



# *Cymat Technologies Ltd.*

## *Management's Discussion and Analysis (“MD&A”)*

### *As at October 31, 2018*

December 13, 2018

The following discussion and analysis of Cymat Technologies Ltd. [“Cymat” or the “Company”] financial condition and results of operations should be read in conjunction with the audited comparative financial statements of the Company for the year ended April 30, 2018, and the associated notes to the financial statements.

The Company prepares its unaudited interim financial statements in accordance with International Financial Reporting Standards (“IFRS”) as issued by the International Accounting Standards Board [“IASB”]. All financial information contained in this MD&A and in the unaudited interim financial statements has been prepared in accordance with IAS 34, Interim Financial Reporting.

This MD&A is dated December 13, 2017 and all amounts herein are denominated in Canadian dollars, unless otherwise stated.

The information below contains certain forward-looking statements that reflect the current view of Cymat with respect to future events and financial performance. Wherever used, the words “may”, “will”, “anticipate”, “intend”, “expect”, “plan”, “believe”, and similar expressions identify forward-looking statements. Any such forward-looking statements are subject to risks and uncertainties, and the Company's actual results of operations could differ materially from historical results or current expectations. The Company will review the forward-looking information in the preparation of the MD&A on a quarterly basis and, where appropriate, provide updated forward-looking statements based on the most current view of Cymat.

#### **1. Company Overview and Business of Company**

Cymat was incorporated on June 13, 2006 under the Business Corporations Act (Ontario) and is the successor to Duntroon Energy (formerly Cymat Corp.) which was incorporated on June 30, 1998 under the Business Corporations Act (Ontario).

Cymat manufactures innovative materials for industry. The Company has worldwide rights, through patents and licenses, to produce Stabilized Aluminum Foam (“SAF”). This ultra-light metallic foam is produced using a proprietary, versatile process in which gas is bubbled into molten-alloyed aluminum containing a dispersion of fine ceramic particles to create foam that is then cast into either flat panels or near-net shapes. The result is a material, which is recyclable, with a wide array of features including very low density, mechanical energy absorption, thermal and acoustic insulation, time and temperature insensitivity and has a relatively low cost of production. The technology is focused on producing products for 3 major markets: automotive, architecture and blast mitigation industries. Cymat markets architectural material under the trademark, “Alusion™” and automotive and blast mitigation products under the “SmartMetal™” trademark.

## 2. Selected Financial Information

Select financial information for the three month periods ended October 31, 2018 and October 31, 2017:

	Three Months Ended October 31		Six Months Ended October 31	
	2018 (\$)	2017 (\$)	2018 (\$)	2017 (\$)
<b>Interim Statements of Operations</b>				
Revenue	<b>1,030,169</b>	381,303	<b>1,421,586</b>	948,347
Plant operating expenses	<b>692,878</b>	354,271	<b>1,077,921</b>	674,608
Research and material testing expense	<b>53,177</b>	11,058	<b>118,629</b>	11,880
Selling, general and administrative expenses	<b>367,987</b>	411,551	<b>767,621</b>	948,854
Loss from operations	<b>(83,873)</b>	(395,577)	<b>(542,585)</b>	(686,995)
Net loss	<b>(136,418)</b>	(389,422)	<b>(625,670)</b>	(836,438)

### Interim Statements of Cash Flows

Cash used in operating activities	<b>(152,351)</b>	(335,940)	<b>(374,761)</b>	(715,627)
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## 3. Results of Operations

### Comparison of the Three Months Ended October 31, 2018 and October 31, 2017

#### Revenue

Revenue for the quarter ended October 31, 2018 was approximately \$1,030,000, an increase of \$649,000, or 170%, from revenue for the quarter ended October 31, 2017, of \$381,000.

Alusion<sup>TM</sup> sales for the second quarter of fiscal 2019 were \$918,000 compared to \$359,000 for the comparable quarter of last year. Sales for the second quarter of fiscal 2018 include Alusion<sup>TM</sup> panel sales from larger architectural projects of \$573,000, compared with sales from similarly-sized architectural projects of \$184,000 for the same quarter of fiscal 2018. The current quarter also included Alusion<sup>TM</sup> sales of approximately \$132,000 resulting from the expansion of Cymat's sales territory into China.

