

ALD NanoSolutions, Inc.

Precision NanoCoating for Nano Particles

ALD NanoSolutions Awarded \$750,000 Phase II STTR DOE Grant

July 14, 2004 – ALD NanoSolutions, Inc. has announced today the award of a \$750,000 Phase II Small Business Technology Transfer (STTR) grant from the Department of Energy (DOE) for “Novel Polymer Nanocomposite Processing.” 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.

ALD NanoSolutions will demonstrate a new technique to produce polymer/inorganic composites. This will involve micron sized polymer particles with a thin film of inorganic prior to extruding these materials into a film or finished part. In comparison to the conventional blending technology, this method has the advantage of perfect pre-mixing of the inorganic into the polymer.

“Our (ALD NanoSolutions) strength is in designing new materials at nano-scale and in the large menu of films we can coat on new materials,” said Karen Buechler, PhD., President and Chief Technology Officer, ALD NanoSolutions. “We believe we’re one of the few companies to take platform coating technology and successfully apply it to small particles. The most unique aspect of the DOE program is the ability to coat the polymer particles with a ceramic material at near room temperature.”

This research, done in partnership with the George/Weimer Laboratories at the University of Colorado – Boulder, shows the company’s command in functionalizing and passivating substrate innovative 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 and fluidized bed processing 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. ALD NanoSolutions has been named one of *R & D* magazine’s top 100 innovations for 2004.

