NOTICE TO SHAREHOLDERS For the Three and Six Months Ended June 30, 2022 (Unaudited and Expressed in US Dollars)

POET TECHNOLOGIES INC.

ONDENSED CONSOLIDATED STATEMENTS OF FINANCIAL POSITION expressed in US Dollars)		June 30, 2022	D	Audited ecember 31, 2021
Assets				
Current Cook and cook organization (Note 2)	\$	44 209 400	\$	14 041 775
Cash and cash equivalents (Note 2) Short-term investments (Note 2)	Ф	11,398,499 2,366,153	Ф	14,941,775 6,366,828
Prepaids and other current assets (Note 3)		381,723		480,523
		14,146,375		21,789,126
Investment in joint venture (Note 4)		236,946		1,445,251
Property and equipment (Note 5) Patents and licenses (Note 6)		3,362,494 496,760		3,064,234 528,476
Right of use assets (Note 7)		315,200		326,890
	\$	18,557,775	\$	27,153,977
Liabilities				
Current				
Accounts payable and accrued liabilities (Note 8)	\$	1,177,113	\$	1,791,222
Contract liabilities (Note 20) Lease liability (Note 7)		341,975 193,269		- 101,074
Covid-19 government support loans (Note 9)		31,068		31,660
		1,743,425		1,923,956
Non-current lease liability (Note 7)		155,733		258,274
		1,899,158		2,182,230
Shareholders' Equity				
Share capital (Note 10(b))		148,814,381		147,729,846
Warrants and compensation options (Note 11)		5,273,723		5,328,455
Contributed surplus (Note 12)		48,547,306		46,954,333
Accumulated other comprehensive loss		(2,274,382)		(2,053,917
Deficit		(183,702,411)		(172,986,970
		16,658,617		24,971,747
	\$	18,557,775	\$	27,153,977

Commitments and contingencies (Note 14)

On behalf of the Board of Directors

Director

CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS AND DEFICIT (Expressed in US Dollars)

	Three Months Ended June 30, 2022 2021			e 30,			
	20	22		2021		2022	2021
Revenue (Note 20)	\$ 120	,261	\$	209,100	\$	120,261	\$ 209,100
Operating expenses							
Selling, marketing and administration (Note 19) Research and development (Note 19)	2,383 2,300	•		2,282,280 2,259,987		4,829,917 4,865,381	4,610,712 3,802,705
	2,300	,042		2,239,307		4,000,301	5,002,705
Operating expenses	4,684	,615		4,542,267		9,695,298	8,413,417
Operating loss before the following	(4,564	,354)		(4,333,167)		(9,575,037)	(8,204,317)
Interest expense (Note 7)	•	,627)		(94,799)		(26,421)	(329,378)
Other income, including interest Share of loss in joint venture (Note 4)		,300 ,961)		19,772		62,299 (1,176,282)	27,081
Share of loss in joint venture (Note 4)	(745	,901)		-		(1,176,202)	
Net loss	(5,282	,642)		(4,408,194)		(10,715,441)	(8,506,614)
Deficit, beginning of period	(178,419	,769)	(16	61,416,297)	(1	72,986,970)	(157,317,877)
Net loss	(5,282	,642)		(4,408,194)	(10,715,441)	(8,506,614)
Deficit, end of period	\$(183,702,	411)	\$(10	65,824,491)	\$(18	83,702,411) \$((165,824,491)
Basic and diluted loss per share (Note 13)	\$ (0.14)	\$	(0.13)	\$	(0.29)	\$ (0.26)

CONDENSED CONSOLIDATED STATEMENTS OF (Expressed in US Dollars)	COMPREHENS	SIVE LOSS		
,	Three Months Ended June 30.		Six Months Ended June 30.	
	2022	2021	2022	2021
Net loss	\$ (5,282,642)	\$ (4,408,194)	\$(10,715,441)	\$ (8,506,614)
Other comprehensive income - net of income taxes Exchange differences on translating foreign operations	(299,674)	119,264	(220,465)	132,912
Comprehensive loss	\$ (5,582,316)	\$ (4,288,930)	\$(10,935,906)	\$ (8,373,702)

CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY (Expressed in US Dollars)