Revenue from SmartMetal<sup>TM</sup> for the quarter ended October 31, 2018 was approximately \$112,000, compared to SmartMetal<sup>TM</sup> revenue of \$22,000 for the second quarter of last fiscal year.

Cymat recognizes revenue from the sale of manufactured products when control of the product is transferred to the customers. Based on the terms of the specific transaction, control typically transfers at a point along a continuum that is as early as the products' departure from the Company's warehouse to as late as the passing of inspection following the products' arrival at a designated shipment location.

## **Plant Operating Expenses**

Plant operating expenses for the quarter ended October 31, 2018 were approximately \$693,000, an increase of \$339,000, or 96%, as compared to the same expenses of \$354,000 for the quarter ended October 31, 2017.

Plant operating expenses include the direct operating expenses of labour, material, consumables, maintenance, freight and changes in inventory as well as manufacturing overhead costs. These direct operating expenses were approximately \$597,000 for the second quarter of fiscal 2019, as compared to \$260,000 for the second quarter of fiscal 2018. Labour expenses were higher due to increased headcount and overtime associated the higher production volume. Increased quarter-over-quarter hourly labour rates were also a contributing factor to the higher labour expenses. Materials, consumables and freight expenses were also higher in keeping with the higher production/sales volume.

Plant operating expenses also includes factory overhead costs such as rent and utilities. These expenses totalled approximately \$82,000 for the second quarter of fiscal 2019 as compared to similar expenses of \$83,000 for the same period of fiscal 2018.

Plant operating expenses also include depreciation and amortization expense of approximately \$14,000 and \$12,000, respectively, for the three-month periods ended October 31, 2018 and October 31, 2017.

## **Research and Material Testing Expenses**

Research and material testing expenses for the second quarter of fiscal 2019 included costs related to foaming experimentation and supply chain development associated an alternative aluminum metal matrix composite in support of the Company's sandwich panel development. The related expenses totalled approximately \$53,000 for the current quarter. The comparative quarter included expenses of \$10,000 relating to sandwich panel brazing investigations.

Research and material testing expenses also included depreciation expenses regarding lab and testing equipment of approximately \$1,000 in each of the second quarters of fiscal 2019 and fiscal 2018.

## **Selling, General and Administrative Expenses ("SG&A")**

SG&A expenses for the quarter ended October 31, 2018 were approximately \$368,000, as compared to an expense of \$412,000 for the same quarter ended October 31, 2017. The most significant expense decreases included a reduction to employee stock-based compensation expenses (\$55,000) and a reduction in marketing and travel expenses (\$25,000). Partially offsetting expense increases included higher employee compensation expenses (\$18,000) due to increased headcount and shareholder expenses (\$21,000) related to a change in the timing of the Annual General Meeting.

SG&A expenses also include depreciation and amortization in the approximate amounts of \$1,000 for each of the second quarters of fiscal 2019 and 2018.

## **Foreign Exchange Loss**

For the quarter ended October 31, 2018, there was a foreign exchange loss of \$3,000 as compared to a gain of \$24,000 for the quarter ended October 31, 2017. The loss for the second quarter of fiscal 2019 was primarily the result of the exchange differentials on payable balances denominated in US dollars. The gain for the second quarter of fiscal 2018 was primarily the result of the effect of the US/Canadian dollar exchange rate on cash and receivable balances denominated in US dollars.

## **Interest and Financing Expense**

Interest and financing expense for the three months ended October 31, 2018, was comprised of royalty-based financing fees of \$50,000 (including \$19,000 payable to a related party).

Interest and financing expense for the three months ended October 31, 2017, was comprised of royalty-based financing fees of \$18,000 (including \$7,000 payable to a related party).

## **Net Income (Loss)**

A net loss of \$136,000 was recorded for the second quarter of fiscal 2019, compared to a net loss of \$389,000 for the same quarter of last year.

The net loss for the second quarter of fiscal 2019 includes the non-cash items of depreciation and amortization of approximately \$16,000 (2018 – \$14,000) and share-based compensation expense of approximately \$25,000 (2018 – \$80,000).

