

ALTAIR NANOTECHNOLOGIES INC
 Form 424B5
 March 30, 2011
 PROSPECTUS SUPPLEMENT
 (To Prospectus dated October 26, 2009)

Altair Nanotechnologies, Inc.

3,600,000 Common Shares
 Series A Warrants to Purchase 1,800,000 Common Shares
 1,800,000 Additional Common Shares

We are offering up to 3,600,000 common shares and Series A warrants to purchase up to 1,800,000 common shares. The common shares and warrants will be sold in units, with each unit consisting of one common share and one Series A warrant to purchase .5 of a common share at an exercise price of \$2.56 per common share during a five-year term beginning six months after the issue date. Each unit will be sold at a price of \$1.784 per unit. In addition, if the Share Subscription Agreement with Canon is adversely amended or the transactions contemplated thereby do not close by July 17, 2011, we will issue an additional number of common shares, as an adjustment, to purchasers without any further consideration. The number of adjustment shares will be equal to: (i) the quotient of (A) the aggregate purchase price paid by the purchaser for the units at closing divided by (B) 85% of the volume weighted average price per common share during the ten trading days beginning on the earlier to occur of July 17, 2011 or the public announcement of the termination of, or adverse amendment to, the Share Subscription Agreement (ii) minus the number of units subscribed for and purchased in the offering. The maximum number of adjustment shares that may be issued will be capped at 1,800,000. See "Description of Units – Securities Purchase Agreement" on page S-22.

Units will not be issued or certificated. The common shares and warrants are immediately separable and will be issued separately. Each common share includes an attached right arising under an Amended and Restated Shareholder Rights Plan Agreement dated October 15, 1999, as amended. Our common shares are listed on the NASDAQ Capital Market under the symbol "ALTI." On March 28, 2011, the last reported sale price of our common shares was \$2.23 per share.

For purposes of General Instruction I.B.6 of Form S-3, the aggregate market value of our outstanding common shares held by non-affiliates is approximately \$68.9 million, based on 27,015,680 outstanding common shares, of which 5,342,030 shares are held by affiliates, and a price of \$3.18 per share, which was the last reported sale price of our common shares on the NASDAQ Capital Market on February 7, 2011. As of the date of this prospectus, we have offered \$905,087.67 in securities pursuant to General Instruction I.B.6. of Form S-3 during the prior 12 calendar month period that ends on, and includes, the date of this prospectus.

Our business and an investment in the securities offered by this prospectus supplement and the accompanying prospectus involve significant risks. See "Risk Factors" beginning on page S-4 of this prospectus supplement.

	Per Unit	Maximum Offering Amount
Public offering price	\$1.784	\$6,422,400
Placement agent's fee ¹	\$0.125	\$449,568
Proceeds, before expenses, to Altair	\$1.659	\$5,972,832

These securities have not been approved or disapproved by the Securities and Exchange Commission ("SEC") or any state securities commission nor has the SEC or any state securities commission passed upon the accuracy or adequacy of this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

We estimate the total expenses of this offering, excluding the placement agent's fee, will be approximately \$150,000. Because there is no minimum offering amount required as a condition to closing this offering, the actual public offering amount, placement agent's fee and net proceeds to us, if any, in this offering are not presently determinable and may be less than the maximum offering amounts set forth above. We are offering these common shares and warrants to purchase common shares on a best efforts basis primarily to institutional investors. We have retained JMP Securities LLC to act as the exclusive placement agent in connection with this offering. We are not required to sell any specific number or dollar amount of the common shares and warrants to purchase common shares offered in this offering, but the placement agent will use its commercially reasonable efforts to arrange for the sale of the common shares and warrants to purchase common shares offered.

1 See "Plan of Distribution" beginning on page S-25 of this prospectus supplement.

 JMP Securities

The date of this prospectus supplement is March 28, 2011

TABLE OF CONTENTS

PROSPECTUS SUPPLEMENT	Page	PROSPECTUS	Page
About this Prospectus Supplement	S-1	Overview	1
Business Overview	S-2	About this Prospectus	1
The Offering	S-3	Risk Factors	2
Risk Factors	S-4	Forward-Looking Statements	10
Forward-Looking Statements	S-16	Use of Proceeds	10
Use of Proceeds	S-16	The Securities We May Offer	10
Dilution	S-17	Plan of Distribution	15
Description of Units	S-18	Incorporation of Certain Information by Reference	19
Certain Registration and Other Rights	S-23	Where You Can Find More Information	19
Certain Canadian Income Tax Considerations	S-23		
Plan of Distribution	S-25	Legal Matters	19
Investor Suitability Standards	S-26	Experts	20
Incorporation of Certain Information by Reference	S-27	Disclosure of Commission Position on	
Where You Can Find More Information	S-28	Indemnification for Securities Act Liabilities	20
Legal Matters	S-28		
Experts	S-28		
Disclosure of Commission Position on Indemnification for Securities Act Liabilities	S-28		