For the Six Months Ended June 30,	2022	2021
Share Capital		
Beginning balance	\$ 147,729,846	114,586,260
Funds from the exercise of warrants	196,800	7,455,332
Fair value assigned to warrants exercised	54,732	3,064,303
Conversion of convertible debentures	=	3,377,887
Fair value of warrants issued upon the conversion of convertible debentures	_	(1,164,316)
Funds from the exercise of stock options	418,845	2,611,206
Fair value assigned to stock options exercised	374,129	2,237,419
Funds from common shares issued on private placement	-	11,815,595
Fair value of warrants issued on private placement	<u> </u>	(3,766,007)
Share issue costs	<u> </u>	(1,143,034)
Fair value of broker warrants issued as share issue costs	-	(288,197)
	40.020	13,814
Common shares issued to settle accounts payable	40,029	13,614
June 30,	148,814,381	138,800,262
Equity Component of Convertible Debentures		
Beginning balance	-	565,121
Fair value of equity component related to conversion of convertible debentures	-	(546,374)
June 30,	-	18,747
Warrants		
Beginning balance	5,328,455	5,557,002
Fair value of warrants issued upon the conversion of convertible debentures	=	1,164,316
Fair value assigned to warrants and compensation warrants exercised	(54,732)	(3,064,303)
Fair value of broker warrants issued as share issue costs	-	288,197
Fair value of warrants issued on private placement	-	3,766,007
June 30,	5,273,723	7,711,219
Contributed Surplus		
Beginning balance	46,954,333	44,407,679
Stock-based compensation	1,967,102	2,057,131
Fair value of stock options exercised	(374,129)	(2,237,419)
Fair value effect of conversion of convertible debentures	=	532,108
June 30,	48,547,306	44,759,499
Accumulated Other Comprehensive Loss		
Beginning balance	(2,053,917)	(1,983,212)
Other comprehensive (loss) income - translation adjustment	(220,465)	132,912
June 30,	(2,274,382)	(1,850,300)
Deficit		
Beginning balance	(172,986,970)	(157,317,877)
Net loss	(10,715,441)	(8,506,614)
June 30,	(183,702,411)	(165,824,491)
Total shareholders' equity	\$ 16,658,617	\$ 23,614,936

CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (Expressed in US Dollars)

For the Six Months Ended June 30,	2022	2021
CASH (USED IN) PROVIDED BY:		
OPERATING ACTIVITIES		
Net loss Adjustments for:	\$ (10,715,441)	\$ (8,506,614)
Depreciation of property and equipment (Note 5)	487,268	393,374
Amortization of right of use asset (Note 7)	87,610	95,557
Amortization of patents and licenses (Note 6) Other operating costs (Note 10)	40,816 _	33,989 13,814
Accretion of debt discount on convertible debentures and non-cash interest (Note 7)	26,421	176,997
Stock-based compensation (Note 12)	1,967,102	2,057,131
Share of loss in joint venture (Note 4)	1,176,282	-
Net change in non-cash working capital accounts:	(6,929,942)	(5,735,752)
Accounts receivable	_	(209,100)
Prepaid and other current assets	98,622	333,205
Accounts payable and accrued liabilities	(554,454)	432,321
Contract liabilities (Note 20)	341,975	-
Cash flows from operating activities	(7,043,799)	(5,179,326)
INVESTING ACTIVITIES		
Sale of short-term investments	4,000,675	-
Purchase of property and equipment (Note 5)	(873,172)	(632,022)
Purchase of patents and licenses (Note 6)	(9,100)	-
Cash flows from investing activities	3,118,403	(632,022)
FINANCING ACTIVITIES		
Issue of common shares, net of share issue costs (Note 10)	615,645	20,739,099
Payment of lease liability (Note 7)	(112,853)	(118,784)
Cash flows from financing activities	502,792	20,620,315
EFFECT OF EXCHANGE RATE CHANGES ON CASH	(120,672)	260,012
NET CHANGE IN CASH AND CASH EQUIVALENTS	(3,543,276)	15,068,979
CASH AND CASH EQUIVALENTS, beginning of period	14,941,775	6,872,894
CASH AND CASH EQUIVALENTS, end of period		\$ 21,941,873

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Expressed in US Dollars)

1. DESCRIPTION OF BUSINESS

POET Technologies Inc. is incorporated in the Province of Ontario. POET Technologies Inc. and its subsidiaries (the "Company") design and develop the POET Optical Interposer and Photonic Integrated Circuits for the data centre and tele-communications markets. The Company's head office is located at 120 Eglinton Avenue East, Suite 1107, Toronto, Ontario, Canada M4P 1E2. These condensed unaudited consolidated financial statements of the Company were approved by the Board of Directors of the Company on August 8, 2022.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

These condensed unaudited consolidated financial statements of the Company and its subsidiaries were prepared in accordance with International Financial Reporting Standards ("IFRS"), as issued by the International Accounting Standards Board ("IASB").

These condensed unaudited consolidated financial statements do not include all of the information required for full annual financial statements and should be read in conjunction with the consolidated audited financial statements for the year ended December 31, 2021.

These condensed unaudited consolidated consolidated financial statements have been prepared on a going concern bases. As at June 30, 2022, the Company had accumulated losses of \$(183,702,411) and working capital of \$12,402,950. During the six months ended June 30, 2022, the Company had negative cash flows from operations of \$7,043,799. The Company has prepared a cash flow forecast which indicates that it does not have sufficient cash to meet its minimum expenditure commitments and therefore needs to raise additional funds to continue as a going concern. As a result, there is substantial doubt about the Company's ability to continue as a going concern for the next twelve months from the date of these condensed unaudited consolidated financial statements.

The Company has put in place a program of strict expense management while being focussed on generating sufficient revenue to fund operations over the next twelve months. The Company has a reasonable expectation that it will be able to manage its finances in order to continue its operations.

The preparation of financial statements in accordance with International Accounting Standards ("IAS") 34 Interim Financial Reporting, requires the use of certain critical accounting estimates. It also requires management to exercise judgment in applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the financial statements are disclosed below:

Basis of presentation

These consolidated financial statements include the accounts of POET Technologies Inc. and its subsidiaries; ODIS Inc. ("ODIS"), Opel Solar Inc. ("OPEL"), BB Photonics Inc.,("BB Photonics"), POET Technologies Pte Ltd. ("PTS") and POET Optoelectronics Shenzhen Co. Ltd. ("POET Shenzhen"). All intercompany balances and transactions have been eliminated on consolidation.

