Nanogenesis Group Wins DARPA SBIR Phase II Solar Energy Award

Huntsville, Alabama (July 15, 2011) - Nanogenesis, A Division of AEgis Technologies, has won a DARPA SBIR Phase II Solar Energy Award for its proposal entitled Photonic Band Gap Structures for Solar Energy Generation.

Nanogenesis is developing solar cells with higher efficiency than current photovoltaic (PV) devices. The technology employs nanostructures that greatly enhance the concentration of light within the cell. By combining these nanostructures with multi-junction cells that accept light from the entire solar spectrum, the device offers the potential for higher efficiency and performance for power generation applications. These wideband PV devices with plasmonic concentrators can be built using thin-film technology, which will provide a low-cost and highly efficient solar energy source. AEgis will model, design, fabricate and test wideband PV devices with plasmonic enhancement.

“U.S. soldiers on patrol in a remote locale are outfitted in the latest high-tech gadgetry - radios, night vision goggles, navigation gear - devices that enhance mission capabilities and help keep the infantry safe. However, this means more batteries to carry and therefore more weight (20-30lb), which last only 3 to 7 days. The development of low cost, compact, portable, efficient and flexible solar cell technology will enable the production of lightweight solar panels that can be portable and will enable powering critical electronic equipments for the soldiers making them more self-sustainable, particularly in remote areas,” said Dr. Neset Akozbek, PhD, Research Physicist and Principal Investigator for this proposal effort.

“Our goal is to provide a cost competitive solar power solution,” added David Thomas, VP of the advanced technology development arm of AEgis called Nanogenesis. “We have assembled a world-class team that is working diligently to minimize the device cost while maximizing efficiency.”

About The AEgis Technologies Group Inc.
The AEgis Technologies Group is a privately held small business headquartered in Huntsville, Alabama, USA, that provides expert modeling & simulation (M&S) and nanotechnology development services to industries throughout the world. The company’s products and services include simulation software and (more)
training systems; warfighter exercise support; simulation development and integration; geospatial programs; systems engineering and analysis; verification, validation, and accreditation (VV&A); and test and evaluation support. AEgis’ Nanogenesis Division excels in advancing cutting edge micro and nanoscale technologies from concept to deployment with applications ranging from defense to energy to biotechnology.

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