You should rely only on the information contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein or therein. We have not, and the placement agent has not, authorized

any other person to provide you with different or inconsistent information. If anyone provides you with different or inconsistent information, you should not rely on it. We are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information contained in this prospectus supplement and the accompanying prospectus is accurate only as of their respective dates, regardless of the time of delivery of this prospectus supplement and accompanying prospectus or of any sale of common shares and warrants to purchase common shares. Our business, financial condition, results of operations and prospects may have subsequently changed. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the common shares and warrants to purchase common shares and the distribution of this prospectus outside the United States.

Unless the context requires otherwise, in this prospectus supplement and the accompanying prospectus, the terms "Altair," "we," "our" and "us" refer to Altair Nanotechnologies Inc., and its subsidiaries as a combined entity, except where it is made clear that the term only means the parent company or an identified subsidiary.

THIS PROSPECTUS SHALL NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY, NOR SHALL THERE BE ANY SALE OF THESE SECURITIES, IN CANADA.

ABOUT THIS PROSPECTUS SUPPLEMENT

This document is in two parts. The first part is the prospectus supplement, which describes the specific terms of the securities we are offering and also adds to and updates information contained in the accompanying prospectus and the documents incorporated by reference into the accompanying prospectus. The second part, the accompanying prospectus, including the documents incorporated by reference, provides more general information. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. This prospectus supplement and the accompanying prospectus are part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using a "shelf" registration process. Under this shelf registration process, we may offer and sell from time to time any combination of securities described in the accompanying prospectus in one or more offerings up to a maximum dollar amount described in the following paragraph. The accompanying prospectus provides you with a general description of the securities we may offer from time to time under our shelf registration statement and provides general information about us, some of which may not apply to this offering. Each time we use the accompanying prospectus to offer securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in the prospectus. The shelf registration statement includes exhibits that provide more detail on descriptions of the matters discussed in this prospectus supplement and the accompanying prospectus. The shelf registration statement was declared effective by the SEC on October 26, 2009. This prospectus supplement describes the specific details regarding this offering, including the price, the number of common shares and warrants being offered, the plan of distribution, the risks of investing in our common shares and warrants and the placement arrangements.

The shelf registration statement originally registered an aggregate of \$150,000,000 in securities. An amount of \$905,087.67 of the common shares offered under this shelf registration process were sold prior to the date hereof. As a result, the total maximum dollar amount of \$149,094,912.23 is remaining under the shelf registration for this offering and any subsequent offerings.

Unless otherwise specified, all dollar amounts in this prospectus supplement are United States Dollars.

To the extent that any statement that we make in this prospectus supplement is inconsistent with statements in the accompanying prospectus, the statements made in this prospectus supplement will be deemed to modify or supersede those made in the accompanying prospectus. You should carefully read this prospectus supplement, the related exhibits filed with the SEC and the accompanying prospectus together with additional information described under the headings "Incorporation of Certain Information by Reference" and "Where You Can Find More Information."

BUSINESS OVERVIEW

We are a Canadian corporation, with principal assets and operations in the United States, whose primary business is developing, manufacturing and selling our nano-lithium titanate battery cells, batteries and battery packs and providing related design, installation and test services. Our primary focus is marketing our large-scale energy storage solutions to power companies and electric grid operators throughout the world. In addition, we market our batteries to electric and hybrid-electric bus manufacturers, and are working to expand into new industrial markets.

Starting in 2010, we began looking at additional opportunities to expand the application of our battery technology into various industrial markets that have a need for the attributes of our battery technology. We believe that in the aggregate, our target markets are multi-billion dollar emerging markets with room for a number of successful suppliers. At the present time, we perceive no dominant provider and we believe that as a result of our significant differentiated product attributes, the overall strength of our management team, and the recognition we are receiving in the marketplace, that we have a very good chance of becoming one of the successful suppliers. Our proprietary technology platform gives our products a number of unique, highly sought after attributes that clearly differentiate our products from their alternatives. Included in these attributes are substantially longer cycle and calendar lives, a rapid recharge time, the ability to provide instantaneous high power, a wide operating temperature range and increased operational safety.

2010 has been a transition year as we have now completely exited the life sciences and performance materials markets to focus on selling products into the power and energy systems market. We expect 2011 to be the year that we gain traction in the sale of our various battery products.

