No securities regulatory authority or regulator has assessed the merits of these securities or reviewed this document. Any representation to the contrary is an offence. This offering may not be suitable for you and you should only invest in it if you are willing to risk the loss of your entire investment. In making this investment decision, you should seek the advice of a registered dealer.

These securities have not been registered under the United States Securities Act of 1933, as amended (the "U.S. Securities Act"), or any of the securities laws of any state of the United States, and may not be offered or sold within the United States or for the account or benefit of U.S. persons or persons in the United States except pursuant to an exemption from the registration requirements of the U.S. Securities Act and applicable U.S. state securities laws. This offering document does not constitute an offer to sell, or the solicitation of an offer to buy, any of these securities within the United States or to, or for the account or benefit of, U.S. persons or persons in the United States. "United States" and "U.S. person" have the meanings ascribed to them in Regulation S under the U.S. Securities Act.

OFFERING DOCUMENT UNDER THE LISTED ISSUER FINANCING EXEMPTION

New Issue April 29, 2024

POET TECHNOLOGIES INC.



PART 1: SUMMARY OF OFFERING

What are we offering?

Offering:	A minimum of 1,629,295 and a maximum of up to3,258,590 units ("Units") of POET Technologies Inc. ("POET" or the "Issuer"), with each Unit being comprised of one common share in the capital of the Issuer and one common share purchase warrant (each, a "Warrant"). Each Warrant will entitle the holder thereof to acquire one common share in the capital of the Issuer (a "Warrant Share") at an exercise price of \$4.26 per Warrant Share for a period of 60 months after the Closing Date (as defined herein).
Offering Price:	\$3.069 per Unit.
Offering Amount:	Gross proceeds of a minimum of \$5,000,000 and a maximum of up to \$10,000,000 (the " Offering ").
Closing Date:	The Offering may be completed in one or more closings and it is expected that the closing will occur on or about May 3, 2024.
Exchange:	The Issuer's common shares (the "Common Shares") are listed on the TSX Venture Exchange (the "TSXV") in Canada under the symbol "PTK" and on The Nasdaq Capital Market under the symbol "POET".
Last Closing Price:	The last closing price of the Common Shares on the TSXV on April 26, 2024, being the last trading day prior to the date of this offering document, was \$3.41.

POET is conducting a listed issuer financing under section 5A.2 of National Instrument 45-106 *Prospectus Exemptions*. In connection with this Offering, the Issuer represents the following is true:

- The Issuer has active operations and its principal asset is not cash, cash equivalents or its exchange listing.
- The Issuer has filed all periodic and timely disclosure documents that it is required to have filed.
- The total dollar amount of this Offering, in combination with the dollar amount of all other offerings made under the listed issuer financing exemption in the 12 months immediately before the date of this offering document, will not exceed \$10,000,000 (being 10% of the aggregate market value of POET's listed securities on the date that POET issued the news release announcing the Offering, to a maximum of \$10,000,000).
- The Issuer will not close this Offering unless the Issuer reasonably believes it has raised sufficient funds to meet its business objectives and liquidity requirements for a period of 12 months following the distribution.
- The Issuer will not allocate the available funds from this Offering to an acquisition that is a significant acquisition or restructuring transaction under securities law or to any other transaction for which the issuer seeks security holder approval.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This offering document contains forward-looking information and forward-looking statements, as defined in applicable securities laws (collectively referred to herein as "forward-looking information"). Forwardlooking information includes, but is not limited to, information with respect to the Issuer's strategy, plans or financial outlook or operating performance, and anticipated events or results; the timing and outcome of the Offering, including completion of the Offering and the raising of the minimum or maximum amount; the receipt of all required approvals for the Offering; the anticipated use of proceeds of the Offering and the use of the available funds following completion of the Offering; the timing and amount of funding required to execute the Issuer's business plans; the ability of the Issuer to continue as a going concern; any expectations regarding the Issuer's anticipated revenue, expenses and operations; any expectations regarding the Issuer's cash needs, and needs for additional financing or funding costs; plans for and timing of development and expansion of its products and services; future growth; ability to attract and retain personnel; the Issuer's competitive position and the regulatory environment in which the Issuer operates; anticipated trends and challenges in the Issuer's business and the markets in which it operates; and other events or conditions that may occur in the future. Generally, but not always, forward looking information and statements can be identified by the use of words such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes" or the negative connotation thereof or variations of such words and phrases or statement that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved" or the negative connation thereof.

