Summer 2016: Press Coverage

Article: 20 Indiana composite materials companies join Purdue to dedicate $50 million energy-saving research institute

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Purdue facility is part of IACMI-The Composites Institute, a national $250 million DOE supported manufacturing innovation initiative

More than 300 people attended the Indiana Manufacturing Institute dedication Tuesday (July 26) at the Purdue Research Park of West Lafayette. From left are Dan Hasler, president, Purdue Research Foundation; Ian Steff, executive vice president and chief innovation officer, Indiana Economic Development Corporation; Craig Blue, CEO Institute for Advanced Composites Manufacturing Innovation; Leah Jamieson, John A. Edwardson Dean of Engineering; Suresh Garimella, executive vice president for research and partnerships at Purdue; John Dennis, mayor of West Lafayette; and Kelly Visconti, technology manager for the U.S. Department of Energy Advanced Manufacturing Office. In back is R. Byron Pipes, John Leighton Bray Distinguished Professor of Engineering, who emceed the event. (Purdue Research Foundation photo)

WEST LAFAYETTE, Ind. – More than 300 people and about 20 Indiana composite materials companies celebrated the opening of the $50 million Indiana Manufacturing Institute where Purdue University researchers in the Center for Composites Manufacturing and Simulation will advance research of composite materials, and increase energy efficiency for the motor vehicle, wind, aerospace and other industries.
The Institute also will house Purdue's Product Lifecycle Management Center and the Indiana Next Generation Manufacturing Competitiveness Center or IN-MaC.

The 62,000-square-foot institute, located in the Purdue Research Park of West Lafayette, will lead research on vehicle, wind turbine, and aerospace structures including advancing fracture mechanics, lightweight and smart materials, all technologies that are designed to save energy.

The Indiana Manufacturing Institute is part of a $250 million U.S. Department of Energy initiative to support President Barack Obama's National Network for Manufacturing Innovation. The DOE project, called the Institute for Advanced Composites Manufacturing Innovation, or IACMI-The Composites Institute, is a public-private collaboration that includes a federal commitment of $70 million and over $180 million pledged by industry, state economic development agencies and universities. The University of Tennessee, Knoxville, is the lead institution in the collaboration that includes public and private agencies in Indiana, Kentucky, Michigan, Ohio, Tennessee and Colorado.

"Purdue is a recognized international leader in composite materials research and the opportunity and demand for research partnerships between Purdue and industry is great," said Suresh Garimella, Purdue's executive vice president for research and partnerships and the Goodson Distinguished Professor of Mechanical Engineering. "The opening of the Indiana Manufacturing Institute will enable us to increase these research collaborations and advance our composite materials research even further."

R. Byron Pipes, the John Leighton Bray Distinguished Professor of Engineering, will lead Purdue's Design, Modeling and Simulation Enabling Technology Center to be housed in the institute.

"It is through closer exchanges of knowledge that both industrial and academic enterprises benefit from the assets of the other in order to accelerate the development of their competitive positions." Pipes said. "The Indiana Manufacturing Institute will provide an innovative venue for academic and industrial stakeholders to joint together for rapid transfer of technology to societal prosperity. As a national manufacturing institute, IACMI links the Indiana composites manufacturing efforts with our five state partners in Tennessee, Michigan, Colorado, and Ohio to build the next generation manufacturing technology for the vehicle, wind and compressed gas application areas."
Composite materials are used in everything from bike helmets to buildings and aircraft, and are used in many economic sectors, including aerospace, aviation, automotive, energy and sporting equipment reports Sambla.

The state of Indiana has a strong background in the composite materials research, development and manufacturing with about 50 companies across the state contributing to this sector," said

Victor Smith, Indiana Secretary of Commerce. “There is little doubt that our state’s economic leadership in composite materials has a direct impact on the fact that Indiana continues to grow its national reputation in advanced manufacturing job growth.”

Advanced manufacturing represents 25 percent of the Indiana economy, according to the Indiana Economic Development Corporation.