Historically, we have provided contract research services on select projects where we can utilize our resources to develop intellectual property and/or new products and technology. Although contract services revenue comprised a significant portion of our total revenues in recent years accounting for 50%, 65%, and 87%, respectively in 2010, 2009 and 2008, we expect this percentage to immediately diminish as we cease providing services under military contracts and as our battery sales expand.

Our revenues have been generated by license fees, product sales, commercial collaborations, and government contracts and grants. We expect future revenues to consist primarily of product sales. We currently have agreements in place to (1) develop a suite of energy storage solutions for the stationary power market, (2) provide battery modules to a U.S. based bus manufacturer and are negotiating agreements to develop battery modules for various other industrial applications, (3) supply a one-megawatt ALTI-ESS energy storage system for a test of wind energy integration and (4) supply our nano lithium titanate powder to an early stage Chinese battery manufacturer affiliated with Canon Investment Holdings Limited, or Canon, (although deliveries under such agreement are suspended); we have also sold a battery system and battery cells under this agreement.

On September 20, 2010, we entered into a Share Subscription Agreement with Canon Investment Holdings Limited, or Canon, pursuant to which Canon has agreed, subject to conditions precedent to closing and rights of termination set forth in the agreement, to purchase a number of common shares such that, following closing, Canon will own 51% of our outstanding common shares on a fully diluted basis. We refer to this transaction as the Canon transaction. The purchase price to Canon will be \$1.5528 per share. We entered into a First Amendment to Share Subscription Agreement on February 16, 2011 extending the end date until May 17, 2011. Based upon the number of common shares and the rights to acquire common shares outstanding as of December 31, 2010, we estimate that the number of shares to be purchased will be 31,523,017, at an aggregate purchase price of \$48,948,799.16. If we issue additional common shares and warrants to purchase common shares in this offering, the number of shares to be purchased, and the aggregate purchase price, will increase.

Our principal executive offices are located at 204 Edison Way, Reno, Nevada 89502, and our phone number is (775) 856-2500. Our website is www.altairnano.com. Information contained on our website is not a part of this or any other prospectus supplement or the accompanying prospectus.

S-2

THE OFFERING

Common shares offered by us	3,600,000 shares.
Series A warrants to purchase common shares we are offering	Series A warrants to purchase up to 1,800,000 common shares at an exercise price per share of \$2.56. The Series A warrants will be exercisable during the period beginning six months after the date of original issuance and ending five years from the date the warrants become exercisable. See "Description of Units – Series A Warrants" on page S-20.
Adjustment common shares	If the Share Subscription Agreement with Canon is adversely amended or the transactions contemplated thereby do not close by July 17, 2011, we will issue an additional number of adjustment common shares to purchasers, without any further consideration. The number of adjustment shares will be equal to: (i) the quotient of (A) the aggregate purchase price paid by the purchaser for the units at closing divided by (B) 85% of the volume weighted average price per common share during the ten trading days beginning on the earlier to occur of July 17, 2011 or the public announcement of the termination of, or adverse amendment to, the Share Subscription Agreement (ii) minus the number of units subscribed for and purchased in the offering. The maximum number of adjustment shares that may be issued will be capped at 1,800,000. See "Description of Units – Securities Purchase Agreement" on page S-22.
Common shares to be outstanding after the closing of this offering	30,615,680 shares
Use of proceeds	Proceeds from the offering will be added to our general corporate funds and be used for working capital and general corporate purposes. See "Use of Proceeds" on page S-16.
Risk Factors	See "Risk Factors" beginning on page S-4 for a discussion of factors you should consider carefully when making an investment decision.
NASDAQ Capital Market symbol	ALTI

The number of common shares to be outstanding after the closing of this offering is based on 27,015,680 common shares outstanding as of March 28, 2011 and excludes:

- 1,497,267 common shares issuable upon exercise of options outstanding under our equity incentive plans as of March 28, 2011, at a weighted-average exercise price of \$7.9476 per share;
- 1,757,115 common shares issuable upon exercise of warrants outstanding as of March 28, 2011, at a weighted-average exercise price of \$ 4.61 per share;
-

390,249 common shares reserved for future grants under our equity incentive plans as of March 28, 2011;

- a number of common shares issuable to Canon pursuant to a Share Subscription Agreement dated September 20, 2011, as amended on February 16, 2011, such that, following closing, Canon will own 51% of our common shares on a fully-diluted basis;
- 1,800,000 common shares issuable upon the exercise of the Series A warrants offered in this offering; and
- up to 1,800,000 common shares issuable if the Share Subscription Agreement with Canon is adversely amended or the transactions contemplated thereby do not close by July 17, 2011.

