplies and vast natural resources, Michigan only needs to collaborate more with companies within its borders to find the additional resources necessary to emerge as an industrial and scientific leader. Companies need to be more aggressive at pursuing relationships."

Southeast Michigan is not only the headquarters and R&D hub for our nation's domestic automotive industry, it is also where many of the world's preeminent science and engineering minds come to study and develop intellectually at the state's universities, says Dr. Grace M. Bochenek, director of the U.S. Army's Research, Development and Engineering Command's Tank Automotive Research, Development and Engineering Center (TARDEC) in Warren.

"At a time when Michigan is looking for ways to diversify commercially and attract technology leaders, pairing military ground vehicle systems and the automotive industry is a logical approach," Bochenek says.

"Developing a defense industry corridor allows access to vast amounts of automotive and engineering expertise, and offers the potential to continue developing advanced technologies to support warfighters for years to come."

Manufacturing will return to the U.S. as new technological innovations allow the company to compete, added Alain Piette, president of SpaceForm Welding Solutions Inc. of Madison Heights. His company, a spin-off from automotive supplier Delphi, offers an inexpensive and rapid method of welding tubular steel to other tube or sheet metal structures. Such a technology promises automakers a new way of building stronger, lighter cars in the future that are cost-competitive to manufacture.

"I do not see big leaps in technology but a continuous refinement and improvement," Piette says. "Only if we return to a producing nation will the U.S. be prosperous. Science and technology therefore need to stay at the forefront to make this possible."

The following recap of the Science & Technology Award winners' innovations and breakthroughs are sure to help keep Michigan at



Science & Technology Awards



Philip L. Fioravante, president & CEO
Enterprise Electronics, LLC.

advises clients how to conserve, reuse and implement green, economical and sustainable business practices. EnerWatch Systems helps its customers save money while bringing in a quick return on investment.

Enterprise Electronics of Troy supplies proprietary electronic products such as vehicle electronic-entry keypads. This feature offers drivers the option of opening their vehicles while still carrying their keys in a pocket, purse or briefcase.

Evigia Systems, Inc. of Ann Arbor offers high-performance radio-frequency-identification sensors and tags to significantly improve supply-chain management and trim costs. At the heart of the technology lies Evigia's digital control logic and memory structures that integrate with analog interfaces and radio components.

GraMedica of Macomb makes the HyProCure sinus tarsi stent system, a device that stabilizes misaligned feet in individuals who are 3 years old and older. It cures individuals with flexible flat feet or overpronation — an extremely common condition affecting millions of people worldwide. HyProCure straightens feet, restores the natural arch to the foot and eliminates excessive strain to the knees, hips and back.

Illuminating Concepts of Farmington Hills is one of the world's largest producers of architectural and theatrical lighting, as well as sound and special effects designs. It makes lighting systems for cities, waterfronts and border towns where "smart lighting" is required for homeland security concerns. The firm's other divisions provide services for some of the largest and most prestigious projects in the world.

Indratech Performance Fiber Systems of Auburn Hills produces advanced fiber materials that are safer, more eco-friendly and recyclable than traditional polyurethane (PU) foams. The Indura Performance Fiber System is a polyester fiber product that is 100 percent green, nontoxic and recyclable. Unlike PU foam, it self-extinguishes when exposed to flame and won't produce airborne particles from mold or bacteria.

Lawrence Technological University in Southfield offers more than 100 undergraduate, master's and doctoral degree programs while providing a number of applied research services and community enrichment programs throughout the region. LTU continuously invests in equipment and facilities while recruiting and retaining top faculty and students to train tomorrow's leaders.

The Linux Box of Ann Arbor specializes in open source software technology for a broad range of customers including financial service providers, government agencies, life science companies and utilities. A founding member of Open Source for America, The Linux Box commits

20 percent of its budget to research and develop open source software and also directly funds select open source projects to create new software and ideas.

LLamasoft of Ann Arbor provides supply chain planning technology, software applications and technical services to many of the world's top companies including Intel, General Mills, Conoco Phillips, Pepsico, the Department of Defense and the World Bank. Its technology allows clients to leverage and make the most out of their scarce resources.

Logic Solutions Inc. of Ann Arbor specializes in Web application and Web site development, mobile development, eLearning solutions and social



Ron Harwood, principal and creative
director for Illuminating Concepts.

MARCELO SOMERSTEIN



Dr. Michael E. Graham, podiatric surgeon and CEO of GraMedica.