Forward-looking information is based on the Issuer's current expectations, experience, beliefs, assumptions, estimates and forecasts about the Issuer's business and the industry and markets in which it operates. Such forward information is based on numerous assumptions, including among others; completion of the Offering; regulatory approval for the Offering; that general business, economic, political and regulatory conditions will not change in a material adverse manner; availability of additional financing in the future; that contractors, equipment and supplies and governmental and other approvals related to engineering, product development and manufacturing or otherwise required to conduct the Issuer's planned activities will be available on reasonable terms and in a timely manner; and that the Issuer can successfully protect its patents, trademarks and other intellectual property. Although the assumptions made by the Issuer in providing forward looking information or making forward-looking statements are considered reasonable by management at the time, there can be no assurance that such assumptions will prove to be accurate.

Forward-looking information also involves known and unknown risks and uncertainties and other factors,

which may cause actual results, performances and achievements of the Issuer to differ materially from any projections of results, performances and achievements of the Issuer expressed or implied by such forwardlooking information or statements. These factors include the failure to complete the Offering; reliance on key management and other personnel; potential downturns in economic conditions; actual results of engineering and product development being different than anticipated; competition from others; market factors, including future demand for and prices of the Issuer's products; adverse changes in regulatory landscape; the policies and actions of foreign governments, which could impact the competitive supply of and global markets for semiconductors; the failure to meet the timelines the Issuer expects in respect of its product development and manufacturing objectives (if at all); changes in national and local government legislation, taxation, controls or regulations and/or changes in the administration or laws, policies and practices; the impact of general business and economic conditions; currency exchange rates; the impact of inflation; general risks of the semiconductor and photonics market; the ability to control costs and potential cost overruns or unexpected expenses; as well as those risk factors discussed or referred to herein in the Issuer's filings made with the securities regulatory authorities available electronically on the System for Electronic Data Analysis and Retrieval ("SEDAR+") at www.sedarplus.ca under the Issuer's profile. The lists of risk factors set out in this offering document or in the Issuer's other public disclosure documents are not exhaustive of the factors that may affect any forward-looking information of the Issuer.

Actual results could differ materially from those projected in the forward-looking information as a result of the matters set out in this offering document generally and certain economic and business factors, some of which may be beyond the control of the Issuer. Although the Issuer has attempted to identify important factors that could cause actual actions, events or results to differ materially from those contained in the forward-looking information or implied by forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking information and statements will prove to be accurate, as actual results and future events could differ materially from those anticipated, estimated or intended. Accordingly, readers should not place undue reliance on forward-looking statements or information. Any forward-looking information speaks only as of the date on which it is made. The Issuer undertakes no obligation to update or reissue forward-looking information as a result of new information or events except as required by applicable securities laws.

For more information on the Issuer and the risks and challenges of its business, investors should review the Issuer's continuous disclosure documents that are available electronically on SEDAR+ at www.sedarplus.ca under the Issuer's profile.

Currency

All references to "\$" in this offering document are to lawful currency of Canada unless otherwise expressly stated. United States dollars are indicated by the symbol "US\$".

PART 2: SUMMARY DESCRIPTION OF BUSINESS

What is our business?

The Issuer is a design and development company offering high-speed optical modules, optical engines and light source products to the artificial intelligence systems market and to hyperscale data centers. POET's photonic integration solutions are based on the POET Optical InterposerTM, a novel, patented platform that allows the seamless integration of electronic and photonic devices into a single chip using advanced wafer-level semiconductor manufacturing techniques. POET's Optical Interposer-based products are lower cost, consume less power than comparable products, are smaller in size and can be produced in high volumes. In addition to providing high-speed (800G and above) optical modules and optical engines for AI clusters and hyperscale data centers, POET has designed and produced novel light source products for chip-to-chip data communication within and between AI servers, the next frontier for solving bandwidth and latency problems in AI systems. POET's Optical Interposer platform also solves device integration challenges in

5G networks, machine-to-machine communication, sometimes referred to as the "Internet of Things" (IoT), self-contained "Edge" computing applications and sensing applications, such as LIDAR systems for autonomous vehicles.