Unless otherwise indicated, all information in this prospectus supplement assumes:

- no exercise or forfeiture of options or warrants since March 28, 2011; and
- no issuance of additional options to purchase common shares under our existing equity incentive plans since March 28, 2011;

S-3

RISK FACTORS

An investment in our common shares and warrants involves significant risks. You should carefully consider the risks described in this prospectus supplement and the accompanying prospectus, in addition to the other information contained or incorporated by reference in this prospectus supplement and the accompanying prospectus before making an investment decision. Any of these risks could materially and adversely affect our business, financial condition or results of operations. In such case, you may lose all or part of your investment. Some factors in this section are forward-looking statements.

Investors in this offering will pay a much higher price than the book value of our stock.

If you purchase common shares and warrants to purchase common shares in this offering, you will incur an immediate and substantial dilution in net tangible book value of \$1.04 per share as of December 31, 2010, after giving effect to the sale by us of 3,600,000 units in this offering at the public offering price of \$1.784 per unit.

Our management will have broad discretion over the use of the net proceeds from this offering, you may not agree with how we use the proceeds and the proceeds may not be invested successfully.

Our management will have broad discretion as to the use of the net proceeds from any offering by us and could use them for purposes other than those contemplated at the time of this offering. Accordingly, you will be relying on the judgment of our management with regard to the use of these net proceeds, and you will not have the opportunity as part of your investment decision to assess whether the proceeds are being used appropriately. It is possible that the proceeds will be invested in a way that does not yield a favorable, or any, return for our company.

Our significant losses and negative cash flow raise questions about our ability to continue as a going concern.

We have suffered recurring losses from operations resulting in an accumulated deficit of \$184,490,000, and a cash balance of \$4,695,000 at December 31, 2010. Additionally, we experienced \$15,172,000 in negative cash flows from operations during the year ended December 31, 2010. We cannot assure you that we will be able to achieve or sustain revenue growth, profitability, or positive cash flow on either a quarterly or annual basis or that profitability, if achieved, will be sustained. No adjustments have been made to the financial statements that might result from the outcome of this uncertainty. If we are unable to achieve or sustain profitability, we may not be financially viable in the future and may have to curtail, suspend, or cease operations, restructure existing operations to attempt to ensure future viability, or pursue other alternatives such as filing for bankruptcy, pursuing dissolution and liquidation or seeking to merge with another company or sell all or substantially all of our assets. Because of our recurring losses and negative cash flows from operations, the audit report of our independent registered public accounting firm on our financial statements for the fiscal years ended December 31, 2010 contains an explanatory paragraph stating that the independent auditor has substantial doubt about our ability to continue as a going concern.

We may not be able to raise sufficient capital to finance our operations.

As of December 31, 2010, we had approximately \$4.7 million in cash and cash equivalents. As a result of our deferral of the end date under our Share Subscription Agreement with Canon until May 17, 2011, we are seeking to raise additional capital. Even if we sell all of the securities offered pursuant to this prospectus, if our transaction with Canon does not close prior to the end date, or at all, we will again have an immediate need to raise capital. Even if our transaction with Canon closes, we will likely need to raise capital to fund our expanding operations and planned nano lithium titanate plant in China. With respect to any such capital raise, we may be unable to raise the amount of capital needed and may be forced to pay an extremely high price for capital. Factors affecting the availability and price of capital may include the following:

- market factors affecting the availability and cost of capital generally, including increases or decreases in major stock market indexes, the stability of the banking and investment banking systems and general economic stability or instability;
 - the price, volatility and trading volume of our common shares;
- our financial results, particularly the amount of revenue we are generating from product sales;
- the market's perception of our ability to execute our business plan and any specific projects identified as uses of proceeds;
 - our ownership structure and recent or anticipated dilution;
- our liquidity at the time of the offering, our monthly burn rate and the amount of our capital needs;
- the market's perception of our company and companies in our line of business; and
 - the economics of projects being pursued.

If we are unable to raise required capital we may be forced to discontinue operations.

We may continue to experience significant losses from operations.

We have experienced a net loss in every fiscal year since our inception. Our loss from operations was \$20.5 million for the twelve months ended December 31, 2010. We may never be profitable in the future. Even if we are profitable in one or more future years, subsequent developments in the economy, our industry, customer base, business or cost structure, or an event such as significant litigation or a significant transaction, may cause us to again experience losses.

The amendment to the Share Subscription Agreement with Canon includes limits on our ability to raise capital, and this offering will trigger a provision giving Canon the option to terminate the Share Subscription Agreement.

