

miamisburg mound community improvement corporation

summer 2010



#### what's inside:

Mound Awarded \$1 M for Energy Center Initiative page 2

Alliance Seeks Energy Parks Legislation page 2

Business Assistance Services Critical to Company's Success page 3

Mound Goes Green page 3

Mound, Israeli Trade Alliance Exploring Business Ventures page 3



## Mound Laser Tapped for Wind Turbine Research

Wind power is emerging as a promising source of alternative energy. Yet even with \$17 billion invested in wind energy since 2008, the technology needs refinement. And that need is leading one Mound company to an opportunity to advance the entire industry.

Innovation-minded Mound Laser & Photonics Company Inc. is involved in National Science Foundation-funded research to address structural integrity and safety issues resulting from composite wind turbine blades being made bigger – up to 300 feet in diameter – to increase their power-generating capacity.

"When the layers of materials that comprise a blade start to separate, it can cause a real catastrophic failure," said MLPC president Dr. Larry Dosser. "You don't want to be anywhere around when a failure happens."

Blade failures and recalls are costly across the industry. One company, for example, incurred losses of \$25 million in 2008 due to cracks in 1,251 of its blades.

NSF has awarded MLPC a \$150,000 Phase I Small Business Innovation Research grant as the first step toward developing a structural health-monitoring system for composite wind turbine blades. Partnering with the University of Dayton Research Institute, MLPC is developing and testing sensors that can remotely monitor the structural health of a blade and provide warnings if parts are in need of repair or

(Please see "Wind Turbine Research" on page 2)



("Wind Turbine Research" continued from page 1.)

replacement. This same sensor technology can be used for spot checking during component fabrication and inspection.

The Phase I work will include sensor design and fabrication along with testing on composite materials. If a Phase II grant is awarded, it will allow for refinement of the technology, full-scale testing and lead to commercialization of the technology.

In the past MLPC conducted similar research for the Air Force Research Lab, which was looking for a way to detect cracks in aging aircraft.

"We took the technology and spun it into this," Dosser said.

The wind turbine blade project represents the twelfth Phase I Small Business Innovation Research grant awarded to MLPC since 1998.

### laser company in growth mode

Increased marketing efforts, a sales representative on the West Coast, and "a lot of hard work here at Mound" are paying off for Mound Laser & Photonics Inc.

The company's sales forecast for 2010 has doubled, two new lasers valued at \$500,000 are being purchased and five more lab technicians will be hired by year's end, bringing the employment total to 24.

"We are really expanding and growing here," said MLPC President Dr. Larry Dosser. "It's shaping up as a good year."



Mound Laser & Photonics Center is experiencing tremendous growth and plans to add five more lab technicians in 2010, bringing total employment to 24.

# mound awarded \$1 M for energy center initiative

An initiative to redevelop the Mound Advanced Technology Center as an energy center focused on renewable and alternative energy technologies is rapidly gaining momentum.

### Effort to capture opportunities and market share

The latest piece of good news has been the Department of Energy announcement this spring that the site will receive \$1 million in Congressionally directed funding to implement energy efficient and renewable projects. The funds will allow MMCIC to take the preliminary steps necessary for the Mound site's development as an energy park.

"It's important that we take advantage of the opportunity to capture market share right now as technologies and products are evolving," said Mike Grauwelman, MMCIC president. "These innovations will certainly generate new business opportunities, and our goal is to maximize them to benefit our region."

#### Mound companies as energy technology leaders



Mound officials hope to make the technology and business park a national model with a goal to generate all its own power, provide educational opportunities to industry, students and the general public, and create new jobs related to renewable and alternative energy technologies. Several of Mound's 14 tenant companies are leading research and development programs in advanced energy areas such as hydrogen fuel cells and long-life batteries.

"We hope to create a dynamic synergy by developing a commercial center that brings together the various sectors of energy research, development and production," said MMCIC Board Chairman Eric Cluxton. "It will be unique in the Dayton region."

### roundtable focused on energy efficiency

The third in a series of Energy Roundtables was held at Mound on May 5, and brought together nearly 100 representatives of area businesses, development organizations and governments. Some 20 energy-focused companies and organizations exhibited their products and services as well. The day-long event focused on energy efficiency and featured presentations on State of Ohio initiatives and incentive programs, a discussion of energy-efficient building systems, cultural challenges, energy efficiency finance and case studies.



# business assistance services critical to company's success

While many businesses struggled to survive in 2009, one Mound company took its success up a notch. PerkinElmer Miamisburg, a global leader in the development and production of energetic safety devices for the defense and aerospace industries, grew revenues by 50 percent and employment by 70 percent, for a current total of 73 workers.

All the while, PerkinElmer maintained its status as a Defense and Aerospace Center of Excellence and a premier supplier for several Fortune 500 defense contractors.