Foreign currency translation

These condensed unaudited consolidated financial statements are presented in U.S. dollars ("USD"), which is the Company's presentation currency.

Items included in the financial statements of each of the Company's subsidiaries are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transaction. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities not denominated in the functional currency of an entity are recognized in the statement of operations and deficit.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Assets and liabilities of entities with functional currencies other than U.S. dollars are translated into the presentation currency at the year end rates of exchange, and the results of their operations are translated at average rates of exchange for the year. The resulting translation adjustments are included in accumulated other comprehensive loss in shareholders' equity. Additionally, foreign exchange gains and losses related to certain intercompany loans that are permanent in nature are included in accumulated other comprehensive loss. Elements of equity are translated at historical rates.

Financial Instruments

IFRS 9 introduced new classification and measurement models for financial assets. The investment classifications held-to-maturity and available-for-sale are no longer used and financial assets at fair value through other comprehensive income ("FVTOCI") were introduced. Financial assets held with an objective to hold assets in order to collect contractual cash flows which arise on specified dates that are solely principal and interest are measured at amortised cost using the effective interest method. Debt investments held with an objective to hold both assets in order to collect contractual cash flows which arise on specified dates that are solely principal and interest as well as selling the asset on the basis of fair value are measured at FVTOCI. All other financial assets are classified and measured at fair value through profit or loss ("FVTPL"). Financial liabilities are classified as either FVTPL or other financial liabilities, and the portion of the change in fair value that relates to the Company's credit risk is presented in other comprehensive loss. Instruments classified as FVTPL are measured at fair value with unrealized gains and losses recognized in net loss. Other financial liabilities are subsequently measured at amortised cost using the effective interest method.

Transaction costs that are directly attributable to the acquisition or issuance of financial assets and financial liabilities, other than financial assets and financial liabilities classified as FVTPL, are added to or deducted from the fair value on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities classified as FVTPL are recognized immediately in consolidated net loss.

Financial assets

The Company derecognizes a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Company neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset. Any interest in transferred financial assets that is created or retained by the Company is recognized as a separate asset or liability.

Financial liabilities

A financial liability is derecognized from the balance sheet when it is extinguished, that is, when the obligation specified in the contract is either discharged, cancelled or expires. Where there has been an exchange between an existing borrower and lender of debt instruments with substantially different terms, or there has been a substantial modification of the terms of an existing financial liability, this transaction is accounted for as an extinguishment of the original financial liability and the recognized in profit or loss.

The Company's financial instruments include cash and cash equivalents, short-term investments, accounts payable and accrued liabilities, contract liabilities and covid-19 government support loans.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Expressed in US Dollars)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

The following table outlines the classification of financial instruments under IFRS 9:

Financial Assets

Cash and cash equivalents

Short-term investments

Amortized cost

Amortized cost

Financial Liabilities

Accounts payable and accrued liabilities

Contract liabilities

Covid-19 government support loans

Amortized cost

Amortized cost

Convertible debentures are accounted for as a compound financial instrument with a debt component and a separate equity component. The debt component of these compound financial instruments is measured at fair value on initial recognition by discounting the stream of future interest and principal payments at the rate of interest prevailing at the date of issue for instruments of similar term and risk. The debt component is subsequently deducted from the total carrying value of the compound instrument to derive the equity component. The debt component is subsequently measured at amortized cost using the effective interest rate method. Interest expense based on the coupon rate of the debenture and the accretion of the liability component to the amount that will be payable on redemption are recognized through profit or loss as a finance cost.

Cash and cash equivalents

Cash and cash equivalents consist of cash in current accounts of \$761,681 (2021 - \$4,216,911) and funds invested in US and Canadian Term Deposits of \$10,636,818 (2021 - \$10,724,864) earning interest at rates ranging from 0.20% - 0.25% and maturing in less than 90 days.

Short-term investments

The short-term investments of \$2,366,153 (2021 - \$6,366,828) consist of guaranteed investment certificates (GICs) held with one Canadian chartered bank and earn interest at rates ranging from 1.3% to 2.3%. The GICs have maturity dates between July 2022 and September 2022. Investments are carried at amortized cost.

Property and equipment

Property and equipment are recorded at cost. Depreciation is calculated based on the estimated useful life of the asset using the following method and useful lives:

Machinery and equipment Straight Line, 5 years

Leasehold improvements Straight Line, 5 years or life of the lease, whichever is less

Office equipment Straight Line, 3 - 5 years

Patents and licenses

Patents and licenses are recorded at cost and amortized on a straight line basis over 12 years. Ongoing maintenance costs are expensed as incurred.

Revenue recognition

Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. The Company recognizes revenue when it transfers control over a product or service to a customer.