## **Comparison of the Six Months Ended October 31, 2018 and October 31, 2017**

### **Revenue**

Revenue for the six months ended October 31, 2018 was approximately \$1,422,000, an increase of \$474,000, or 50%, from revenue for the six months ended October 31, 2017, of \$948,000.

Alusion<sup>TM</sup> sales for the first half of fiscal 2019 were \$1,301,000 compared to \$894,000 for the comparable period of last year. Sales for the first half of fiscal 2018 include Alusion<sup>TM</sup> panel sales included revenue from larger architectural project of \$719,000, compared with sales from similarly-sized architectural projects of \$549,000 for the same quarter of fiscal 2018. The current quarter also included Alusion<sup>TM</sup> sales of approximately \$184,000 resulting from the expansion of Cymat's sales territory into Korea and China.

Revenue from SmartMetal<sup>TM</sup> for the six months ended October 31, 2018 was approximately \$121,000, compared to SmartMetal<sup>TM</sup> revenue of \$54,000 for the first half of last fiscal year.

Cymat recognizes revenue from the sale of manufactured products when control of the product is transferred to the customers. Based on the terms of the specific transaction, control typically transfers at a point along a continuum that is as early as the products' departure from the Company's warehouse to as late as the passing of inspection following the products' arrival at a designated shipment location.

## **Plant Operating Expenses**

Plant operating expenses for the six months ended October 31, 2018 were approximately \$1,078,000, an increase of \$403,000, or 60%, as compared to the same expenses of \$675,000 for the six months ended October 31, 2017.

Plant operating expenses include the direct operating expenses of labour, material, consumables, maintenance, freight and changes in inventory as well as manufacturing overhead costs. These direct operating expenses were approximately \$878,000 for the first half of fiscal 2019, as compared to \$495,000 for the first half of fiscal 2018. Labour expenses were higher due to increased headcount and overtime associated the higher production volume. Increased hourly labour rates were also a contributing factor to the higher labour expenses. Increased raw material costs combined with the lower purchasing power of the Canadian dollar led to higher material costs. All direct operating expenses were increased as a result of the higher production volume.

Plant operating expenses also includes factory overhead costs such as rent and utilities. These expenses totalled approximately \$174,000 for the first half of fiscal 2019 as compared to similar expenses of \$156,000 for the same period of fiscal 2018. The increase in these expenses was the result of higher electricity expenses arising from higher consumption of energy and an increase in facility lease expense.

Plant operating expenses also include depreciation and amortization expense of approximately \$26,000 and \$24,000, respectively, for the six-month periods ended October 31, 2018 and October 31, 2017.

## **Research and Material Testing Expenses**

Research and material testing expenses for the first half of fiscal 2019 included costs related to experimentation with the foaming of an alternative aluminum metal matrix composite in support of the Company's sandwich panel development. The related expenses totalled approximately \$117,000 for the current period (fiscal 2018 - \$10,000).

Research and material testing expenses also included depreciation expenses regarding lab and testing equipment of approximately \$2,000 in each of the first halves of fiscal 2019 and fiscal 2018.

## **Selling, General and Administrative Expenses ("SG&A")**

SG&A expenses for the six months ended October 31, 2018 were approximately \$768,000, as compared to expenses of \$949,000 for the same period ended October 31, 2017. The most significant expense decreases included a reduction to employee stock-based compensation expenses (\$211,000) and a reduction in marketing and travel expenses (\$23,000). Partially offsetting expense increased included higher employee compensation expenses (\$57,000) due to increased headcount.

SG&A expenses also include depreciation and amortization in the approximate amounts of \$2,000 for each of the first halves of fiscal 2019 and 2018.

## **Foreign Exchange Loss**

For the six months ended October 31, 2018, there was a foreign exchange loss of \$13,000 as compared to a gain of \$8,000 for the six months ended October 31, 2017. The losses for the first half of fiscal 2018 were primarily the result of the exchange differentials on trade receivable balances denominated in Euros and payables denominated in \$US. Exchange gains for the comparative period were largely the result of changing \$US exchange rates on \$US denominated accounts receivable.

