

POET TECHNOLOGIES INC.

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NEWS RELEASE

POET Technologies Announces Technology and Regulatory Updates

Toronto, ON, and Storrs, CT, July 8, 2014 – POET Technologies Inc. (TSX-V: PTK and OTCQX: POETF) (the "Company") – developer of the planar opto-electronic technology ("POET") platform for monolithic fabrication of integrated circuit devices containing both electronic and optical elements on a single semiconductor wafer – today announced several key updates on its 100-nm scaling and prototype initiatives, and the registration of its common shares with the United States Securities and Exchange Commission ("SEC").

100-nm Scaling and Prototype Initiatives

The Company's 100-nm scaling and prototype initiatives have successfully achieved a culmination point where transition to a third-party foundry is now being negotiated.

The 100-nm initiative reduces the feature size of key POET devices down to the 100-nm range. In the course of this program, the technical team developed numerous processes critical to the practical application of POET, which will now form the basis of several new patent applications.

The prototype initiative aims to put together several key device building blocks, all with integrated optical and electronic capability, into an integrated circuit ("IC") or array of ICs. Development of the two initiatives have proceeded in parallel so far, but are technologically linked.

Mr. Peter Copetti, Executive Chairman and interim CEO, noted, "We are extremely proud of how far our team has come. We are now at a point where the capabilities of a third-party foundry are required for practical demonstration, as well as subsequent third-party validation. We look forward to proceeding on this basis."

Registration Statement on Form 20-F Filed with U.S. SEC

The Company has registered its common stock under the Securities Exchange Act of 1934. As a reporting company, the Company shall file annual and other periodic reports with the SEC, which filings will be available to the public through the SEC's EDGAR online database. The Company's common stock is already traded in Canada under the symbol "PTK" on the TSX Venture Exchange.

Mr. Copetti noted, "Registration with the SEC is in line with the goals of Management and the Company's Board of Directors to actively improve corporate governance standards, transparency, and to provide periodic disclosure to the market."

Copies of the Company's documents will now be available for review by visiting www.sec.gov. The Company also files documents under Canadian regulatory requirements on SEDAR, which can be accessed via the website www.sedar.com.

Mr. Copetti concluded, "In the last twelve months, the Company's profile and visibility within the semiconductor industry has increased significantly and the Company will need to continue this transparency in its efforts reach out to a global audience of investment and strategic partners."

Ajit Manocha Joins the Company

As a follow up to the Company's press release of July 7, 2014, the Company is pleased to confirm that it has signed a memorandum of understanding with Mr. Ajit Manocha.

As disclosed, Mr. Manocha will help in determining the strategic direction of the Company, and work directly with the Company's Executive Chairman and interim CEO in carrying out actions to support that strategic

direction, specifically including: mergers and acquisitions, and related transitions; joint ventures, collaborations, partnerships and other industry relationships; assistance in capital raises; and identification and installation of a permanent CEO.

In addition to the previously announced stock options, the Company agreed to a compensation package at a rate of \$41,666.67 per month. The precise terms will be included in a definitive agreement to be negotiated between the parties.

Mr. Manocha commented: "POET promises tremendous potential to the semiconductor industry as a next-generation technology. I am looking forward to being part of the POET Team and especially working directly with Mr. Copetti on building shareholder value."

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About POET Technologies Inc.

POET Technologies is the developer of the POET platform for monolithic fabrication of integrated circuit devices containing both electronic and optical elements on a single semiconductor wafer. With head office in Toronto, Ontario, Canada, and operations in Storrs, CT, the Company, through ODIS Inc., a U.S. company, designs III-V semiconductor devices for military, industrial and commercial applications, including infrared sensor arrays and ultra-low-power random access memory. The Company has several issued and pending patents for the POET process, with potential high speed and power-efficient applications in devices such as servers, tablet computers and smartphones. The Company's common shares trade on the TSX Venture Exchange under the symbol "PTK" and on the OTCQX under the symbol "POETF". For more information please visit our websites at www.poet-technologies.com.

ON BEHALF OF THE BOARD OF DIRECTORS

Michel Lafrance

Michel Lafrance, Secretary

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