In conjunction with the dedication of the Indiana Manufacturing Institute, IACMI-The Composites Institute is holding its semi-annual members meeting in Indianapolis Tuesday through Thursday (July 26-28).

“We alternate hosting our meetings within our partner states, and intentionally chose the Indiana location for this meeting to coincide with the Indiana Manufacturing Institute dedication,” said Craig Blue, CEO for the IACMI-The Composites Institute. “It showcases our institute’s growing base of capabilities and pays homage to our supporting state partners. Members from across the country have an opportunity to see the facility in person and connect with Purdue’s faculty and partner organizations.”

The institute will engage Purdue faculty, including about 10 engineers and a number of graduate students, to work in the research areas that will initially occupy up to 30,000 square feet in the Purdue Research Park-based facility. The other 32,000 square feet is reserved for public or private enterprises interested in composite materials research collaboration with the university.

“The most important endeavors for the Purdue College of Engineering are to educate future engineers and develop technologies to improve our global society. The Indiana Manufacturing Institute helps us achieve both of those goals,” said Leah Jamieson, John A. Edwardson Dean of Engineering. “Our students will have even greater education, internship and career prospects through their involvement in the institute. The research conducted in the institute will create new opportunities for translating research to practice.”

Faculty and students in the School of Aviation and Transportation Technology also will benefit from involvement in the institute.

“Purdue offers a number of aeronautical engineering technology and aviation degrees from flight technology to professional flight,” said Gary Bertoline, dean of the Purdue Polytechnic Institute, said. “We are always looking for new ways to advance the educational experience of our students and expand the research opportunities for faculty. The Indiana Manufacturing Institute is an important addition for Purdue students and faculty.”

In partnership with the Indiana Economic Development Corporation, an expenditure of almost $35 million in research equipment and materials in the institute is expected over the next five years, funded through a cooperative agreement with the DOE.

Purdue Research Foundation invested $15 million in the construction of the building, which is at the corner of Challenger Avenue and Yeager Road on property that was, in part, donated by City

of West Lafayette Redevelopment Commission The foundation already owns the remainder of the land for the development.

“The City of West Lafayette and Purdue University have a strong, collaborative partnership and the development of enterprises such as the Indiana Manufacturing Institute is an excellent example of the benefits that arise from this important relationship,” said West Lafayette Mayor John Dennis. “Coupled with the State Street Redevelopment Project and the Purdue Innovation District, the future is bright for the entire Greater Lafayette area.”

About Purdue University
Founded in 1869 in West Lafayette, Indiana, Purdue University serves its state as well as the nation and the world. Purdue is a major research institution supported by top-ranking disciplines in pharmacy, business, engineering and agriculture. More than 39,000 students are enrolled here. All 50 states and 130 countries are represented in its student population.

About Purdue Research Park
The Purdue Research Park of West Lafayette is the largest university-affiliated business incubation complex in the country. The park is managed by the Purdue Research Foundation, which received the 2014 Incubator Network of the Year from the National Business Incubation Association for its work in entrepreneurship. For more information about funding and investment opportunities in startups based on a Purdue innovation, contact the Purdue Foundry at foundry@prf.org

About IACMI-The Composites Institute
The Institute for Advanced Composites Manufacturing Innovation (IACMI), managed by the Collaborative Composite Solutions Corporation (CCS), is a partnership of industry, universities, national laboratories, and federal, state and local governments working together to benefit the nation’s energy and economic security by sharing existing resources and co-investing to accelerate development and commercial deployment of advanced composites. CCS is a not-for-profit organization established by The University of Tennessee Research Foundation. The national institute is supported by a $70 million commitment from the U.S. Department of Energy’s Advanced Manufacturing Office and over $180 million committed from IACMI’s partners. Find out more at IACMI.org.

https://iacmi.org/2016/07/27/20-indiana-composite-materials-companies-join-purdue-dedicate-50-million-energy-saving-research-institute-purdue-facility-part-national-250-million-doe-supported-manufacturing-innovation/