## Interest and Financing Expense

Interest and financing expense for the six months ended October 31, 2018, was comprised of royalty-based financing fees of \$70,000 (including \$27,000 payable to a related party).

Interest and financing expense for the six months ended October 31, 2017, includes cash-based amounts of approximately \$100,000 which consisted of:

- \$56,000 in convertible debenture interest, and
- \$44,000 in royalty-based financing fees (including \$17,000 payable to a related party).

The expense for the quarter also includes a non-cash-based amount of \$58,000 which consisted of:

- accreted interest on the convertible debentures arising from the difference between the face value and the recorded value of the debentures.

## Net Income (Loss)

A net loss of \$626,000 was recorded for the first half of fiscal 2019, compared to a net loss of \$836,000 for the same period of last year.

The net loss for the first half of fiscal 2019 includes the non-cash items of depreciation and amortization of approximately \$30,000 (fiscal 2018 – \$28,000), a share-based compensation expense of approximately \$95,000 (fiscal 2018 – \$305,000), share-based consulting fees of \$Nil (fiscal 2018 - \$21,000) and non-cash interest of \$Nil (fiscal 2018 - \$58,000) regarding the convertible debt.

## 4. Selected Financial Information

The following table presents selected quarterly financial information derived from the Company's unaudited statements of operations and cash flows for the eight most recent quarters ended July 31, 2018. These operating results are not necessarily indicative of results to be achieved for any future period and should not be relied upon to predict future performance.

Three months ended,	Oct 31, 2018	Jul 31, 2018	Apr 30, 2018	Jan 31, 2018	Oct 31, 2017	Jul 31, 2017	Apr 30, 2017	Jan 31, 2017
Revenue	1,030	391	1,322	777	381	567	536	756
Plant operating expenses	693	385	819	376	354	320	425	390
Research and material testing expenses	53	65	52	17	11	1	1	1
SG&A expenses	368	400	457	442	412	537	369	340
Net Loss	(136)	(489)	(165)	(115)	(389)	(447)	(456)	(183)
Net Loss per Share	-	(0.01)	(0.00)	(0.00)	(0.01)	(0.02)	(0.03)	(0.01)
Operating cash flow	(152)	(222)	231	(278)	(336)	(380)	16	(84)

## 5. Liquidity and Capital Resources

### Sources and Uses of Cash

As at October 31, 2018 the Company had approximately \$287,000 of cash and cash equivalents on hand. For the six months ended October 31, 2018, the cash flow used in operating activities was approximately \$375,000 (October 31, 2017 – used \$716,000). Cash utilized by operating activities was the result of a net loss adjusted for items not involving cash of negative \$501,000 (October 31, 2017 – negative \$369,000) and cash provided by changes in non-cash working capital balances of \$127,000 (October 31, 2017 – \$347,000 used by changes in non-cash working capital).

For the six-month period ended October 31, 2018, cash used in investing activities was \$32,000, primarily the result of the capital refurbishment of the production furnaces and the ventilation system. For the six-month period ended October 31, 2017, cash used in investing activities of \$66,000 was the result of the purchase of plant equipment.

For the six months ended October 31, 2018, cash provided by financing activities in the amount of \$169,000 was the result of warrant exercises. For the six months ended October 31, 2017, cash provided by financing activities was \$903,000 as the result of proceeds of \$1,360,000 from exercise of warrants, partially offset by the payment of interest on convertible debentures in the amount of \$457,000.

### **Investments in Property, Plant and Equipment**

In the first half of fiscal 2019, the Company spent \$32,000 on the capital refurbishment of the production furnaces and ventilation system. The furnace linings have estimated useful lives of two years. In the first quarter of fiscal 2018, the Company incurred \$66,000 of capital expenditure on production equipment, including \$61,000 on equipment to increase production capacity.

Management maintains its capital expenditure with the goal of meeting expected production demands.

### **Licenses and technology rights**

Cymat controls the following patent elements related to its SAF which cover:

- the fundamental process to make foam, irrespective of final shape;
- the fundamental process to make foam as a shaped part or a flat panel; and
- the fundamental process to make shaped parts using displacement casting.