We entered into an amendment to the Share Subscription Agreement with Canon, extending the end date until May 17, 2011. The end date is the date after which either party can terminate the Share Subscription Agreement without cause. It is likely that the share issuance to Canon will not close until the end date, if at all. As a result of the expected delay in closing, we must raise additional working capital to fund our operations. Our ability to raise additional capital is limited by the terms of the amendment, in addition to market factors. Under the terms of the amendment, we are able to raise additional capital from third parties prior to May 1, 2011 through issuances of our common shares and warrants to purchase common shares subject to the following limitations:

- the aggregate number of common shares, together with the number of common shares issuable upon the exercise of any warrants, must be less than 20% of our outstanding common shares; and
- if any issuance is made at a price (taking into account the implied value of any warrants issued in connection with such issuance) lower than \$1.5528, we may not raise more than \$7.5 million in capital.

Such limitations may harm our ability to raise capital, which may limit our ability to implement our business plan or continue operations. We believe that the price of the common shares (taking into account the implied value of the Series A Warrants) in this offering is lower than the \$1.5528 price floor limitation. As a result, Canon will have the right to terminate the Share Subscription Agreement at any time, which may decrease the likelihood that the Canon share issuance will close.

The share issuance to Canon may not close.

The amended Share Subscription Agreement gives Canon the right to terminate the Share Subscription Agreement upon certain conditions, including if we make any issuance at a price (taking into account the implied value of any warrants issued in connection with such issuance) lower than \$1.5528. We believe that the price of the common shares (taking into account the implied value of the Series A Warrants) in this offering is lower than the \$1.5528 price floor limitation, triggering the termination options. In addition, Canon has the right to not close if certain conditions precedent under the agreement are not satisfied or if we are otherwise in breach of the Share Subscription Agreement. Even if all conditions to close are satisfied and Canon has no right to terminate the Share Subscription Agreement or to decline to close, Canon may fail to close in breach of the Share Subscription Agreement. In such event, although we could pursue legal remedies, including damages, it is unlikely we could compel Canon to close. If Canon fails to close under the Share Subscription Agreement for any reason, we will have a near term need to raise capital in order to continue our operations.

Even if we close the transaction with Canon, we may not realize the anticipated benefits of such transaction.

We have identified various potential benefits, in addition to the receipt of capital, from the share issuance to Canon. Examples include the possibility that a Canon affiliate, China-based Zhuhai Yintong Energy Company, or YTE, would be a significant long-term customer for us and that, together with or as a result of our relationship with

Canon or YTE, we would have better access to the Chinese markets than we do today. We may not realize these and other expected benefits for various reasons, including without limitation, the following:

- After the close of the Canon transaction, YTE may be unable to use our nano lithium titanate or battery technology in its products and, as a result, may not purchase products from us long term;
- Even if YTE is able to integrate our nano lithium titanate and/or technology into its products, it may not be able to achieve significant sales with its products;
- We may be unable to continue to reach agreement with YTE on the pricing of any products or services we supply them or may, as a result of market or other circumstances, be compelled to agree to prices that are not consistent with profitability;
- As a result of the terms of the Conditional Supply and Technology Licensing Agreement, subsequent agreements or gaps in our intellectual property protection, Canon or YTE may be able to exploit our technology under circumstances in which we do not receive significant economic benefits;
- Canon may not be able to, or exert significant efforts to, provide us access to the Chinese markets, particularly if our products could compete with products produced by YTE.

S-5

If one or more of these risks materializes in a significant manner, we may not experience the anticipated benefits from our relationship with Canon or YTE, which may harm our business and operations.

If Canon acquires a 51% ownership interest, we will face risks associated with having a majority shareholder.

If the Canon funding occurs, it will own a majority of our outstanding common shares. This presents certain risks to us, including the following:

- Certain of our existing or potential customers or suppliers may be reluctant to do business with a company controlled by a single shareholder, or a China-based affiliate of a battery manufacturer, and, as a result, may cancel or choose not to make, orders.
 - We may experience significant turnover in key management, technical or other employees;
- Because of the physical distance, cultural differences and language difference between the United States and China, we may experience conflicts or inefficiencies in Board-management communication, management-employee communication, strategy formation and other parts of our business; this risk may be exacerbated by the fact that most of the nominees proposed by Canon do not speak English, and none of our current management speaks Mandarin Chinese;
- We have agreed to potentially spend a portion, which may be substantial, of the proceeds from the Canon transaction on a nano lithium titanate manufacturing plant in China; this project may divert management attention and consume a significant amount of capital; and
- As a majority shareholder, Canon may be able to influence our Board of Directors to enter into transactions with Canon affiliates, or third parties, that are more favorable to such Canon affiliate or third party than would be negotiated by an independent Board of Directors.

If one or more of these risks, or other risks, materializes, our business will be harmed, and it may be harmed materially.

If the share issuance to Canon closes, we would lose certain net operating loss carryforwards, which may increase our tax burden if we become profitable in the future.

