

New Venture in Dayton, Ohio Set to Commercialize Nanotechnology-based Materials for Use in Manufacturing



(Dayton, Ohio) - North Carolina-based NanoTechLabs has teamed with the National Composite Center in Dayton to create a new division called Buckeye Composites. Housed at the National Composite Center's headquarters, Buckeye Composites will focus on commercialization, scale-up and production of composite materials that use buckypaper, according to a news release.

Buckypaper contains carbon nanotubes, also known as CNTs, or other carbon nanomaterial in a membrane or paper-like format and is the core technology behind the new division. What began as development work between NCC and NanoTechLabs has resulted in manufacturing successes that include the production of a 12-inch-wide by 50 foot roll of buckypaper – the largest sample known to be produced to date.

Buckypaper can be used by manufacturers in existing production lines to replace metallic surface layers that are bonded to composites. The result is enhanced thermal and electrical properties while reducing weight.

Construction and installation of a 12-inch-wide continuous line in the National Composite Center's nano facilities has recently been completed. Buckeye Composites will initially target thermal and electrical property enhancements for aerospace applications while reducing weight relative to existing material solutions. Contract work will be performed for the Air Force.

“One of the benefits of our buckypaper process is its versatility,” said Jessica Ravine, Ohio Division President for Buckeye Composites. “We can use a variety of carbon nanomaterials including CNTs, carbon nanofibers (CNFs), and nano scale graphene platelets. We can also incorporate binders during the paper making process or during post production pre-pregging steps.”

According to Ravine, the buckypaper process is very scaleable and the company has plans to scale to a 52-inch wide continuous process. Buckeye Composites is tapping resources in Dayton through National Composite Center's business incubation program.

A quick commercialization agent and manufacturing accelerator, National Composite Center's business incubation services include floor space for scale-up, business spin-off, supplier and distribution sources as well as a complete value chain that has helped to grow 50 companies and produce over 600 jobs in the last decade.

For more information about the National Composite Center visit <http://www.compositecenter.org/>

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