Some of these patents are controlled under a license from Alcan International Inc. [“Alcan”]; some have been acquired from Hydro Aluminum a.s. [“Hydro”]; and Cymat has developed others independently. The scope of patent protection provides Cymat with important cost advantages in the production of aluminum foams.

Cymat continues to develop and protect its intellectual property and its proprietary manufacturing processes. It is Cymat’s intention to continue to vigorously employ all legal remedies available to enforce its intellectual property rights.

### **Going Concern Uncertainty**

To date, the Company has financed its operations primarily through share and convertible debt issuances, investment tax credits, interest income, and collaborative co-development agreements. The Company has incurred significant operating losses and cash outflows from operations. As at October 31, 2018, the anticipated level of cash flows from operating activities for the next twelve months is not assured to be sufficient to sustain operations. The ability of the Company to continue as a going concern is dependent upon achieving future profitable operations and may also be dependent upon raising additional financing through borrowings or equity issuance. The outcome of these matters is dependent on a number of items outside the Company’s control. As a result, there are material uncertainties that may cast significant doubt as to whether the Company will have the ability to continue as a going concern. These financial statements do not include any adjustments or disclosures that may result from the Company’s inability to continue as a going concern. If the going concern assumption were not found to be appropriate for these financial statements, adjustments might be necessary in the carrying values of assets and liabilities, the statement of financial position classifications and the reported expenses. Such adjustments could be material.

## 6. Investments and Capitalization

Cymat is listed on the TSX – Venture Exchange, trading under the symbol CYM.

The table below sets out the number of issued and outstanding common shares as at December 13, 2018.

	Number of Securities
Common Shares	37,799,331
Stock Options	<u>5,138,908</u>
Total Diluted Shares Outstanding	<u>42,938,239</u>

### Share Capital

The Company is authorized to issue an unlimited number of common shares. At October 31, 2018, issued and outstanding common shares totalled approximately 37,799,331 shares.

The Company has not paid dividends on its common shares and has no expectations of paying dividends in the near future.

### Stock Options

Under the terms of the stock option plan approved at the Annual General Meeting on July 13, 2017, the aggregate number of common shares reserved for the issuance of stock options is 7,424,866.

During the six months ended October 31, 2018, stock options were granted as follows:

- On June 11, 2018, the Company granted 25,000 options to an employee at an exercise price of \$0.28, with one third vesting immediately, one third vesting on June 11, 2019 and one third vesting on June 11, 2020.

During the fiscal year ended April 30, 2018, stock options were granted as follows:

- On July 13, 2017, the Company granted 2,785,000 options to certain directors, officers and employees at an exercise price of \$0.205, with 34% vesting on the grant date, 33% vesting on July 13, 2018 and the remaining 33% vesting on July 13, 2019. Vesting for 878,331 of these options is further dependent upon the attainment of certain performance criteria; and
- On July 13, 2017, the Company granted 100,000 options to a consultant at an exercise price of \$0.21, vesting immediately.

No options were exercised in the first half of fiscal 2019, nor in fiscal 2018.



## Critical Accounting Policies and Estimates

### Revenue recognition

Revenue from the sale of manufactured products is recognized at the point in time when control of the product is transferred to the customer. Based on the terms of the specific transaction, control typically transfers at a point along a continuum that is as early as the products' departure from the Company's warehouse to as late as the passing of inspection following the products' arrival at a designated shipment location. Amounts received in advance of recognized revenues are recorded as deferred revenue.

### Financial Instruments

The Company adopted all of the requirements of IFRS 9 Financial Instruments ("IFRS 9") as of May 1, 2018. IFRS 9 replaces IAS 39 Financial Instruments: Recognition and Measurement ("IAS 39"). IFRS 9 utilizes a revised model for recognition and measurement of financial instruments and a single, forward-looking "expected loss" impairment model. Most of the requirements in IAS 39 for classification and measurement of financial liabilities were carried forward in IFRS 9, such that the Company's accounting policy with respect to financial liabilities is unchanged. Additionally, as a result of the adoption of IFRS 9, the Company has not materially changed its accounting policy for financial assets. The adoption of IFRS 9 had no impact on the carrying values of any financial assets or financial liabilities on the transition date.

A summary of the Company's accounting policy for financial instruments under IFRS 9 is described below.