We currently have approximately \$U.S.144.1 million in U.S. net operating loss carryforwards and approximately \$Cdn.6.5 million in Canadian equivalents to net operating loss carryforwards. Our stock issuance to Canon would constitute a change of control which would result in a substantial reduction in the value of, and limits on the availability of any net operating loss carryforwards. We anticipate that the available U.S. net operating loss carryforwards may be significantly limited and the Canadian equivalents will be forfeited in total. If we are profitable in the future, the loss of such net operating loss carryforwards will lead to higher income taxes than we would have paid absent the change of control.

Proterra, Inc. may have investment funding issues that might prohibit them from purchasing additional battery modules from us on a timely basis or at all.

Proterra Inc. is currently our sole significant customer in the mass transit market. On January 14, 2011 the Securities and Exchange Commission obtained a court order freezing the assets of the Michael Kenwood Group and its related entity MK Energy + Infrastructure, which is Proterra's lead equity investor. Without further funding from this investor, Proterra may not have funds sufficient to continue to purchase battery modules from us in the near term. Proterra is currently seeking capital from other sources. If Proterra is unable to obtain capital from MK Energy or

another source, we will not be able to continue to ship Proterra battery modules and may lose a significant source of revenue and opportunity to establish market credibility.

Sherwin-Williams may elect not to, or be unable to, finance and continue AlSher Titania LLC or a related enterprise using our pigment production technology; in this case, we would not receive any revenues or royalties related to such technology.

We transferred to Sherwin-Williams our 70% interest in AlSher Titania LLC, which holds an exclusive license to use our intellectual property relating to the Altairnano Hydrochloride Process for the production of pigments and similar powders or materials. Under agreements related to the transfer, we received no upfront consideration, and our right to receive a percentage of revenue over time is capped at \$3,000,000 in the aggregate. Our receipt of any revenue under our agreement is tied to Sherwin-Williams or AlSher continuing to develop and exploit the technology, over which we have no control or influence. It is uncertain that we will receive any proceeds related to our pigment technology, and it is unlikely that total revenues will be significant in the long term.

We may not realize anticipated benefits from our agreement with Inversiones Energeticas.

We recently entered into a purchase contract with Inversiones Energeticas, S.A. de C.V., or INE, related to the purchase of a turn-key 10 Megawatt ALTI-ESS advanced battery system for \$18 million. Projected revenue under this agreement represents a substantial portion of our expected revenue in 2011. It is possible that the transactions contemplated by such agreement will not be completed, or that we will not realize the anticipated benefits, for various reasons, including the following:

- INE is not obligated to issue the initiation order, if the conditions precedent to the initiation order including performance bonds, are not met;
- the costs of supplying the ALTI-ESS on a turn-key basis may exceed our projections, and in such event, imposing such increased costs on INE is precluded by the contract;
- INE may terminate the contract for breach, including a failure to maintain performance and warranty bonds, failure to deliver products and services in conformance with a strict timeline and failure to meet specific performance standards;
- INE may terminate the contract without cause upon thirty days notice, and we will be entitled only to equitable compensation for our efforts (rather than the full benefits of the contract); and
- we have provide warranties and indemnified INE with respect to certain matters, which provisions may lead to substantial post-completion expenses related to the agreement.

If any of these risks, or other risks, materializes, we may not realize expected benefits associated with the INE contract and may experience substantial net costs and liabilities.

We may be obligated to pay a royalty on sales into the stationary power market.

In a joint development agreement we entered into in 2007 to develop a collection of advanced lithium based battery systems to provide frequency regulation and other services to the electricity generations and transmission markets, we granted a royalty of 5% of the gross revenue we realize from the sale of certain battery systems through July 20, 2012. It is uncertain whether the battery systems we are marketing are within the scope of the royalty provisions. As we begin generating revenue from the sale of large scale stationary batteries for use in connection with electrical transmission and regulation, there is a reasonable likelihood that we will be required to pay this royalty. This would harm our gross margins on such sales. We may also incur litigation expenses, and management attention may be diverted from the operation of our business.

We depend upon several sole-source and limited-source third-party suppliers.

We rely on certain suppliers as the sole-source, or as a primary source, of certain services, raw materials and other components of our products. We do not yet have long-term supply or service agreements engaged with any such suppliers. As a result, the providers of such services and components could terminate or alter the terms of service or supply with little or no advance notice. If our arrangements with any sole-source supplier were terminated, or if such a supplier failed to provide essential services or deliver essential components on a timely basis, failed to meet our product specifications and/or quality standards, or introduced unacceptable price increases, our production schedule would be delayed, possibly by as long as six months. Any such delay in our production schedule would result in delayed product delivery and may also result in additional production costs, customer losses and litigation.

