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NEWS RELEASE

POET Technologies Special Strategic Committee Announces Key Updates

Toronto, ON, and Storrs, CT, October 21, 2013 – POET Technologies Inc. (TSX-V: PTK, OTC: POETF) ("the Company") – developer of the proprietary planar optoelectronic technology ("POET") platform for monolithic fabrication of integrated electronic and optical devices on a single semiconductor wafer – announced today updates regarding its near-term strategic plan and technical milestones.

The Company remains on track to deliver to industry, and specifically to its development partners, by mid-2014, a fully-integrated monolithic optoelectronic semiconductor chip based on the Company's POET platform. This leap-forward solution will be capable of providing significant energy savings and increased performance over current silicon technology.

POET Development Alliance (PDA) – To date, POET has met with several large-scale technology firms who have expressed interest in jointly adapting POET to commercial scale implementation. Some of these potential alliance partners have already provided input into POET's alignment of resources, notably with respect to our technical roadmap. Some specific instances include the moving forward of milestone 6 in our corporate presentation, achieved in the second quarter 2013; and the current 100 nm initiative, which is proceeding as planned. Incubating such relationships is an ongoing task of the Special Strategic Committee (SSC), as a key aspect of finalizing licensing relationships towards a "*Powered by POET*" device ecosystem.

Shareholder Rights Plan (SRP) – As previously announced on August 16th, the Board of Directors has adopted a shareholder rights plan (the "Rights Plan") designed to encourage the fair and equal treatment of shareholders in connection with any take-over bid for the outstanding securities of the Company. The Rights Plan provides the Board of Directors with additional time to assess the advantages and disadvantages to any particular offer and to seek out alternative proposals in the best interests of all shareholders. The Rights Plan is subject to approval of the TSX Venture Exchange and the shareholders. The Company is required to seek shareholder approval to re-approve the Rights Plan every three years. The Company has not adopted the Rights Plan in response to any specific proposal to acquire control of its outstanding shares. The Rights Plan is similar to plans adopted by other Canadian companies and ratified by their shareholders. It is not the intention of the Rights Plan to entrench management or prevent a change of control of the Company to the detriment of shareholders. The Rights Plan does not apply to take-over bids that meet certain requirements including that the bid be made by way of a take-over bid circular and be left open for at least 60 days so as to ensure that shareholders have an adequate opportunity to assess the merits of the bid.

A copy of the Rights Plan will be made available for viewing in due course on SEDAR at www.sedar.com, and can also be obtained from the Company.

Milestone 5 - *Switching Laser Demonstration at POET's R&D Labs.* This milestone is near completion; it demonstrates a fast-signal controllable laser for standard optical fibre telecommunications applications. While the integrated POET switchable laser transmitter is a key differentiator to silicon technology, it is considered to demand less priority on resources, because of its low-risk for achievability, over milestones in our technical roadmap which have been deemed more important to our potential partners.

Milestone 7 – *Optical Thyristor-Based Infrared Detector Array Fabrication and Validation.* This milestone is currently proceeding with no technical issues, according to POET's third-party fab partner. While the POET team is in continuous communication with the fab, a publicly-available update may fall well into fourth quarter reporting, as control of this fabrication and validation process remains with our partner.

It should be noted that the technical roadmap in the Company presentation provides best approximations based on current progress at POET's R&D labs and partner fabs; timing differences will arise and have arisen not only due to technical resource needs but also due to input from potential PDA partners. It has become impractical to document the numerous changes to our roadmap due to these interactions, but we have elected to keep the current presentation as indicative, rather than provide no information. Despite balancing all these demands, the Company expects to complete and present its monolithic solution on time.

Peter Copetti, Executive Director and Chairman of the SSC commented, "On behalf of Management and POET's Board of Directors, we would like to thank investors for participating in this crucial juncture of POET Technologies' evolution as a fabless designer of next-generation semiconductor technology. As such, the SSC has made strategic motions to protect shareholder's rights and our core IP portfolio, while moving the Company's monetization agenda forward."

Mr. Copetti continued: "This is the critical period approaching the last phases of development, towards the introduction to the semiconductor industry of a revolutionary, and validated, process to produce integrated monolithic optoelectronic chips. The Company continues to target a liquidity event for investors, which has remained a primary objective throughout our discussions. We are excited to see that the work of Geoff Taylor's team is finally bearing fruit – securing POET Technologies as a leader in its space as the semiconductor industry works towards extending Moore's Law into the next millennium."

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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 34 patents issued and 7 patents pending 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.

Dated: October 21, 2013

ON BEHALF OF THE BOARD OF DIRECTORS

Michel Lafrance

Michel Lafrance, Secretary

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