Sale of goods

Revenue from the sale of goods is recognized, net of discounts and customer rebates, at the point in time the transfer of control of the related products has taken place as specified in the sales contract and collectability is reasonably assured.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Expressed in US Dollars)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Service revenue

The Company provides contract services, primarily in the form of non-recurring revenue ("NRE") where control is passed to the customer over time. The contracts generally provide agreed upon milestones for customer payment which include but are not limited to the delivery of sample products, design reports and test reports. The customer makes payment when it has approved the delivery of the milestone. The Company must determine if the contract is made up of a series of independent performance obligations or a single performance obligation. Where NRE contracts contain multiple performance obligations for which a standalone transaction price can be assessed, revenue is recognized as each performance obligation is satisfied. Where NRE contracts contain a single performance obligation to be settled over time, revenue is recognized progressively based on the output method.

Other income

Interest income

Interest income on cash and cash equivalents and short-term investments is recognized as earned using the effective interest method.

Wage subsidies

Wages subsidies received from the Singaporean government are netted against payroll costs on the consolidated statements of operations and deficit.

Government Grants

Loans received exclusively from governmental agencies to support the Company throughout the COVID-19 pandemic qualify to be forgiven if certain conditions are met. Forgiveness of COVID-19 related loans will be recognized as other income on the consolidated statements of operations and deficit.

Stock-based compensation

Stock options and warrants awarded to non employees are measured using the fair value of the goods or services received unless that fair value cannot be estimated reliably, in which case measurement is based on the fair value of the stock options. Stock options and warrants awarded to employees are accounted for using the fair value method. The fair value of such stock options and warrants granted is recognized as an expense on a proportionate basis consistent with the vesting features of each tranche of the grant. The fair value is calculated using the Black-Scholes option pricing model with assumptions applicable at the date of grant.

Loss per share

Basic loss per share, net of taxes is calculated by dividing net loss by the weighted average number of common shares outstanding during the year. Diluted loss per share is calculated by dividing net loss by the weighted average number of common shares outstanding during the period after giving effect to potentially dilutive financial instruments. The dilutive effect of stock options and warrants is determined using the treasury stock method.

Joint Venture

A joint arrangement is an arrangement among two or more parties where the parties are bound by a contractual arrangement and the contractual arrangement gives the parties joint control of the arrangement. A joint venture is a form of joint arrangement where an entity is independently formed and the parties jointly have rights to the net assets of the arrangement and therefore account for their interests under the equity method.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

3. PREPAIDS AND OTHER CURRENT ASSETS

The following table reflects the details of prepaids and other current assets:

	June 3 20	•	ember 31, 2021
Sales tax recoverable and other current assets Prepaid expenses Equipment deposit	200	7,006 \$ 5,217 8,500	141,568 50,668 288,287
	\$ 38	,723 \$	480,523

4. JOINT VENTURE

The Company's contribution of intellectual property to Super Photonics Xiamen Co., Ltd ("SPX") was independently valued at \$22,500,000 at the time of its contribution. During 2021, the Company recognized a gain of \$2,587,500 related to its contribution of intellectual property to SPX in accordance with IAS 28. The Company only recognized a gain on the contribution of the intellectual property equivalent to the Sanan IC's interest in SPX, the unrecognized gain of \$19,912,500 will be applied against the investment and periodically realized as the Company's ownership interest in SPX is reduced. At June 30, 2022, Sanan IC's and the Company's ownership interests were approximately 11.5% and 88.5% respectively.

SPX was determined to be a joint venture as both Sanan IC and POET exercise joint control over SPX. All relevant activity of SPX require unanimous consent.

The Company's investment in joint venture can be summarized as follows:

Balance, January 1, 2021		\$ -
Contribution of intellectual property		22,500,000
Unrecognized gain on contribution of intellectual property		(19,912,500)
Share of loss in joint venture for the year ended December 3	1, 2021	(1,142,249)
Investment balance, December 31, 2021		1,445,251
Share of loss in joint venture for the six months ended June	30, 2022	(1,176,282)
Effect of changes in foreign exchange rates		(32,023)
Investment balance, June 30, 2022		\$ 236,946
Summarized financial information of the joint venture is as for	ollows:	
,		
	December 31, 2021	June 30, 2022
Current assets	December 31, 2021 \$ 2,287,252	June 30, 2022 \$ 765,642
Current assets Intangible assets	,	·
	\$ 2,287,252	\$ 765,642 \$ 21,407,239
Intangible assets	\$ 2,287,252 \$ 22,500,000	\$ 765,642 \$ 21,407,239 \$ (360,187)
Intangible assets Liabilities	\$ 2,287,252 \$ 22,500,000 \$ (44,683)	\$ 765,642

The Company recognizes its share of SPX's profits or losses using the equity method. On a weighted average basis, the Company recognized approximately 88.5% or \$(1,176,282) of the net operating loss of SPX for the six months ended June 30, 2022 and nil for the six months ended June 30, 2021. The Company's current share of the operating loss is a result of the high value of the Company's initial contribution. The Company's share of the loss will reduce as Sanan IC periodically contributes cash and other assets to SPX.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

