



# News

**Contact:**

**Debbie Goldberg**

Philadelphia University Director, Media Relations  
215.951.2718/ goldbergd@PhilaU.edu

**Bridget Grady Spears**

Marketing Specialist Composites  
859.534.4537/ bridget.spears@mag-ias.com

## **Philadelphia University and MAG establish new Composites Institute to develop textile-based composites for industrial applications**

*A \$1.1 million contribution from MAG also will help support a unique concentration in composites in the Philadelphia University B.S. in Engineering program*

PHILADELPHIA, January 14, 2011 – Philadelphia University and MAG are establishing the Philadelphia University MAG Composites Institute for research and development of new textile-based composites that could have wide application in industry, including the aerospace, automotive and energy sectors.

The new research institute will be funded in part by \$1.1 million from MAG, whose chairman and chief executive officer is Dr. Eng. Mo I. Meidar, a Philadelphia University alumnus and member of the University's Board of Trustees. MAG, headquartered in New York, is the world's leading developer of automation technologies for producing composite structures, as well as one of the largest global suppliers of machine tools and manufacturing automation systems for the durable goods industry.

In addition to the Philadelphia University MAG Composites Institute, the funding also will support a new B.S. in Engineering program with a concentration in composites, one of the only such programs in the country. The first courses in composites will be offered in fall 2011.

“Our partnership with MAG to support new and important research in composite materials and expand our academic programming in engineering has myriad advantages for both MAG and the University, as well as for our students and faculty and the industries that are likely to benefit from the development of new textile-composite materials,” said Philadelphia University President Stephen Spinelli Jr., Ph.D. “It’s a perfect example of an industry leader and a professional university partnering to create extraordinary opportunities in engineering science and education.”

“An educated workforce in advanced composites technology will see increasing opportunities for generations to come. The Philadelphia University MAG Composites Institute

represents MAG's commitment to expand the level of research and education in this field," said Mo Meidar, chairman and CEO of MAG. "As the global leader in automated composites processing solutions, MAG is driven to support new business opportunities serving a multitude of industries and we believe this partnership will be a key factor in achieving the full potential for new applications of composite materials."

Composites play an increasingly important role in industrial applications across a wide range of fields.

"Composites are important in industry because they are lighter than steel or aluminum and thus provide engineers with a lightweight alternative for use in a broad array of structures for aerospace, automotive and wind-energy applications," said David Brookstein, Sc.D., Philadelphia University's executive dean for university research. One example: vehicles that weigh less tend to have better fuel efficiency than their heavier counterparts.

In particular, woven and braided textiles have been used for fiber reinforcement in composites for many years, Brookstein noted. For instance, Boeing has announced that up to 50 percent of the primary structure – including the fuselage and wing – of its new 787 Dreamliner airplane will be made of composite materials. Brookstein said some of those are textile-based composites.

"We applaud and encourage the Philadelphia University vision of expanding its resources, student opportunities and industry involvement in composite technologies," said Robert Vitlip, associate technical fellow, Composites Manufacturing Technology at Boeing Philadelphia. "It is our shared belief that an investment in technology growth is required to secure an industry competitive and economic advantage."

The Philadelphia University MAG Composites Institute will use analytical tools, such as finite element analysis, to design and research new textile-based composites from both two-dimensional and three-dimensional textile performs. And, Brookstein said, "adding composites to our B.S. in Engineering program will provide our students with an engineering education that is rich in the basics of mechanical engineering, and which has the added value of a composites concentration."

The Philadelphia University MAG Composites Institute builds on the University's legacy as the nation's first textile school and its considerable expertise in advanced textile-related research. In fall 2009, Philadelphia University established the Biomedical Textile Structures Laboratory to develop textile-based products for medical use and in 2004 established the Laboratory for Engineering Human Protection to assist the military in designing and developing new protection systems for military personnel.

"The creation of this Institute embodies the innovation made possible by the intersection of industry-leading partners and the integrative learning approach of our new College of Design, Engineering and Commerce," said D.R. Widder, Philadelphia University's executive director of innovation.

The establishment of the Philadelphia University MAG Composites Institute builds on a similar MAG donation in 2009, when the company provided a state-of-the-art \$100,000 machining center to the University's School of Engineering and Textiles to manufacture prototypes.

Philadelphia University, founded in 1884, is developing the model for professional university education in the 21<sup>st</sup> century. With 3,500 students enrolled in more than 60 undergraduate and graduate programs, the University focuses on professional programs that prepare students to be leaders in their professions, in an active, collaborative and real-world learning environment with a strong foundation in the liberal arts. Philadelphia University includes Schools of Architecture, Business Administration, Design and Engineering, Liberal Arts and Science and Health. In fall 2011, the School of Design and Engineering and the School of Business Administration will merge into a new and innovative College of Design, Engineering and Commerce.

MAG is a leading machine tool and systems company serving the durable goods industry worldwide with complete manufacturing solutions for metal cutting and composites applications. With a strong foundation based upon renowned brands such as Boehringer, Cincinnati, Cross Hüller, Ex-Cell-O, Fadal, Giddings & Lewis, Hessapp, Honsberg, Hüller Hille and Witzig & Frank, MAG is recognized as the preeminent provider of tailored production solutions based on state-of-the-art technology. Key industrial markets served include aerospace, automotive and truck, heavy equipment, oil and gas, rail, solar energy, wind turbine production and general machining.

With manufacturing and support operations strategically located worldwide, MAG offers comprehensive lines of equipment and technologies including turning, milling, hobbing, grinding, honing, systems integration, composites processing, maintenance, automation and software, tooling and fluids, and core components.

For more information about MAG, please visit: [www.mag-ias.com](http://www.mag-ias.com).

For more information about Philadelphia University, please visit: [www.PhilaU.edu](http://www.PhilaU.edu).