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## **Amtech Systems Awarded Almost \$1 million in Funding from the U.S. Department of Energy SunShot Initiative**

TEMPE, Ariz., Nov. 17, 2015 /PRNewswire/ -- Amtech Systems, Inc. (NASDAQ: ASYS), a global supplier of production equipment and related supplies for the solar, semiconductor, and LED markets, today reported that it was selected for a cooperative award totaling almost \$1 million from the [U.S. Department of Energy SunShot Initiative](#).

The award is a part of the SunShot Initiative Technology-to-Market Incubator Round 10 program and supports Amtech's ongoing focus on the advancement of crystalline silicon (c-Si) solar cell technology, particularly in key specialized areas of doping and surface passivation technologies. This initiative is a pilot-production level project and seeks to develop a novel, low-cost passivation technology to enhance the energy conversion efficiency in c-Si solar cells and ultimately reduce the cost of the electricity generated.

The technology uses a patented, concept-proven method of charge introduction into a surface passivation film. The introduced charge forms a strong surface electric field and helps to prevent photo-generated carrier loss and to improve cell efficiency. This charge-injection method does not cause negative side effects like parasitic film deposition or corrosion inside of the processing tool, which leads to a significant reduction in its total cost of ownership. As a result, this new method can be a low-cost alternative to the current aluminum oxide ( $\text{Al}_2\text{O}_3$ ) passivation technology. The charge stability or reliability is a key concern for the commercialization of the technology and this project aims to improve stability by developing the optimal cell structure for this application.

Mr. Fokko Pentinga, Chief Executive Officer of Amtech, commented, "The innovation culture across Amtech's businesses positions us very well to further our research, technologies, and product development as we closely align our efforts with the objectives of the SunShot Initiative. We are pleased that our never-ending focus on advancing solar cell efficiency is recognized by the U.S. Department of Energy. We are dedicated to driving progress within the solar industry as demand for next-generation technology solutions continues to grow around the globe."

This funding opportunity is expected to expedite the commercialization of the technology while introducing important new equipment to the solar industry. The year-long project will be conducted as a cross-divisional effort utilizing resources from Amtech and its subsidiary BTU International. Amtech will also partner with the Georgia Institute of Technology (Georgia Tech), a recognized leader in solar cell research. Amtech and BTU will focus on the optimization of charging tool operation and test wafer-level charging experiment for various passivation stack options. Georgia Tech will focus on the development of advanced solar cell structures for the charging application.

## About the SunShot Initiative

The [U.S. Department of Energy SunShot Initiative](#) is a collaborative national effort that aggressively drives innovation to make solar energy fully cost-competitive with traditional energy sources before the end of the decade. Through SunShot, the Energy Department supports efforts by private companies, universities, and national laboratories to drive down the cost of solar electricity to \$0.06 per kilowatt-hour. Learn more at [energy.gov/sunshot](http://energy.gov/sunshot).

## About Amtech Systems, Inc.

Amtech Systems, Inc. is a global supplier of advanced thermal processing equipment to the solar, semiconductor / electronics, and LED manufacturing markets. Amtech's equipment includes diffusion, ALD and PECVD systems, and solder reflow systems. Amtech also supplies wafer handling automation and polishing equipment and related consumable products. The Company's wafer handling, thermal processing and consumable products currently address the diffusion, oxidation, and deposition steps used in the fabrication of solar cells, LEDs, semiconductors, MEMS, printed circuit boards, semiconductor packaging, and the polishing of newly sliced sapphire and silicon wafers. Amtech's products are recognized under the leading brand names Tempress Systems™, Bruce Technologies™, PR Hoffman™, R2D Automation™, SoLayTec, and BTU International.

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## Cautionary Note Regarding Forward-Looking Statements

Certain information contained in this press release is forward-looking in nature. All statements in this press release, or made by management of Amtech Systems, Inc. and its subsidiaries ("Amtech"), other than statements of historical fact, are hereby identified as "forward-looking statements" (as such term is defined in Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended). In some cases, forward-looking statements can be identified by terminology such as "may," "will," "should," "would," "expects," "plans," "anticipates," "intends," "believes," "estimates," "predicts," "potential," "continue," or the negative of these terms or other comparable terminology or our management are intended to identify such forward-looking statements. Examples of forward-looking statements include statements regarding Amtech's future financial results, operating results, business strategies, projected costs, products under development, competitive positions, and plans and objectives of Amtech and its management for future operations. These statements are not guarantees of future performance and involve risks, uncertainties and assumptions that are difficult to predict. The Form 10-K that Amtech filed with the Securities and Exchange Commission (the "SEC") for the year-ended September 30, 2014, listed various important factors that could affect the company's future operating results and financial condition and could cause actual results to differ materially from historical results and expectations based on forward-looking statements made in this document or elsewhere by Amtech or on its behalf. These factors can be found under the heading "Risk Factors" in the Form 10-Ks and investors should refer

to them. Because it is not possible to predict or identify all such factors, any such list cannot be considered a complete set of all potential risks or uncertainties. Except as required by law, we undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events, or otherwise.

To view the original version on PR Newswire, visit:<http://www.prnewswire.com/news-releases/amtech-systems-awarded-almost-1-million-in-funding-from-the-us-department-of-energy-sunshot-initiative-300180078.html>

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