An area in which our dependence upon a limited number of sources creates significant vulnerability is the manufacturing of our nano lithium titanate cells. Prior to the fourth quarter of 2010, we relied upon a single supplier of nano lithium titanate cells. We experienced significant quality issues with this supplier in early 2010 and continue to have quality issues with this supplier. In late 2010, we completed validation for a second supplier and began receiving shipments from that second supplier without any quality issues to date. Our nano lithium titanate battery cells are the building blocks of all of our products (other than our nano lithium titanate powder). If we continue to experience quality issues with our initial supplier, or begin to experience them with our second supplier, we may be unable to meet our deadlines, or quality specifications, with respect to existing or future orders. This would harm our reputation and our ability to grow our business.

Our operating results have fluctuated significantly in the past and will continue to fluctuate in the future, which could cause our stock price to decline.

Our operating results have fluctuated significantly in the past, and we believe that they will continue to fluctuate in the future, due to a number of factors, many of which are beyond our control. If in future periods our operating results do not meet the expectations of investors or analysts who choose to follow our company, the price of our common shares may fall. Factors that may affect our operating results include the following:

- fluctuations in the size, quantity and timing of customer orders;
- timing of delivery of our services and products;
- additions of new customers or losses of existing customers;
- positive or negative business or financial developments announced by us or our key customers;

S-7

- our ability to commercialize and obtain orders for products we are developing;
- costs associated with developing our manufacturing capabilities;
- the retention of our key employees;
- new product announcements or introductions by our competitors or potential competitors;
- the effect of variations in the market price of our common shares on our equity-based compensation expenses;
- disruptions in the supply of raw materials or components used in the manufacture of our products;
- the pace of adoption of regulation facilitating our ability to sell our products in our target markets;
- technology and intellectual property issues associated with our products;
- general political, social, geopolitical and economic trends and events; and
- availability of components sourced from Korea if tensions between North Korea and South Korea erupt into a greater military conflict.

Our patents and other protective measures may not adequately protect our proprietary intellectual property.

We regard our intellectual property, particularly our proprietary rights in our nano lithium titanate technology, as critical to our success. We have received various patents, and filed other patent applications, for various applications and aspects of our nano lithium titanate technology and other intellectual property. Such patents and agreements and various other measures we take to protect our intellectual property from use by others may not be effective for various reasons, including the following:

- Our pending patent applications may not be granted for various reasons, including the existence of conflicting patents or defects in our applications, if there was in existence relevant prior art or the invention was deemed by the examiner to be obvious to a person skilled in the art whether or not there were other existing patents. Risks associated with patent applications are enhanced because patent applications of others remain confidential for a period of approximately 18 months after filing; as a result, our belief that we are the first creator of an invention or the first to patent it may prove incorrect, as information related to conflicting patents is first published or first brought to our attention;
- The patents we have been granted may be challenged, invalidated, narrowed or circumvented because of the pre-existence of similar patented or unpatented intellectual property rights or for other reasons;
- The costs associated with enforcing patents, confidentiality and invention agreements or other intellectual property rights may make aggressive enforcement cost prohibitive;
- We have not filed for patent protection in many countries in which we are currently selling produce or seek to sell product; as a result, we may be unable to prevent competitors in such markets from selling infringing products;
- Even if we enforce our rights aggressively, injunctions, fines and other penalties may be insufficient to deter violations of our intellectual property rights; and
-

Other persons may independently develop proprietary information and techniques that, although functionally equivalent or superior to our intellectual proprietary information and techniques, do not breach proprietary rights.

Our inability to protect our proprietary intellectual property rights or gain a competitive advantage from such rights could harm our ability to generate revenues and, as a result, our business and operations.

We may be involved in lawsuits to protect or enforce our patents, which could be expensive, time consuming and involve adverse publicity and adverse results.

Competitors or others may infringe our patents. To counter infringement or unauthorized use, we may be required to file patent infringement claims, which can be expensive and time-consuming. Interference proceedings brought by the United States Patent and Trademark Office may be necessary to determine the priority of inventions with respect to our patent applications. Litigation or interference proceedings may result in substantial costs and be a distraction to our management.

Because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure. In addition, during the course of this litigation (even if ultimately successful), there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common shares.

In addition, in an infringement proceeding, a court may decide that a patent of ours is not valid or is unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover that technology. An adverse determination of any litigation or defense proceedings could put one or more of our patents at risk of being invalidated or interpreted narrowly and could put our patent applications at risk of not issuing.

We may not prevail in any litigation or interference proceeding in which we are involved. Even if we do prevail, these proceedings can be expensive, result in adverse publicity and distract our management.

