

NEWS RELEASE

COMPANY CONTACT

Doug Baker
Applied Nanotech Holdings, Inc.
248.391.0612
dbaker@appliednanotech.net

Applied Nanotech Holdings Expands its Presence in Solar Field

Austin, TX, January 27, 2010 – Applied Nanotech Holdings, Inc. (OTC BB: APNT) announced that it has entered into an agreement with Arima Eco Energy Technologies Corporation of Taiwan (ArimaEco), a world leader in concentrated photovoltaic (CPV) module development, system integration, and installation with systems deployed in Asia and Europe.

CPV systems utilizing multi-junction solar cells offer the highest efficiency of commercially available solar technology. As part of the collaboration between the two companies, ANI will take advantage of the high thermal diffusivity and low CTE of CarbAI™ material to further improve the efficiency and lifetime of CPV systems by increasing the sun concentration, reducing solar cell temperatures, limiting temperature fluctuations, and reducing thermal stresses caused by different rates of thermal expansion.

As part of the agreement, ANI will also represent ArimaEco CPV systems in the State of Texas on an exclusive basis. Working with ArimaEco, ANI intends to implement its concept of “energy fields” by combining the existing land and infrastructure for capturing wind energy in Texas with high efficiency and low cost CPV solar energy systems. This will enable wind energy fields to transform to higher value renewable energy fields, combining both wind and solar power generation. CPV solar energy is extremely well suited to Texas, given the sunny climate, pre-existing wind farms, and transmission infrastructure.

ANI will introduce the ArimaEco CPV module at the Photovoltaic World Pavilion at the Renewable Energy World Conference and Expo in Austin TX, February 23-25 along with CarbAI™ material.

“We are optimistic about the collaboration with ANI and we are looking forward to further the implementation of CPV solar energy in Texas by integrating both companies’ capabilities and resources,” said Mr. Howard Chou, Sales and Marketing Manager of ArimaEco.

“I am confident that ArimaEco CPV systems will benefit from our nanotechnological tailored CarbAI™ material for improved thermal management,” said Dr. Zvi Yaniv, President and CEO of Applied Nanotech, Inc.

“It is part of our strategic direction to become closer to the end product user and be less reliant on others for revenue generation and commercialization of our technology,” said Doug Baker, CEO of Applied Nanotech Holdings, Inc. “I am pleased that we have entered into this relationship with ArimaEco. This strengthens our position in the renewable energy field and complements our funded projects related to the development of technical inks for the solar energy market.”

ABOUT APPLIED NANOTECH HOLDINGS, INC.

Applied Nanotech Holdings, Inc. is a premier research and commercialization organization focused on solving problems at the molecular level. Its team of PhD level scientists and engineers work with companies and other organizations to solve technical impasses and create innovations that will create a competitive advantage. The business model is to license patents and technology to partners that will manufacture and distribute products using the technology. Applied Nanotech has over 250 patents or patents pending. Applied Nanotech's website is www.appliednanotech.net.

ABOUT ARIMA ECO TECHNOLOGIES CORPORATION

ArimaEco is a leading CPV system integrator and total solution provider in the sector of CPV solar energy. ArimaEco's high concentration photovoltaic (HCPV) modules have passed indoor tests under IEC62108 standards and obtained compliance certification in 2008. Currently ArimaEco is one among the very few global CPV players that has CPV power plant design and installation experience. ArimaEco's vision is to be a HCPV system total solution provider offering a better solution for solar energy and help users to create more value by implementing CPV technology. ArimaEco's website is www.arimaeco.com

SAFE HARBOR STATEMENT

This press release contains forward-looking statements that involve risks and uncertainties concerning our business, products, and financial results. Actual results may differ materially from the results predicted. More information about potential risk factors that could affect our business, products, and financial results are included in our annual report on Form 10-K for the fiscal year ended December 31, 2008, and in reports subsequently filed by us with the Securities and Exchange Commission ("SEC"). All documents are available through the SEC's Electronic Data Gathering Analysis and Retrieval System (EDGAR) at www.sec.gov or from our website listed above. We hereby disclaim any obligation to publicly update the information provided above, including forward-looking statements, to reflect subsequent events or circumstances.

###