Manufacturing is in Georgia Tech’s DNA: GTMI Binds it Together

Georgia Tech has a 125-year history with manufacturing, earning it a reputation as an industry thought leader. Georgia Tech President G. P. “Bud” Peterson is one of six university presidents to serve on the Steering Committee for the Advanced Manufacturing Partnership (AMP). AMP is a national public-private effort that is charting the course for developing emerging technologies, creating high-quality manufacturing jobs, and enhancing U.S. global competitiveness.

The Georgia Tech Manufacturing Institute (GTMI) is one of 10 interdisciplinary research institutes (IRI) at Georgia Tech. IRIs exist to make it easier to create transformative opportunities, strengthen collaborative partnerships, and maximize the societal impact of the research being done at Georgia Tech. Both government and industry work with Tech’s IRIs to connect with a large portfolio of basic and applied research programs, to create and use novel research laboratories, to interact with Georgia Tech students, and to collaborate with other research partners.

GTMI is a cutting-edge interdisciplinary research institute that tackles the challenges facing today’s manufacturers. We focus on the complete innovation value chain — from raw and recycled resources to prototypes and finished products — and develop materials, systems, processes, education programs, and policies. GTMI is a leader in moving innovation from lab to market. Its comprehensive expertise ranges from manufacturing processes and factory automation to supply chain management and enterprise transformation. GTMI also offers a hands-on educational experience that produces scientists and engineers who are innovative, collaborative, adaptive and well-suited for the rapidly evolving world of manufacturing.

Collaboration and Innovation are Core Strengths

Among GTMI’s recognitions are:

- Named a Boeing Supplier of the Year and serves as one of the company’s eight university partners
- Awarded a grant to develop and lead the Consortium for Accelerated Innovation and Insertion of Advanced Composites (CAIIAC)
- Named a Caterpillar “University Center of Excellence in Machining-Related Research”
- A Siemens research partner for 25 years and counting

GTMI develops international standards for electronics, solar energy, woodworking and precision machining industries that allow companies to easily work together, compare results and exchange data.

Major Research Thrusts

GTMI works with Georgia Tech colleges, industry, small businesses, government and with numerous consortia. The major intellectual themes and research thrusts are: Additive Manufacturing, Automation, Cell Manufacturing, Clean Energy Manufacturing, Factory Information Systems, Industrial Design, Model-Based Systems Engineering, Nano-Composite Processing, Precision Machining, Public Policy, Supply Chain & Logistics, and Sustainable Design & Manufacturing.

Advancing Manufacturing Innovation

Since 1991, GTMI has invested $58 million in its research complex, comprising 400,000-sq.-ft. of state-of-the-art R&D facilities. GTMI has assisted in the development of 20 spinoff companies including: AkroMetrix, Applied Thermoplastics Resources, CAMotion, CAMotion Cranes, CardioMEMS, DDM Systems, DHX Electric Machines, Factory Right, GTC, Innovolt, InterCax, MedShape, Polartek Systems, Qcept Technologies, Radatec, Sntristic, Suniva, Vendormate, Verco Materials and viaCycle.