(i) *Classification.*

A financial asset or liability is classified in one of the following categories: at fair value through profit and loss ("FVTPL"), at fair value through other comprehensive income (loss) ("FVTOCI"), or at amortized cost. The Company determines the classification of a financial instrument at initial recognition. The classification of the Company's financial assets and liabilities is disclosed in Note 13.

(ii) *Measurement.*

Financial assets and liabilities classified at amortized cost are initially recognized at fair value, plus or minus transaction costs, and subsequently carried at amortized cost less any impairment.

Financial assets and liabilities classified at FVTPL are initially recorded at fair value and related transaction costs are expensed. Realized and unrealized gains and losses arising from changes in the fair value of the financial assets and liabilities held at FVTPL are included in the statements of operations and comprehensive loss in the period in which they arise. The Company has no financial assets in this category. The accrued royalty is held at FVTPL. At the end of each reporting period, the royalty accrual is recalculated and changes attributable to changes in the timing and amounts of estimated future cash flows are included in interest expense.

The Company has no financial instruments classified at FVTOCI.

(iii) *Derecognition.*

Financial assets are derecognized when the contractual rights to cash flows from the financial assets expire, or when the Company transfers the financial assets and substantially all of the associated risks and rewards of ownership to another entity. Gains and losses on derecognition are recorded in the statements of operations and comprehensive loss.

Financial liabilities are derecognized only when its obligations under the financial liability are discharged, cancelled or expired. Typically, the difference between the carrying value of the derecognized financial liability and the consideration paid or payable is recorded in the statements of operations and comprehensive loss.

### **Accrued royalties**

The Company issued promissory notes that included an embedded perpetual royalty that survived the maturity of the promissory notes. The royalties have been designated as a financial liability at fair value through profit or loss. Accordingly, the perpetual royalty is valued at the reporting date based on the most recent revenue projections. The change in estimated fair value of the royalty is recorded in income in the period in which the liability is recalculated.

### **Use of estimates**

The preparation of these financial statements in accordance with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual amounts could differ from those estimates. Significant estimates include those used in:

- the measurement of the cost of finished goods inventory, including the allocation of costs of conversion and manufacturing overhead,
- allowance for doubtful accounts,
- the determination of the useful lives of long lived assets,
- the determination of the appropriate amount, if any, of the writedown in the carrying value of long term assets, including the estimation of the associated future cash flows and the appropriate discount rate used to estimate the recoverable amount,
- the valuation of the accrued royalties on the promissory notes, including the forecasted revenues and the appropriate discount rate to apply in the determination of present value,
- the valuation of the debt and equity components of the convertible debt, including the appropriate discount rate to apply in the determination of the fair value of the debt and the volatility and risk free rates used in the valuation of the warrants and conversion feature, and
- the measurement of the fair value of share-based compensation, including the volatility and risk free rates used in the option valuation models and the estimation of number of options expected to vest.

The Company's assessment of the recoverable amount of property, plant and equipment, and intangible assets is based on management's assessment of potential indicators of impairment and best estimates of likely courses of action by the Company. This assessment is subject to significant measurement uncertainty. Material write-downs of these assets could occur if actual results differed from the estimates and assumptions used.

## **Judgments**

In the process of applying the Company's accounting policies, management has made judgments regarding the determination of whether there has been impairment in the carrying value of long term assets which has the most significant effect on the amounts recognized in the financial statements. The Company has also applied significant judgment in classifying the perpetual royalty related to promissory notes as a derivative liability.

## **7. Accounting Standards Issued But Not Yet Applied**

The IASB released IFRS 16 Leases, completing its long-running project on lease accounting. IFRS 16 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (the lessee and the lessor).

All leases result in the lessee obtaining the right to use an asset at the start of the lease and, if lease payments are made over time, also obtaining financing. Accordingly, from the perspective of the lessee, IFRS 16 eliminates the classification of leases as either operating leases or finance leases that is currently required by IAS 17 Leases and, instead, introduces a single lessee accounting model. When applying that model, a lessee is required to recognize:

- assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value; and
- depreciation of lease assets separately from interest on lease liabilities in the income statement.

