

White House Picks UT to Lead National Composites Manufacturing Institute

President Obama will announce today that the University of Tennessee, Knoxville, will lead the Institute for Advanced Composites Manufacturing Innovation, or IACMI, a \$259 million public-private partnership. The Institute reflects a \$70 million commitment from the U.S. Department of Energy and \$189 million from IACMI's partners.

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Supported by the Advanced Manufacturing Office in the DOE's Office of Energy Efficiency and Renewable Energy, IACMI joins four other institutes backed by the Obama administration in a recent push to accelerate advanced manufacturing.

The selected team, a 122-member consortium, connects the world's leading manufacturers across the supply chain with universities and national laboratories pioneering advanced composites technology development and research.

Established as a nonprofit 501(c)(3) in Tennessee by the UT Research Foundation, IACMI has received a \$15 million commitment from the Tennessee Department of Economic and Community Development as part of an effort to facilitate breakthroughs in manufacturing and materials.

"This project places the university and its partners in a unique position to strengthen Tennessee's economy," said UT Chancellor Jimmy G. Cheek. "We are very honored to have been selected for this role in shaping the future of composites manufacturing through IACMI. This will build upon our deep collaborations with our consortium partners and spark innovation and growth within our nation's industries."

The Institute is regionally organized around five focus areas: vehicles (Michigan); wind turbines (Colorado); compressed gas storage (Ohio); design, modeling and simulation

(Indiana); and composite materials and processing technology (Tennessee supported by Kentucky).

"The UT Research Foundation's involvement to establish IACMI was critical to the project's success and will further the university's efforts to boost our state's economic development through the creation of new intellectual property," said David Millhorn, UT Research Foundation president and CEO, and UT System executive vice president and vice president for research.

IACMI includes founding partners in Tennessee (University of Tennessee and Oak Ridge National Laboratory), Colorado (National Renewable Energy Laboratory), Indiana (Purdue University), Michigan (Michigan State University), Ohio (University of Dayton Research Institute) and Kentucky (University of Kentucky).

Contributors come from many sectors

The Institute will focus on advanced fiber-reinforced polymer composites that combine strong fibers with tough plastics to yield materials that are lighter and stronger than steel.

The Institute has received commitments from large charter corporate contributors such as those with critical connection to the automotive composites supply chain like Ford, Volkswagen, Dow Chemical Company and DowAksa; premium members with national manufacturing impact like Boeing and Lockheed Martin; and small and medium enterprises like Strongwell Corporation, the world's leading pultrusion company, and Local Motors, the world's leading 3D-printed car company, which are both innovation drivers and local to East Tennessee. More than 90 companies across the supply chain support the project.

While advanced composites are used in selected industries such as aircraft, military vehicles, satellites and luxury cars, these materials remain expensive, require large amounts of energy to manufacture and are difficult to recycle. IACMI aims to overcome these barriers by developing low-cost, high-production, energy-efficient manufacturing and recycling processes for the composites sector.

"This has brought together unprecedented commitment from state governments, industry and research institutions to develop the workforce, create jobs and increase

global manufacturing competitiveness in advanced polymer composites," said new IACMI CEO Craig Blue, a joint ORNL-UT faculty member. "Our state partners include the top five states for automotive employment and companies representing 70 percent of U.S. automotive manufacturing."

"This opportunity adds to the momentum we've already built as a leader in this field," said Wayne Davis, dean of UT's College of Engineering. "This selection, along with our Governor's Chairs, our strategic focus on advanced manufacturing, and our faculty's applied research into woven composites, carbon fiber and residual stress in composites, all serve to showcase our strategic place in the field of advanced materials. We look forward to our role in advancing manufacturing innovation."

Helping manufacturing go green

The plan also dovetails with the DOE's Clean Energy Manufacturing Initiative by encouraging collaboration and moving ahead with production methods and materials that require less energy and resources.

"IACMI will be a significant catalyst in advanced composites materials and manufacturing innovation," said Taylor Eighmy, UT vice chancellor for research and engagement, principal investigator of the project and co-chair of the Institute's board of directors.

"We are grateful to the U.S. Department of Energy and President Obama for this opportunity and will build on our extensive and long-standing partnerships to hit the ground running."

For more information, visit the IACMI website at <http://iacmi.org>.