Recent developments

The following summary sets out the key recent developments involving or affecting the Issuer:

• At-the-Market Programs

The Issuer had established an at-the-market equity program, which was initially active in both the United States and Canada, pursuant to an equity distribution agreement dated June 29, 2023, which ended on August 5, 2023. The Issuer continued the at-the-market equity program in the United States only pursuant to an equity distribution agreement dated September 1, 2023.

• Platform for 1.6T Transceivers

On August 15, 2023, POET announced its development of an optical interposer platform for 1.6T transceivers and beyond using 200G per lane technology utilizing POET's enhanced interposer-powered optical engines.

• Optical Module for AI

On March 26, 2024, the Company announced its first entry into the optical module market for artificial intelligence and cloud data center markets with an 800G pluggable transceiver. The POET *Wavelight* is an 800G 2xFR4 OSFP module that incorporates the Company's POET Optical Interposer-based optical engine products.

Material facts

There are no material facts about the securities being distributed that have not been disclosed in this offering document or in any other document filed by the Issuer in the 12 months preceding the date of this offering document.

What are the business objectives that we expect to accomplish using the available funds?

The Issuer is currently experiencing strong demand for its proprietary optical engine technology that powers 800G and higher optical modules for AI processing clusters and light sources for advanced chip-to-chip light-based data communications and computing. Use of proceeds of this financing is for general working capital purposes aimed at supporting this significant growth phase for the Company. This includes further development of its optical engines for transceivers and light source modules for the AI market, capital asset purchases and selling and general and administrative expenses. See Part 3 – *Use of Available Funds* for more details.

PART 3: USE OF AVAILABLE FUNDS

What will our available funds be upon the closing of the Offering?

As at April 26, 2024, the Issuer has an existing working capital of \$10,960,000 (US\$8,000,000), with \$13,152,000 (US\$9,600,000) cash on hand.

In addition to this Offering, the Issuer has commenced a concurrent non-brokered private placement pursuant to which the Issuer expects to raise up to an additional \$10,000,000 (US\$7,300,000) (the "Concurrent Private Placement"). The Concurrent Private Placement is being conducted in each of the provinces of Canada in reliance on applicable exemptions from the prospectus requirement under applicable Canadian securities laws. The Company expects that certain identified Canadian-based institutional investors will subscribe for the entire Concurrent Private Placement, which is expected to close on or about May 10, 2024. There are no finders' fees or commissions associated with these Offerings.

Net of closing costs, the Issuer estimates that it will have up to \$30,880,000 (US\$22,540,000) of available funds, determined as follows:

		Minimum Offering Only	Maximum Offering Only	Maximum Offering and Maximum Concurrent Private Placement
A	Amount to be raised by this Offering	\$5,000,000	\$10,000,000	\$10,000,000
В	Selling commissions and fees	\$Nil	\$Nil	\$Nil
С	Estimated Offering costs (e.g., legal, accounting, regulatory filing fees)	\$(80,000)	\$(80,000)	\$(80,000)
D	Net proceeds of offering: $D = A - (B+C)$	\$4,920,000	\$9,920,000	\$9,920,000
Е	Working capital as at April 26, 2024 (deficiency) – Estimate only	\$10,960,000	\$10,960,000	\$10,960,000
F	Additional sources of funding	Nil	Nil	\$10,000,000
G	Total available funds: G = D+E+F	\$15,880,000	\$20,880,000	\$30,880,000
	Total available funds in US\$1	US\$11,591,000	US\$15,241,000	US\$22,540,000

Notes:

From the financial year ended December 31, 2023 to March 31, 2024, being the most recent month end, the Issuer's working capital increased by US\$1,378,758 from US\$716,881 on December 31, 2023 to US\$2,095,639 on March 31, 2024. The Issuer does not generate material or sustained revenues from the sale of its products and services as it is presently in the development stages of its proprietary products. For additional information, see "How will we use the available funds?" below.