5. PROPERTY AND EQUIPMENT

	uipment not n service			Machinery and equipment	Office equipment	Total
Cost Balance, January 1, 2021 Additions, net of returns (1) Reclassification Effect of changes in foreign exchange rates	\$ 227,147 (128,575) (96,334) (2,238)		71,928 \$ - 47,393 (2,206)	3,994,657 \$ 842,877 48,941 (56,455)	128,185 57,221 - (2,137)	\$ 4,421,917 771,523 - (63,036)
Balance, December 31, 2021 Additions Effect of changes in foreign exchange rates	- 142,992 (2,422)		17,115 - (5,828)	4,830,020 709,767 (154,291)	183,269 20,413 (2,870)	5,130,404 873,172 (165,411)
Balance, June 30, 2022	140,570	1	11,287	5,385,496	200,812	5,838,165
Accumulated Depreciation Balance, January 1, 2021 Depreciation Effect on changes in foreign exchange rates	- - -		10,777 18,891 (1 4 2)	1,146,014 794,834 (10,122)	79,372 26,641 (95)	1,236,163 840,366 (10,359)
Balance, December 31, 2021 Depreciation for the period Effect of changes in foreign exchange rates	- - -		29,526 13,122 (1,652)	1,930,726 466,203 (75,109)	105,918 7,943 (1,006)	2,066,170 487,268 (77,767)
Balance, June 30, 2022	-		40,996	2,321,820	112,855	2,475,671
Carrying Amounts At December 31, 2021	\$ -	\$	37,589 \$	5 2,899,294 \$	77,351	\$ 3,064,234
At June 30, 2022	\$ 140,570	\$	70,291 \$	3,063,676 \$	87,957	\$ 3,362,494

⁽¹⁾ During the year, the Company returned \$196,490 in equipment to a vendor. The equipment was returned without penalty to the Company.

6. PATENTS AND LICENSES

Cost Balance, January 1, 2021 Additions	\$ 837,102 159,359	
Balance, December 31, 2021 Additions	996,461 9,100	
Balance, June 30, 2022	1,005,561	
Accumulated Depreciation Balance, January 1, 2021 Amortization	398,425 69,560	
Balance, December 31, 2021 Amortization during the period	467,985 40,816	
Balance, June 30, 2022	508,801	
Carrying Amounts		
At December 31, 2021	\$ 528,476	
At June 30, 2022	\$ 496,760	

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

7. RIGHT OF USE ASSET AND LEASE LIABILITY

The Company recognizes a lease liability and right of use asset relating to its commercial leases. The lease liability is measured at the present value of the remaining lease payments, discounted using the Company's incremental borrowing rate of 12%.

Right of use asset	Building
Cost Balance, January 1, 2021 Effect of changes in foreign exchange rates	\$ 653,232 (4,122)
Balance, December 31, 2021 Lease modification ⁽¹⁾ Effect of changes in foreign exchange rates	649,110 81,542 -
Balance, June 30, 2022	\$ 730,652
Accumulated Amortization Balance, January 1, 2021 Amortization Effect of changes in foreign exchange rates	132,546 190,596 (922)
Balance, December 31, 2021 Amortization during the period Effect of changes in foreign exchange rates	322,220 87,610 5,622
Balance, June 30, 2022	415,452
Carrying Amounts	
At December 31, 2021	\$ 326,890
At June 30, 2022	\$ 315,200
Lease liability	
Balance, January 1, 2021 Interest expense Lease payments Effect of changes in foreign exchange rates	\$ 531,997 67,675 (237,634) (2,690)
Balance, December 31, 2021 Lease modification ⁽¹⁾ Interest expense Lease payments Effect of changes in foreign exchange rates	359,348 81,542 26,421 (112,853) (5,456)
Balance, June 30, 2022	\$ 349,002

⁽¹⁾ During the period ended June 30, 2022, the Company acquired additional space for its Allentown facility. The acquisition of the additional space resulted in a lease modification.

8. ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

	June 30 , Dec 2022	ember 31, 2021
Trade payable Payroll related liabilities Accrued liabilities	\$ 712,158 \$ 459,405 5,550	987,498 521,692 282,032
	\$ 1,177,113 \$	1,791,222

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

9. COVID-19 GOVERNMENT SUPPORT LOANS

On April 9, 2020, the Canadian government launched the Canada Emergency Business Account ("CEBA") which is intended to support businesses during COVID-19 by providing interest free financing of up to \$31,068 (CA\$40,000) until December 31, 2023. If 75% of the loan is repaid by December 31, 2023, the loan recipient will be eligible for a loan forgiveness of the remaining 25% of the amount loaned. On April 15, 2020, the Company received a loan in the amount of \$31,068 (2021 - \$31,660) through the CEBA. If the loan has not been repaid by December 31, 2023, the outstanding amount will be automatically extended for an additional two years at 5% interest per annum payable monthly and maturing on December 31, 2025. The Company expects to repay 75% of the amount borrowed prior to December 31, 2023.

