

## Case Study Research and Development in Nanomaterials

**CUSTOMER:** U.S. Department of Defense (DoD)  
**CONTRACT #:** W911SR-09-C-0030  
**PROJECT NAME:** SBIR Project, "Low Cost Method for Metal Nano-Coating of Anisotropic Carbon Fibers"  
**PROJECT DURATION:** 2009-2010

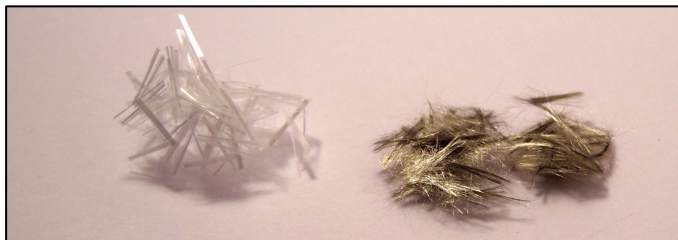
### OVERVIEW

The US Department of Defense solicited a SBIR/STTR request for proposal (RFP) for the design and development of metal nano-coatings on carbon fibers. These coated carbon fibers can be used as a microwave absorbent for aerosols in military applications. Aegis Technology was awarded the project in 2009 and completed the project in 2010.

### DELIVERABLES

Aegis Technology delivered several types of coated fibers. In the process, Aegis Technology conducted:

- Processing
- Scanning Electron Microscope (SEM) Characterization
- Energy-dispersive X-Ray Spectroscopy (EDS)



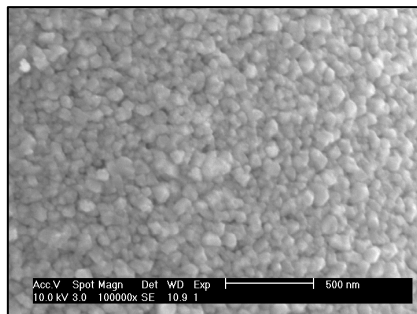
(a)

(b)

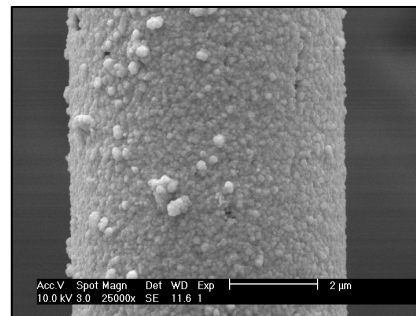


(c)

(d)



(e)



(f)

(a) Uncoated Glass Fiber, (b) Silver nano-coated glass fiber, (c) Uncoated Carbon fiber,  
(d) Silver nano-coated carbon fiber, (e) SEM image of silver nano-coating on glass fiber,  
(f) SEM image of silver nano-coating on carbon fiber

### CONTACT

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