How will we use the available funds?

Key Milestones	Stage	Timing	Minimum Offering Only	Maximum Offering Only	Maximum Offering and Maximum Concurrent Private Placement
Next 12 months (Q2 2024 – Q1 2025):					
Research & Development Programs:					
	Development	Q1 – Q2 2024	US\$1,500,000	US\$1,500,000	US\$1,500,000

⁽¹⁾ Assumes an US/CAD exchange rate of \$1.37.

Module	Prototype	Q3 – Q4 2024	US\$1,000,000	US\$1,500,000	US\$1,500,000
Development	Production	Q1 2025	US\$1,000,000	US\$2,000,000	US\$2,000,000
	Total		US\$3,500,000	US\$5,000,000	US\$5,000,000
Light Sources for	Prototypes	Q1 2024 – Q1 2025	US\$800,000	US\$800,000	US\$800,000
Artificial Intelligence	Total		US\$800,000	US\$800,000	US\$800,000
800G Tx	Development	Q1 – Q3 2024	US\$2,000,000	US\$2,000,000	US\$2,000,000
	Prototypes	Q4 2024	US\$800,000	US\$1,600,000	US\$1,600,000
	Total		US\$2,800,000	US\$3,600,000	US\$3,600,000
Total Research & Development 1:			US\$6,650,000	US\$9,400,000	US\$9,400,000
Selling, General and Administrative (SG&A) ²			US\$4,000,000	US\$5,000,000	US\$5,000,000
Total Q2 2024 - 0	Total Q2 2024 – Q1 2025			US\$14,400,000	US\$14,400,000
Beyond 12 months (Q2 2025 – Q4 2025)					
Research and deve	Research and development Q2 – Q4 2025		US\$291,000	US\$541,000	US\$6,140,000
<i>SG&A</i> Q2 -		Q2 – Q4 2025	US\$200,000	US\$300,000	US\$2,000,000
Total Q2 2025 – Q4 2025			US\$491,000	US\$841,000	US\$8,140,000

Notes:

- (1) The Issuer intends to outsource the integration of commercial components and firmware development required at the prototyping stage. All other research and development activities noted above are expected to be completed by the Issuer.
- (2) Estimated SG&A for the next 12 months.

The above noted allocation of capital and anticipated timing represents the Issuer's current intentions based upon its present plans and business condition, which could change in the future as its plans and business conditions evolve. Development and production of prototypes and samples of both modules, light source products and 800G Tx optical engines, and initial production of modules are the top operational priorities, all of which can be achieved with the capital on hand and what is expected to be raised in the Offering in the time periods indicated. In the event that the Company raises only the minimum amount, the priority will be to fulfill existing customer orders for the light source product and to complete the development of the module and 800G Tx. Spending can be reduced on prototypes and related production activities, which may limit future revenue expansion, but would not significantly impair short-term results. SG&A spending would be reduced corresponding with a lower level of sampling and marketing efforts. Although the Issuer intends to spend the proceeds from the Offering as set forth above, there may be circumstances where, for sound business reasons, a reallocation of funds may be deemed prudent or necessary and may vary materially from that set forth above, as the amounts actually allocated and spent will depend on a number of factors, including the Issuer's ability to execute on its business plan and sustain its operations for not less than 12 months from the Closing Date of the Offering. Commercial production of modules will depend on qualifications to be performed by customers and subsequent volume orders. Initial orders are not expected to increase costs over what has been estimated, largely because the Company has provided for manufacturing of optical engines through its Super Photonics joint venture and intends to use outside contractors, both of which are supported with external capital. The current version of light source product has been ordered by an existing customer and the Company will be supplying initial production quantities for the sampling of devices to their customers. The high-volume commercial market for this product is not expected to materialize until late 2025. Costs for supplying the initial production quantities are included in the cost estimates above. Prototypes of the 800G Tx engines will be produced in 2024 and commercial

production will depend on qualification and customer orders, with manufacturing being done by Super Photonics. See the "Cautionary Statement Regarding Forward-Looking Information" section above.