10, SHARE CAPITAL

(a) AUTHORIZED

Unlimited number of common shares

One special voting share

(b) COMMON SHARES ISSUED

	Number of Shares	Amount
Balance, January 1, 2021	29,461,811	\$ 114,586,260
Issued on the conversion of convertible debentures	1,119,750	3,571,342
Fair value of warrants issued on conversion of convertible debentures	-	(1,229,305)
Share issue costs	-	(1,143,034)
Shares issued to settle accounts payable	1,678	13,814
Funds from common shares issued on private placement	1,764,720	11,815,595
Fair value of warrants issued on private placement	=	(3,766,007)
Fair value of broker warrants issued as share issue costs	-	(288,197)
Funds from the exercise of stock options	1,001,519	3,124,392
Fair value of stock options exercised	-	2,699,042
Funds from the exercise of warrants and compensation warrants	3,144,750	12,994,358
Fair value of warrants and compensation warrants exercised	-	5,351,586
Balance, December 31, 2021	36,494,228	147,729,846
Funds from the exercise of stock options	143,437	418,845
Fair value of stock options exercised	=	374,129
Funds from the exercise of warrants	50,000	196,800
Fair value of warrants exercised	-	54,732
Shares issued to settle accounts payable	5,422	40,029
Adjustment for 10 for 1 share consolidation	(272)	-
Balance, June 30, 2022	36,692,815	\$ 148,814,381

In 2020, the Company engaged with a firm to assist with its shareholder communications strategy. The terms of the agreement require the Company to issue common shares at certain pre-determined dates in statisfaction of past services rendered. During the six months ended June 30, 2022, the Company settled \$40,029 (2021 - \$13,814) in accounts payable related to services rendered in 2021 under this agreement by issuing 5,422 (2021 - 1,678) common shares at a price of \$7.38 (CAD\$9.38) (2021 - \$8.20 (CAD\$10.10) per share to the firm.

Share Consolidation

On February 24, 2022, the Company filed Articles of Amendment to consolidate its common shares on a ten-for-one basis. For further clarity, for every ten (10) pre-consolidated common shares, shareholders received one (1) post-consolidated common share. On February 28, 2022, the Company's common shares began trading on the TSX Venture Exchange on a post consolidation basis. The Company's name and trading symbol remained unchanged. All references to share and per share amounts in these consolidated financial statements and accompanying notes to the consolidated financial statements have been retroactively restated to reflect the ten-for-one share consolidation.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Expressed in US Dollars)

11. WARRANTS AND COMPENSATION OPTIONS

The following table reflects the continuity of warrants and compensation options:

	Avera	storical ge Exercise Price Com	Number of Warrants/ pensation option	Historical ons Fair value
Balance, January 1, 2021 Fair value of warrant issued on private placement Fair value of broker warrants issued on private placement Fair value of warrants issued on conversion of convertible debentures (Notes 9)	\$	3.90 9.00 6.70 3.80	3,269,050 1,764,720 105,883 1,119,750	\$ 5,557,002 3,766,007 288,197 1,229,305
Historical fair value assigned to warrants exercised Fair value of expired warrants		3.90 3.90	(3,144,750) (93,300)	(5,351,586) (160,470)
Balance, December 31, 2021 Historical fair value assigned to warrants exercised		7.10 3.90	3,021,353 (50,000)	5,328,455 (54,732)
Balance, June 30, 2022	\$	7.10	2,971,353	\$ 5,273,723

12. STOCK OPTIONS AND CONTRIBUTED SURPLUS

Stock Options

On October 7, 2021, shareholders of the Company approved amendments to the Company's fixed 20% stock option plan (as amended, previously referred to as the "2020 plan", now referred to as the "2021 Plan"). Under the 2021 Plan, the board of directors may grant options to acquire common shares of the Company to qualified directors, officers, employees and consultants. The 2021 Plan provides that the number of common shares issuable pursuant to options granted under the 2021 Plan and pursuant to other previously granted options is limited to 7,090,518 (the "Number Reserved"). Any subsequent increase in the Number Reserved must be approved by shareholders of the Company and cannot, at the time of the increase, exceed 20% of the number of issued and outstanding shares. The stock options vest in accordance with the policies determined by the Board of Directors from time to time consistent with the provisions of the 2021 Plan which grants discretion to the Board of Directors.

Stock option transactions and the number of stock options outstanding were as follows:

		Historical ghted average
	Number of Options	Exercise Price
Balance, January 1, 2021 Expired/cancelled Exercised Granted	5,114,449 \$ (166,438) (1,001,519) 1,013,125	3.30 3.40 3.00 8.50
Balance, December 31, 2021 Expired/cancelled Exercised Granted	4,959,617 (75,938) (143,437) 242,939	4.40 8.75 2.92 6.49
Balance, June 30, 2022	4,983,181 \$	4.48

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

12. STOCK OPTIONS AND CONTRIBUTED SURPLUS (Continued)

During the six months ended June 30, 2022, the Company granted 242,939 (six months ended June 30, 2021 - 693,125) stock options to employees and consultants of the Company to purchase common shares at an average price of \$6.49 (six months ended June 30, 2021 - \$8.80) per share.

During the six months ended June 30, 2022, the Company recorded stock-based compensation of \$1,967,102 (six months ended June 30, 2021 - \$2,057,131) relating to stock options that vested during the period.

The stock options granted were valued using the Black-Scholes option pricing model using the following assumptions:

Six Months Ended June 30,	2022	2021
Weighted average exercise price	\$6.49	\$4.10
Weighted average risk-free interest rate	1.8% - 3.5%	0.80% - 1.48%
Weighted average dividend yield	0%	0%
Weighted average volatility	84.74%	90.68%
Weighted average estimated life	10 years	10 years
Weighted average share price	\$6.49	\$8.80
Share price on the various grant dates:	\$5.18 - 6.86	\$6.40 - \$9.40
Weighted average fair value	\$5.47	\$7.60

The underlying expected volatility was determined by reference to the Company's historical share price movements, its dividend policy and dividend yield and past experience relating to the expected life of granted stock options.

