

May 16, 2014



Amtech to Exhibit at 8th Annual SNEC Solar Industry Exhibition & Conference in Shanghai, China May 20-22, 2014

TEMPE, Ariz., May 16, 2014 /PRNewswire/ -- Amtech Systems, Inc. (NASDAQ: ASYS), a global supplier of production and automation systems and related supplies for the manufacture of [solar cells](#), semiconductors, and sapphire and silicon wafers, today announced that the Company, along with its solar subsidiary, Tempress Systems, will exhibit at the 8th International Photovoltaic Power Generation Conference & Exhibition (SNEC 2014) May 20-22, 2014, in Shanghai, China at the Shanghai New International Expo Center (Hall E3, Booth 330).

To enable the PV roadmap towards lower cost and higher efficiencies, Tempress Systems is introducing two main innovations at next week's SNEC 2014:

- **HD-POCl₃TM Atmospheric High Throughput Diffusion:** With throughput in excess of 3,200 wafers per hour (WPH) Tempress Systems is taking the next step in POCl₃ processing using special chemistry and optimized hardware. The new system more than doubles the throughput compared to conventional POCl₃ systems. The new POCl₃ process is being introduced on Tempress Systems' 5-stack platform for emitter resistivity up to 140 ohm/square. The atmospheric process enables a low maintenance and high uptime system, while giving customers a throughput of more than 3,200WPH and outstanding efficiencies that are expected to be equal to or better than conventional atmospheric systems. We believe these innovations lead to the lowest cost per wafer currently available.
- **n-PASHA technology:** Together with the Energy Research Centre of The Netherlands (ECN) and Kingstone Semiconductor, a majority-owned subsidiary of Amtech Systems, we developed the 3rd generation of n-PASHA technology. This Ion-Implant Flow technology is currently yielding an average efficiency in production of 20.3%, with greater than 20.8% achieved in ongoing research and development. While achieving higher efficiency, the cost of ownership is lower than previous generations. This 3rd generation n-PASHA technology is part of a roadmap towards back-contacted cell structures using standard equipment with minimal additional process steps.

Dr. Albert Hasper, General Manager of Tempress Systems, commented: "We are very pleased that our continued investment in research and development, technologies and equipment during the industry down-cycle are now advancing our offerings into an evolving solar market. We expect these new innovations will bring our customers new solutions that enable them to reduce costs and increase efficiency. I am particularly proud of the fact that after introducing our new direct plasma SPECTRETM PECVD system, we now offer two new innovations that can be integrated in existing and new production lines as the market looks to position itself for next generation production."

About Amtech Systems, Inc.

Amtech Systems, Inc. manufactures capital equipment, including silicon wafer handling automation, thermal processing and ion implant equipment and related consumables used in fabricating solar cells, LED and semiconductor devices. Semiconductors, or semiconductor chips, are fabricated on silicon wafer substrates, sliced from ingots, and are part of the circuitry, or electronic components, of many products including solar cells, computers, telecommunications devices, automotive products, consumer goods, and industrial automation and control systems. 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 and the polishing of newly sliced silicon wafers.

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 ("the Company" or "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. 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 the Company and its management for future operations.

We cannot guarantee that any forward-looking statement will be realized, although we believe that the expectations reflected in the forward-looking statements are reasonable. Achievement of future results is subject to risks, uncertainties and potentially inaccurate assumptions. The Form 10-K that we filed with the Securities and Exchange Commission for the year-ended September 30, 2013 listed various important factors that could affect Amtech'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-K 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.

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