

# **ALD NanoSolutions, Inc.**

*Precision NanoCoating for NanoParticles*

## **ALD NanoSolutions Awarded \$469,000 Phase II STTR Grant from NSF**

Boulder, Colorado- July 23, 2004 – ALD NanoSolutions, Inc. has announced today the award of a \$469,030 Phase II STTR grant from the National Science Foundation (NSF) for “Novel NanoCoated FerroMagnetic Materials.” These funds will be used to further the company’s research on nano-scale material applications using a proprietary Atomic Layer Deposition (ALD) process to control particle surface chemistry.

Dr. Karen Buechler, President of ALD Nanosolutions commented: “The STTR Phase II project will capitalize on the great successes of the Phase I program by demonstrating that the nanocoating of fine ferromagnetic particles can be scaled up and that such nanocomposite particles have commercial uses. Fine iron particles are used in a variety of applications such as metal injection molding, radar absorption, localized drug delivery carriers, electronic devices etc. Most of these applications would benefit from a smaller initial iron particle size and reduced oxidation sensitivity. The Phase I program demonstrated that Atomic Layer Deposition (ALD) of an alumina film can provide these properties. The objectives of the Phase II program are to demonstrate the scalability of the process as well as to work with supporting companies to develop specific products for commercial markets. A pilot scale facility will be constructed to increase the scale of production to provide the kg quantities of material that most partners require for product development. This facility will be optimized to provide the best quality coatings at the lowest production cost. It is anticipated that at the close of the Phase II program, ALD NanoSolutions will have developed at least one market for commercial production with 2-4 markets still being developed.”

ALD Nanosolutions stated that this research, done in partnership with the George/Weimer Laboratories at the University of Colorado – Boulder, will provide further validation of the company’s command in functionalizing and passivating particle substrate applications.

### **About ALD NanoSolutions**

ALD NanoSolutions, Inc. was founded in 2002 by P. Michael Masterson, Dr. Karen Buechler, and University of Colorado Professors Dr. Steven George and Dr. Alan Weimer. The company’s proprietary technology is based on atomic layer deposition (ALD) coating chemistry methods developed by Dr. George and Dr. Weimer for depositing ultra-thin films on particulate and polymeric surfaces. The company is focused on commercializing its nano-coating processes, called Particle ALD™ and Polymer ALD™, and is targeting collaborative research agreements with domain partners for the

discovery and validation of innovative composite materials in selected industries. For more information, visit [www.aldnanosolutions.com](http://www.aldnanosolutions.com).

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