The weighted average remaining contractual life and weighted average exercise price of options outstanding and of options exercisable as at June 30, 2022 are as follows:

	Options Out	tstanding		Options Exercis	Options Exercisable					
Exercise Range	Number Outstanding	Historical Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (years)	Number Exercisable	W A E	listorical /eighted .verage xercise Price				
\$0.88 - \$2.08 \$2.09 - \$2.96 \$2.97 - \$9.52	1,520,929	\$ 2.04 \$ 2.43 \$ 5.26	6.09 6.30 7.47	7,000 1,220,495 2,053,972	\$ \$ \$	2.04 2.40 4.44				
	4,983,181	\$ 4.39	7.11	3,281,467	\$	3.68				

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

13. LOSS PER SHARE

	Three Months Ended June 30,			Six Months June	
	2022		2021	2022	2021
Numerator Net loss	\$ (5,282,642)	\$	(4,408,194) \$	(10,715,441) \$	(8,506,614)
Denominator Weighted average number of common shares outstanding - basic and diluted	36,672,390		34,525,021	36,589,778	33,293,790
Basic and diluted loss per share	\$ (0.14)	\$	(0.13) \$	(0.29) \$	(0.26)

The effect of common share purchase options, warrants and broker warrants on the net loss is not reflected as they are anti-dilutive.

14. COMMITMENTS AND CONTINGENCIES

The Company has operating leases on four facilities; head office located in Toronto, Canada, design and testing operations located in Allentown, Pennsylvania (formerly in San Jose, California) and operating facilities located in Singapore and China. The Company's design and testing operations terminated a lease on January 31, 2021. A new lease was initiated on April 1, 2021 and expires on June 30, 2025. The lease on the Company's operating facilities in Singapore was initiated on November 1, 2019 with an original expiry of April 30, 2022. The lease on the Singapore facilty was renewed on May 1, 2022 and expires on May 31, 2023. The lease on the Company's operating facilities in China was initiated in November 19, 2021 and expires on November 18, 2023. As at June 30, 2022, the Company's head office was on a month to month lease term.

Remaining minimum annual rental payments to the lease expiration dates are as follows:

July 1, 2022 to December 31, 2022	\$ 138,257
2023 and beyond	 368,597
	\$ 506,854

15. RELATED PARTY TRANSACTIONS

Compensation to key management personnel were as follows:

	Three Months Ended June 30,			Six Months Ended June 30,		
	2022 2021		2022		2021	
Salaries	\$ 524,098 \$	388,881	\$	968,197	\$	972,382
Share-based payments (1)	405,007	611,671		871,401		1,052,080
Total	\$ 929,105 \$	1,000,552	\$	1,839,598	\$	2,024,462

⁽¹⁾ Share-based payments are the fair value of options granted to key management personnel and expensed during the various periods as calculated using the Black-Scholes model.

All transactions with related parties have occurred in the normal course of operations and are measured at the exchange amounts, which are the amounts of consideration established and agreed to by the related parties.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

16. SEGMENT INFORMATION

The Company and its subsidiaries operate in a single segment; the design, manufacture and sale of semi-conductor products and services for commercial applications. The Company's operating and reporting segment reflects the management reporting structure of the organization and the manner in which the chief operating decision maker regularly assesses information for decision making purposes, including the allocation of resources. A summary of the Company's operations is below:

OPEL, ODIS, POET Shenzhen and PTS

OPEL, ODIS, POET Shenzhen and PTS are the developers of the POET platform semiconductor process IP for monolithic fabrication of integrated circuit devices containing both electronic and optical elements on a single die.

BB Photonics

BB Photonics developed photonic integrated components for the datacom and telecom markets utilizing embedded dielectric technology that enables the low-cost integration of active and passive devices into photonic integrated circuits. BB Photonics' operation is currently dormant.

On a consolidated basis, the Company operates geographically in China and Singapore (collectively "Asia"), the United States and Canada. Geographical information is as follows:

2022

As of June 30,	, Asia US Canada		Consolidated			
Current assets	\$	520,907	\$ 254,186	\$ 13,371,282	\$	14,146,375
Investment in joint venture		236,946	-	-		236,946
Property and equipment		2,715,328	647,166	-		3,362,494
Patents and licenses		-	496,760	-		496,760
Right of use assets		88,756	226,444	-		315,200
Total Assets	\$	3,561,937	\$ 1,624,556	\$ 13,371,282	\$	18,557,775

For the Six Months Ended June 30,		Asia	US	Canada	Consolidated		
Revenue	\$	120,261	\$ -	\$ -	\$	120,261	
Selling, marketing and administration	\$	(1,046,671)	\$ (2,998,510)	\$ (784,736)	\$	(4,829,917)	
Research and development Interest expense		(2,674,508) (11,024)	(2,078,915) (15,362)	(111,958) (35)		(4,865,381) (26,421)	
Share of loss in joint venture		(1,176,282)	-	-		(1,176,282)	
Other income, including Interest and loan forgiveness		-	-	62,299		62,299	
Net loss	\$	(4,788,224)	\$ (5,092,787)	\$ (834,430)	\$	(10,715,441)	

