

**Examples of the NANOMATERIALS APPLICATION CENTER [NAC] commercialization efforts:**

Internal Texas State University development:

**CBDO** is an enhanced nano-composite material that is the first improvement in bullet resistance since the invention of polycarbonate in the 1960s. CBDO has been tested to be 40% stronger than current materials. It is being considered by the Marines for the Cobra helicopter transparent armor. Unlike polycarbonate, CBDO increases in strength as it is made thicker. [Promo available at <http://www.nanotxstate.org/images/TxMo2.pdf>]

NAC Member companies include a mixture of startups and established companies. Selected examples:

**Xitronix Corporation** is developing metrology equipment that enables semiconductor manufacturers to control their manufacturing processes at 45nm and below. Results shown at SEMICON West 2007 and directly to customers have generated significant interest worldwide. Equipment development efforts are located in the Physics Building (Mitte Hall). Web site is <http://www.xitronixcorp.com/>.



**Nanotailor, Inc.** is developing a manufacturing process for carbon nanotubes. The R&D manufacturing equipment, which is currently under development in the Chemistry Building, will provide a process for high volume manufacturing. Web site is <http://www.nanotailor.com/>.



**nanoTox, Inc.** is focusing on the issues of developing the methodology for appropriate testing of nanomaterials and their impact on both humans and the environment. **nanoTox** recently moved from Texas State University to larger quarters in an industrial complex near the Austin Bergstrom International Airport in order to better serve international companies. Web site is <http://www.nanotox.com/>.



**GigaCircuits, Inc.**, is developing a novel approach to the manufacture of embedded passive components in circuit boards. The increased reliability of the components will raise the quality of miniature devices, like PDAs, and permit an increase in functionality in a smaller package. Web site is <http://www.gigacircuits.com/>.



**Cerimulabs, Inc.**, is a spinoff of Advanced Micro Devices (AMD) and has a focus on providing an independent source of metrology analysis for emerging technology companies. They have a significant amount of leading edge capabilities along with the expertise to provide precise and accurate results. Web site is <http://www.ceriumlabs.com/>.



**Applied Nanotech, Inc.**, is an established nanotechnology company that has many products including carbon nanotube based displays, nanomaterial products, and nano based sensors. Web site is located at <http://www.appliednanotech.net/>.



Emerging Technology Startups:

There are currently a number of startup companies that are involved with researchers through NAC. Due to the nature of their efforts, only the application field will be mentioned and not any other details to protect their developing Intellectual Property. **Company #1** is developing a unique wireless application to address law enforcement needs. **Company #2** is working on an improved and cost effective method of desalinization. There are **three different** collaborations under way with companies in both the US and Japan on different approaches to solar energy. **Many other efforts** are addressing development of emerging technology products.

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