#### **Bursting at the seams**

Adding new work and new workers has presented a new challenge, however: The company has been bursting at the seams in its current 44,000 square feet of space. "If we want to generate more business, we need space for people to work," said PerkinElmer Miamisburg Vice President and General Manager Doug Benner.

Enter MMCIC and its business assistance services. Through the city of Miamisburg, MMCIC applied to Montgomery County's ED/GE program for funding to help pay for PerkinElmer's facility expansion, improvement and reconfiguration.

#### MMCIC instrumental

The proposal was approved and the ED/GE award of a \$200,000 grant will supplement contributions from the city and MMCIC, as well as the company's own investment, to fund the \$550,000 facility project. As part of its business assistance package, MMCIC will also manage the construction process, which is slated to be completed by year's end.

"MMCIC has been instrumental in making this project possible," said Benner. "As in the past, they have been truly supportive of our success."

#### mound goes green

When Mound businesses said they wanted to do their part to help save the planet, site property manager Turner Property Services Group made it happen. The "Go Green" recycling project has been launched as a free service for the tenants of 965 Capstone Drive.

The results are stellar: Approximately 1.7 tons of office papers were recycled during April and May 2010. This will be remade into new paper and paper products, with savings of the following natural resources:\*

**SAVED** 29 mature trees **SAVED** .29 acres of forest

**REDUCED** Greenhouse gas emissions by 1.7 metric tons of carbon

equivalent

**SAVED** 6,982 kilowatt hours of energy

**SAVED** 11,921 gallons of water

landfill space

**SAVED** 6,642 gallons of oil **SAVED** 20 cubic yards of

\* The amount it would take to make new products from virgin material.

# mound, Israeli trade alliance exploring business ventures

Opportunities come in all shapes, sizes and now, nationalities. The doors to an overseas connection were recently opened for Mound through a visit from the newly appointed business development director for a trade partnership between the Dayton region and the city of Haifa, Israel, both strongholds of innovation in aerospace and defense technologies.

The Dayton Region Israel Trade Alliance is the result of a 2009 agreement that includes the city of Dayton, Montgomery County, the Dayton Development Coalition and Haifa.

Uri Attir visited the Miami Valley with the goal of exploring possible business ventures between Ohio and Israeli technology-based companies. While at Mound, he met with the principals of Precision Joining Technologies, Mound Laser & Photonics Inc. and Mound Technical Solutions.

In addition to the technology, Attir was

quite interested in MMCIC's redevelopment activities because of the planned realignment of various military sites in Israel.

"Uri was also impressed with the extensive business assistance services beyond typical landlord offerings that we provide our

clients," said MMCIC vice president (Ret.) Carl Simmons. "He said our approach to business development parallels that used in Israel."

According to Simmons, the director was interested in Mound's energy initiative and plans to look for opportunities to collaborate on renewable energy activities.



The business development director of the Dayton Region Israel Trade Alliance and other officials spent time discussing business opportunities with Mound business owners during a 10-day visit to the Miami Valley. Pictured here: (left to right) David Silk, SGI Global business Advisors; Howard Gudell, SGI Global Business Advisors; Joe Tuss, Montgomery County; Uri Attir, Dayton Region Israel Trade Alliance; Ann Liebschutz, Executive Director, U.S.-Israel Science & Technology Foundation; Bart Shidecker, City of Dayton; Mike Grauwelman, MMCIC; and Carl Simmons, MMCIC.



www.mound.com 4



P.O. Box 232

Miamisburg, OH 45343-0232

Phone: 937-865-4462

Web Site: www.mound.com

PRESRT STD
U.S. POSTAGE
PAID
PERMIT NO. 1080
DAYTON, OH

**FRONTLINE** is a summary of news

and information about the

Mound Advanced Technology

Center. It is published for

stakeholders by the Miamisburg

Mound Community Improvement

Corporation. We welcome your

comments and suggestions.

Please call us at 937-865-4462.

## congressman honored as steadfast champion

U.S. Rep. Mike Turner has been recognized with a Mound Builder award for his outstanding contributions to the transformation of Mound from a defense weapons facility into a business and technology park. Turner has been a steadfast champion for the completion of environmental cleanup and redevelopment at Mound.

When it appeared in 2007 that the Department of Energy would leave a small area of contamination on the site in an area known as OU-1, Turner called for a Congressional hearing to be held at Mound to draw attention to the issue.

Turner, together with U.S. Rep. David Hobson and other members of the Congressional delegation, also led the effort in Congress to provide adequate funding – \$40 million in total – to ensure that Mound's cleanup is completed.

"Congressman Turner's actions have paved the way for Mound's future success,"



redevelopment effort.

said Miamisburg Mayor Dick Church. "He has worked tirelessly to make certain that the federal government meets its obligations to this community."

Now in its fourth year, the Mound Builder award recognizes individuals who have been leaders in the effort to transform Mound into a successful business and technology park.