2021

As of December 31,	Asia		US			Canada		Consolidated
Current assets Investment in joint venture Property and equipment Patents and licenses Right of use assets	\$	537,647 1,445,251 2,787,273 - 150,134	\$	291,772 - 276,961 528,476 176,756	\$	20,959,707 - - - -	\$	21,789,126 1,445,251 3,064,234 528,476 326,890
Total Assets	\$	4,920,305	\$	1,273,965	\$	20,959,707	\$	27,153,977

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

16. SEGMENT INFORMATION (continued)

For the Six Months Ended June 30,		Asia		US		Canada	Consolidated		
Revenue Selling, marketing and administration Research and development Interest Other income, including interest	\$	209,100 (719,250) (2,266,515) (18,769)	\$ \$	- (2,949,242) (1,016,024) (16,316) -	\$ \$	- (942,220) (520,166) (294,293) 27,081	\$ \$	209,100 (4,610,712) (3,802,705) (329,378) 27,081	
Net loss	\$	(2,795,434)	\$	(3,981,582)	\$	(1,729,598)	\$	(8,506,614)	

17. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The Company's financial instruments consist of cash and cash equivalents, short-term investments, covid-19 government support loans, contract liabilities and accounts payable and accrued liabilities. Unless otherwise noted, it is management's opinion that the Company is not exposed to significant interest risk arising from these financial instruments. The Company estimates that carrying value of these instruments approximates fair value due to their short term nature.

The Company has classified financial assets and (liabilities) as follows:

	•	June 30, 2022	De	cember 31, 2021
Cash and cash equivalents, measured at amortized cost:				
Cash and cash equivalents	\$	11,398,499	\$	14,941,775
Short-term investments	\$	2,366,153	\$	6,366,828
Other liabilities, measured at amortized cost:				
Accounts payable and accrued liabilities	\$	(1,177,113	\$ ((1,791,222)
Contract liabilities	\$	(341,975		
Covid-19 government support loans	\$	(31,068	•	(31,660)

Exchange Rate Risk

The functional currency of each of the entities included in the accompanying consolidated financial statements is the local currency where the entity is domiciled. Functional currencies include the Chinese Yuan, US, Singapore and Canadian dollar. Most transactions within the entities are conducted in functional currencies. As such, none of the entities included in the consolidated financial statements engage in hedging activities. The Company is exposed to a foreign currency risk when its subsidiaries hold current assets or current liabilities in currencies other than its functional currency. A 10% change in foreign currencies held would increase or decrease other comprehensive loss by \$479,000.

Liquidity Risk

The Company currently does not maintain credit facilities. The Company's existing cash and cash resources are not considered sufficient to fund operating and investing activities beyond one year from the issuance of these unaudited condensed consolidated financial statements.

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

18. CAPITAL MANAGEMENT

In the management of capital, the Company includes shareholders' equity (excluding accumulated other comprehensive loss and deficit) and cash and cash equivalents and short-term investments. The components of capital on June 30, 2022 were:

Cash and cash equivalents and short-term investments \$ 13,764,652 Shareholders' equity \$ 202,635,410

The Company's objective in managing capital is to ensure that financial flexibility is present to increase shareholder value through growth and responding to changes in economic and/or market conditions; to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business and to safeguard the Company's ability to obtain financing should the need arise.

In maintaining its capital, the Company has a strict investment policy which includes investing its surplus capital only in highly liquid, highly rated financial instruments. The Company reviews its capital management approach on an ongoing basis.

19. EXPENSES

Research and development costs can be analysed as follows:

		Three Months Ended June 30,			Six Months Ended June 30,			
		2022		2021	2022		2021	
Wages and benefits Subcontract fees Stock-based compensation Supplies	\$	909,588 603,262 471,273 316,519	\$	687,153 686,073 447,063 439,698	\$ 1,947,877 1,320,012 803,478 794,014	\$	1,269,625 1,194,148 649,997 688,935	
	\$	2,300,642	\$	2,259,987	\$ 4,865,381	\$	3,802,705	
Selling, marketing and administration costs of Stock-based compensation Wages and benefits General expenses Professional fees Depreciation and amortization Rent and facility costs	can be ar \$	498,388 728,313 519,359 291,185 313,677 33,051	lows \$	789,530 593,280 353,786 247,742 270,189 27,753	\$ 1,163,624 1,336,831 1,122,820 539,297 615,695 51,650	\$	1,407,134 1,409,292 698,133 531,847 522,920 41,386	
	\$	2,383,973	\$	2,282,280	\$ 4,829,917	\$	4,610,712	

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (Expressed in US Dollars)

20. REVENUE

Disaggregated Revenues

The Company disaggregates revenue by timing of revenue recognition, that is, at a point in time and revenue over time. During the period, the Company recognized \$120,261 (2021 - \$209,100) from non-recurring engineering services. The revenue is recognized over time.

Revenue Contract Balances

	Contract			
	Rec	eivables	I	Liabilities
Opening balance, January 1, 2022 Revenues recognized Changes due to payment, fulfillment of performance obligations or other Effect of changes in foreign exchange rates	\$	- 120,261 (120,261)	\$	- (470,261) 120,261 8,025
Balance, June 30, 2022	\$	-	\$	(341,975)