The Issuer's most recent audited annual financial statements included a going-concern note. The Issuer is still in the research and product development phase on a number of its projects. During the financial year ended December 31, 2023, the Issuer had negative cash flow from operating activities. The Issuer anticipates it will continue to have negative cash flow from operating activities in future periods until sustained profitable commercial production is achieved on its main products and projects. As a result, if necessary, certain of the net proceeds from the Offering may be used to fund such negative cash flow from operating activities in future periods. The Offering is not expected to affect the decision as to whether to include a going concern note in the next annual financial statements of the Issuer.

How have we used the other funds we have raised in the past 12 months?

POET has raised the following funds from financings in the past 12 months (all amounts are in US\$).

Date of Financing	Funds Raised	Intended Use of Funds	Explanation of Variances and Impact on Business Objectives and Milestones
June 30, 2023 – April 27, 2024	Gross proceeds of approximately US\$7,941,469	General working capital purposes related to research and development of the Issuer's optical engines for transceivers and light source modules for the AI market, capital asset purchases and selling and general and administrative expenses.	No significant variances to the intended use of proceeds.
December 4, 2023	Gross proceeds of approximately US\$1,607,400	General working capital purposes related to research and development of the Issuer's optical engines for transceivers and light source modules for the AI market, capital asset purchases and selling and general and administrative expenses.	No significant variances to the intended use of proceeds.
January 24, 2023	Gross proceeds of approximately US\$4,613,312	General working capital purposes related to research and development of the Issuer's optical engines for transceivers and light source modules for the AI market, capital asset purchases and selling and general and administrative expenses.	No significant variances to the intended use of proceeds.

PART 4: FEES AND COMMISSIONS

Who are the dealers or finders that we have engaged in connection with this offering, if any, and what are their fees?

The Issuer has not engaged any dealers or finders in connection with the Offering. The Issuer may elect to pay finder's fees to eligible parties who have introduced subscribers to the Offering. However, there is no engagement letter or other agreement in place with any dealers or finders at the date of this offering document.

PART 5: PURCHASERS' RIGHTS

Rights of Action in the Event of a Misrepresentation

If there is a misrepresentation in this offering document, you have a right

- (a) to rescind your purchase of these securities with POET, or
- (b) to damages against POET and may, in certain jurisdictions, have a statutory right to damages from other persons.

These rights are available to you whether or not you relied on the misrepresentation. However, there are various circumstances that limit your rights. In particular, your rights might be limited if you knew of the misrepresentation when you purchased the securities.

If you intend to rely on the rights described in paragraph (a) or (b) above, you must do so within strict time limitations.

You should refer to any applicable provisions of the securities legislation of your province or territory for the particulars of these rights or consult with a legal adviser.

PART 6: ADDITIONAL INFORMATION

Where can you find more information about us?

Copies of POET's continuous disclosure filings may be obtained on request from POET Technologies Inc. at 120 Eglinton Avenue East, Suite 1107, Toronto, Ontario, M4P 1E2 (telephone: (416) 368-9411), and are also available electronically on SEDAR+ at www.sedarplus.ca under POET's issuer profile or at the Issuer's website at www.poet-technologies.com.

Additional information regarding POET is also available on POET's website at www.poet-technologies.com.

Investors should read this offering document and consult their own professional advisors to assess the income tax, legal, risk factors and other aspects of their investment of Units.

PART 7: DATE AND CERTIFICATE

This offering document, together with any document filed under Canadian securities legislation on or after April 29, 2023, contains disclosure of all material facts about the securities being distributed and does not contain a misrepresentation.

Dated: April 29, 2024

(signed) "Suresh Venkatesan"

Suresh Venkatesan Chief Executive Officer (signed) "Thomas Mika"

Thomas Mika Chief Financial Officer