



DARPA Awards Ascent Solar Team Multi-Million Dollar Contract for High-Efficiency Low-Cost Portable Photovoltaics (PoP) Program

THORNTON, Colo., Jun 22, 2010 (BUSINESS WIRE) -- Ascent Solar Technologies, Inc. (NASDAQ:ASTI), a developer of state of the art flexible thin-film solar modules, announced today that the Defense Advanced Research Projects Agency (DARPA) has selected their team for an award under the Low-Cost Lightweight Portable Photovoltaics (PoP) solicitation. The ASTI-led program, entitled "Flexible High-performance Tandem-junction PV Array", consists of three gated phases, the first of which is 18 months and has an approximate contract value of \$3.8M. The entire program is anticipated to continue over the next 54 months. The goal of PoP is to demonstrate low-cost, lightweight photovoltaics (PV) that can stand up to battle conditions and environmental extremes while delivering a power conversion efficiency of 20% or greater by the end of the program.

ASTI leads a highly-talented team of small businesses (ITN Energy Systems, Littleton, CO, Cambrios Technologies Company, Sunnyvale, CA, Brewer Science, Rolla, MO), large business (QinetiQ North America-TSG, Boston, MA) and academia (Institute of Energy Conversion (IEC), Newark, DE) partners to leverage their collective expertise with dedicated funding from DARPA to meet the highly aggressive goals of the PoP program.

"We are excited that DARPA selected our team for the PoP project," stated Farhad Moghadam, President and CEO of Ascent Solar. "In order to meet the aggressive goals of performance, capacity, and military toughness, our team has put together a definitive plan that combines our flexible CIGS production experience and existing MILSTD 810G military product, advanced high-temperature substrates from QinetiQ, the combined expertise in multijunction thin film technology from ASTI and IEC, films for optical and electrical enhancement from Brewer and Cambrios, and enhanced packaging technologies being developed by ITN and ASTI. The outcome of the program dovetails nicely with our existing technology improvement pathway for our flexible thin film monolithically integrated CIGS-based PV modules at 20% module efficiency for the Department of Defense (DoD)."

About Ascent Solar Technologies:

Ascent Solar Technologies, Inc. is a developer of thin-film photovoltaic modules with substrate materials that can be more flexible and affordable than most traditional solar panels. Ascent Solar modules can be directly integrated into standard building materials, commercial transportation, space applications, consumer electronics for portable power or configured as stand alone modules for large scale terrestrial deployment. Ascent Solar is headquartered in Thornton, Colo. Additional information can be found at www.ascentsolar.com.

About ITN Energy Systems:

After working for more than 20 years in aerospace industry, Dr. Mohan Misra founded ITN Energy Systems, Inc. (ITNES) in 1994 to bring aerospace know-how to the commercial marketplace. ITNES primary mission is to identify, develop and commercialize emerging technologies for defense and commercial markets by establishing successful spin-offs, joint ventures or licensing arrangements. ITNES focuses on developing advanced products and technologies that address the needs of today's competitive business environment, which is driven by the technology revolution. ITNES has built a diverse and growing technology portfolio for CleanTech including energy generation and storage, energy efficiency, and environment applications, which has provided ITNES with an unprecedented growth opportunity in the past as well as in the future. Since 1996 ITNES has successfully spun-off four companies, they are Global Solar Energy (www.globalsolar.com), Infinite Power Solutions (www.infinitepowersolutions.com), Microsat Systems (www.microsatsystems.com) and Ascent Solar Technologies (www.ascentsolar.com). For more information on ITNES please visit www.itnes.com.

About Brewer Science

Brewer Science delivers innovative material, process, and equipment solutions for various applications including nanotechnology, lithography, advanced packaging, MEMS, optoelectronics, and compound semiconductors. As the inventor of ARC(R) anti-reflective coating products for the microlithography world, Brewer Science continues to expand its scope with CNTRENE(R) microelectronics-grade carbon nanotube solutions, ProTEK(R) temporary etch protective coatings, WaferBOND (R) temporary bonding materials, OptiINDEX(TM) high refractive index coatings, and Cee(R) processing equipment. Additional information can be found at www.brewerscience.com.

About Cambrios

Cambrios is an electronic materials company that develops proprietary, competitive products using nanotechnology. Cambrios implements its novel technology to simplify electronics manufacturing processes, improve end-product performance and identify ways to satisfy unmet industry needs. The company's first product is ClearOhm(TM) coating material that produces a transparent, conductive film by wet processing. ClearOhm(TM) films have improved properties by comparison to currently used materials such as indium tin oxide and other transparent conductive oxides. Applications of ClearOhm(TM) coating material include transparent electrodes for touch screens, liquid crystal displays, e-paper, OLED devices, and thin film photovoltaics. Additional information can be found at www.cambrios.com.

About QinetiQ North America's Technology Solutions Group

QinetiQ North America's Technology Solutions Group includes the businesses of Foster-Miller, Inc. and its subsidiaries Planning Systems Incorporated - PSI, Automatika, Applied Perception, Spectro, Inc., plus the research and development activities of Apogen Technologies, Inc. It is a technology and product development business with an international reputation for delivering innovative products and systems that perform under the most demanding conditions. Additional information can be found at www.qinetiq-na.com.

About the Institute of Energy Conversion (IEC)

The Institute of Energy Conversion (IEC), established at the University of Delaware in 1972, is a laboratory devoted to research and development of thin-film photovoltaic solar cells and other photonic devices. IEC was designated a University Center of Excellence for Photovoltaic Research and Education by the Department of Energy and the National Renewable Energy Laboratory in 1992. Fundamental materials and device research is carried out in parallel with process engineering studies and analysis of film deposition and processing. The broad scope of the research and development effort offers opportunity for study in the fields of physics, chemistry, materials science, chemical engineering, mechanical engineering, and electrical engineering as well as collaboration with industrial groups seeking to manufacture and commercialize photovoltaics. IEC is a totally integrated laboratory in which materials and films are synthesized and characterized and electrical devices are fabricated and analyzed, offering the unique experience of correlating properties of completed devices with their fabrication processing all under one roof. Close collaboration between IEC staff and thin film photovoltaic industrial partners insures that the research is relevant to today's technology and includes state-of-the-art process development.

Forward Looking Statements:

Statements in this press release that are not statements of historical or current fact constitute "forward-looking statements." Such forward-looking statements involve known and unknown risks, uncertainties and other unknown factors that could cause the Company's actual operating results to be materially different from any historical results or from any future results expressed or implied by such forward-looking statements. In addition to statements that explicitly describe these risks and uncertainties, readers are urged to consider statements that contain terms such as "believes," "belief," "expects," "expect," "intends," "intend," "anticipate," "anticipates," "plans," "plan," to be uncertain and forward-looking. The forward-looking statements contained herein are also subject generally to other risks and uncertainties that are described from time to time in the Company's filings with the Securities and Exchange Commission.

SOURCE: Ascent Solar Technologies, Inc.

Ascent Solar Technologies, Inc.
Brian Blackman, 720-872-5107 (Investor Relations)
bblackman@ascentsolar.com

or
Brand Fortified Public Relations
Kelly Brandner, 303-289-4303 (Media)
kellybrandner@msn.com

Copyright Business Wire 2010