From the perspective of the lessor, IFRS 16 substantially carries forward the accounting requirements in IAS 17. Accordingly, a lessor continues to classify its leases as operating leases or finance leases, and accounts for those two types of leases differently.

In addition, IFRS 16 also:

- changes the definition of a lease;
- sets requirements on how to account for the asset and liability, including complexities such as non-lease elements, variable lease payments and option periods;
- provides exemptions for short-term leases and leases of low value assets;
- changes the accounting for sale and leaseback arrangements; and
- introduces new disclosure requirements.

IFRS 16 will be effective for annual periods beginning on or after January 1, 2019. For Cymat, the first effective fiscal year will be the one commencing May 1, 2019. The Company will not be implementing early adoption of this standard. The Company has completed an initial review to identify all leases that will require recognition of a right-of-use asset and lease liability. The Company is currently quantifying these impacts and assessing its transition and implementation options.

## **8. Related Party Transactions**

Interest and financing expense for the six months ended October 31, 2018, includes cash-based royalties in the amount of \$27,000 (October 31, 2017 – \$17,000) payable to a related party. The first quarter of last fiscal year also included interest in the amount of \$11,000 pertaining to convertible debentures that were payable to a related party.

## **9. Risks and Uncertainties**

### **Liquidity risk**

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company has sustained annual losses and negative annual cash flows from operations since its inception. The Company's objective for liquidity risk management is to maintain sufficient liquid financial resources to meet financial obligations and commitments in the most cost-effective manner possible. The Company manages its liquidity risk by continually forecasting cash flows from operations and anticipated investing and financing activities. As of October 31, 2018, the Company was holding cash and cash equivalents of \$286,675 (April 30, 2018 - \$524,332) and trade and other receivables of \$153,908 (April 30, 2018 - \$465,200).

There are uncertainties regarding the Company's liquidity conditions. See Note 1 regarding the Company's ability to continue as a going concern.

### **Foreign currency risk**

The Company is primarily exposed to the fluctuation of the European Euro and United States (US) dollar relative to the Canadian dollar in as much as certain sales and raw material and consumable purchases are denominated in those currencies. Revenue and expenses are translated into Canadian dollars at the time of the transaction. The Company typically extends regular credit terms to its customers and recognizes foreign exchange translation gains or losses on a monthly basis through foreign currency translation of foreign currency receivables and payables using the temporal method.

At present, the Company does not use derivative instruments to reduce its exposure to foreign currency risk. In some cases, the Company does have the ability to mitigate foreign currency risk by adjusting prices charged to non-Canadian customers.

Increases in the value of the Canadian dollar can reduce revenue, with a partially off-setting reduction in the cost of material inputs. Declines in the comparative value of the Canadian dollar can result in increased revenue with a partially off-setting increase in the cost of material inputs.

### **Credit risk**

Credit risk arises from the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge the obligation. The Company is exposed to credit risk from customers. The maximum exposure to credit risk is equal to the carrying value of the receivable.

Management seeks to minimize credit risk through the establishment of payment terms requiring the receipt of full order payment prior to shipment of goods. In some cases credit terms, generally between 30 and 90 days after shipment, are granted to customers. When deemed appropriate by management, letters of credit are also employed to secure payment on product orders.

Accounts receivable are reviewed by management at each balance sheet reporting date on an account-by-account basis to determine their collectability. The review considers such factors as customer payment history, the current financial conditions of the customers and the general economic environment.

## **Commodity price risk**

At present, the Company is exposed to commodity price risk through its purchasing of raw materials as it uses aluminum as its primary raw material.

Metal prices and international commodity quotations are external variables over which the Company has no influence or control. This potentially exposes the Company to price volatilities that could significantly impact its future operating cash flows. As part of its routine activities, management closely monitors the trend in international metal prices. The Company does have the ability to mitigate commodity price risk by adjusting prices charged customers.

At present, the Company does not use derivative instruments to reduce its exposure to commodity price risk.

## **Dependence on Key Personnel**

Cymat is dependent on key employees and believes that its future success will depend on its ability to attract and retain highly skilled engineering and production, managerial and marketing personnel. Competition for such personnel is intense and there is no assurance that the Company will be able to retain, attract or hire qualified personnel in the future. The loss of certain key employees, or the inability to hire and retain additional key employees could adversely impact the Company.

## **Proprietary Technology Protection**

Cymat's technology leadership is subject to the risks of patent infringement by competitors, and of competitors making technological breakthroughs, which may make the Company's products less attractive. An intellectual property management program is in place to protect Cymat's intellectual property and trade secrets. Cymat funds ongoing improvements to its proprietary manufacturing processes, which create new patent opportunities that enhance and may extend the period of the technological exclusivity. There is the risk that the Company's patents and trade secrets may not be held valid and enforceable, or be held to have a scope sufficiently broad to cover competitors' products or processes. There is also the risk that Cymat's products or process may infringe on other patents, which may limit the Company's ability to fully commercialize certain SAF applications. The cost of enforcing Cymat's patent rights in lawsuits or defending against infringement claims may be significant and could interfere with the Company's operations. For a more complete discussion please refer to the "License and Technology Rights" section above.

## **Government Regulation and Certification Requirements Imposed by Customers**

The use of SAF in certain applications may be subject to regulation by certain government bodies and to compliance with applicable laws, both inside and outside of Canada. In addition, industry users may impose significant certification, safety, quality control and other requirements. Compliance with these laws and regulations may be costly and time consuming, and failure to comply may have a material, adverse effect on the Company's business.

## **Other Risks**

The Company may be subject to a number of other risks that could materially and adversely affect Cymat's business, financial condition, liquidity or results of operations. Such risks include those associated with competing products, international markets, fluctuating currency exchange rates and the possibilities of trade restrictions and the ability of the Company to manage growth.

## **10. Management's Assessment of Disclosure Controls and Procedures**

Management is responsible for the design of internal controls over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the financial statements in accordance with accounting principles generally accepted in Canada. Overall, the Company believes its internal controls and procedures are effective in providing reasonable assurance that financial information is recorded, processed, summarized and reported in a timely manner.

Management is also responsible for the design and effectiveness of disclosure controls and procedures to provide reasonable assurance that material information related to the Company is made known to the Company's certifying officers.

There were no changes in the internal controls over financial reporting during the period ended October 31, 2018, that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting

## **11. Outlook**

Alusion<sup>TM</sup> – Cymat's architectural SAF- sales are expected to continue to represent the largest source of revenue for the balance of the year. Management anticipates that architectural revenue will continue to benefit from the recent addition of sales agents in Korea and China. Alusion<sup>TM</sup> continues to gain acceptance as an option for exterior building cladding as demonstrated by orders for four separate façade projects that were shipped in the most recently ended quarter. Such façade projects are typically larger in scope, thus entailing higher order values. For the balance of the year, Cymat has expectations for the order of Alusion<sup>TM</sup> panels to be installed in exterior façade applications located in South America and Asia.

Cymat continues to support SmartMetal<sup>TM</sup> development projects involving vehicle blast mitigation assemblies for several international military OEM's. Cymat also continues to explore other non-vehicular energy absorption applications for SmartMetal<sup>TM</sup> including the use of SmartMetal<sup>TM</sup> in the French nuclear energy industry for safeguards involving the transport of radioactive material. The most recently completed quarter included a follow-on sale of SmartMetal<sup>TM</sup> cylinders that act as a key component in non-lethal crowd dispersal projectiles. The Company has expectations that these cylinders will become a long-term source of SmartMetal<sup>TM</sup> revenue.

In the automotive sector, the Company continues to participate in discussions and prototype programs involving the development of SmartMetal<sup>TM</sup> applications vehicle crash mitigation systems and light-weighting applications. Management remains convinced that SmartMetal<sup>TM</sup> has the potential to resolve the conflicting requirements within automotive design for increased vehicle crashworthiness while at the same time reducing vehicle weight.

Cymat continues to work closely with our partner, Alucoil SA., in the development of composite sandwich panels with Cymat's SAF as the panel core. A production-scale panel brazing line has been installed in Spain and its operation is currently being fine-tuned. This testing phase is anticipated to be completed shortly, with the potential for revenue from composite panels anticipated in calendar 2019.