Other parties may bring intellectual property infringement claims against us, which would be time-consuming and expensive to defend, and if any of our products or processes is found to be infringing, we may not be able to procure licenses to use patents necessary to our business at reasonable terms, if at all.

Our success depends in part on avoiding the infringement of other parties' patents and proprietary rights. We may inadvertently infringe existing third-party patents or third-party patents issued on existing patent applications. Third party holders of such patents or patent applications could bring claims against us that, even if resolved in our favor, could cause us to incur substantial expenses and, if resolved against us, could cause us to pay substantial damages. Under some circumstances in the United States, these damages could be triple the actual damages the patent holder incurs.

If we have supplied infringing products to third parties for marketing or licensed third parties to manufacture, use or market infringing products, we may be obligated to indemnify these third parties for any damages they may be required to pay to the patent holder and for any losses the third parties may sustain themselves as the result of lost sales or damages paid to the patent holder. In addition, we have, and may be required to, make representations as to our right to supply and/or license intellectual property and to our compliance with laws. Such representations are usually supported by indemnification provisions requiring us to defend our customers and otherwise make them whole if we license or supply products that infringe on third party technologies or violate government regulations. Further, if a patent infringement suit were brought against us, we and our customers, development partners and licensees could be forced to stop or delay research, development, manufacturing or sales of products based on our technologies in the country or countries covered by the patent we infringe, unless we can obtain a license from the patent holder. Such a license may not be available on acceptable terms, or at all, particularly if the third party is developing or marketing a product competitive with products based on our technologies. Even if we were able to obtain a license, the rights may be nonexclusive, which would give our competitors access to the same intellectual property.

Any successful infringement action brought against us may also adversely affect marketing of products based on our technologies in other markets not covered by the infringement action. Furthermore, we may suffer adverse consequences from a successful infringement action against us even if the action is subsequently reversed on appeal, nullified through another action or resolved by settlement with the patent holder. As a result, any infringement action against us would likely harm our competitive position, be costly and require significant time and attention of our key management and technical personnel.

We may be unable to adequately prevent disclosure of trade secrets and other proprietary information.

We rely on trade secrets to protect our proprietary technologies, especially where we do not believe patent protection is appropriate or obtainable. Trade secrets are difficult to protect. We rely in part on confidentiality agreements with our employees, contractors, consultants, outside scientific collaborators and other advisors to protect our trade secrets and other proprietary information. Parties to the confidentiality agreements may have such agreements declared unenforceable or, even if the agreements are enforceable, may breach such agreements. Remedies available in connection with the breach of such agreements may not be adequate, or enforcing such agreement may be cost prohibitive. Courts outside the United States may be less willing to protect trade secrets. In addition, others may independently discover our trade secrets or independently develop processes or products that are similar or identical to

our trade secrets. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain trade secret protection would harm our competitive business position.

If we are sued on a product liability claim, our insurance policies may not be sufficient.

Although we maintain general liability insurance and product liability insurance, our insurance may not cover all potential types of product liability claims to which manufacturers are exposed or may not be adequate to indemnify us for all liability that may be imposed. Any imposition of liability that is not covered by insurance or is in excess of our insurance coverage could harm our business, including our relationships with current customers and our ability to attract and retain new customers. In addition, if the liability were substantial relative to the size of our business, any uncovered liability could harm our liquidity and ability to continue as a going concern.

Laws regulating the manufacture or transportation of batteries may be enacted which could result in a delay in the production of our batteries or the imposition of additional costs that could harm our ability to be profitable.

At the present time, international, federal, state and local laws do not directly regulate the storage, use and disposal of the component parts of our batteries. However, laws and regulations may be enacted in the future which could impose environmental, health and safety controls on the storage, use and disposal of certain chemicals and metals used in the manufacture of lithium and lithium-ion batteries. Satisfying any future laws or regulations could require significant time and resources from our technical staff, including those related to possible redesign which may result in substantial expenditures and delays in the production of our product, all of which could harm our business and reduce our future profitability.

The transportation of lithium and lithium-ion batteries is regulated both domestically and internationally. Under recently revised United Nations recommendations and as adopted by the International Air Transport Association, our batteries and battery systems currently fall within the level such that they are not exempt and require a Class 9 designation for transportation. The revised United Nations recommendations and other recommendations are not U.S. law until such time as they are incorporated into the Hazardous Material Regulations of the U.S. Department of Transportation, or DOT. However, DOT has proposed new regulations harmonizing with the U.N. guidelines and is reviewing other proposed changes under consideration for inclusion. At present it is not known if or when the proposed regulations would be adopted by the United States. Although we fall under the equivalency levels for the United States and comply with all safety packaging requirements worldwide, future DOT or IATA approval process could require significant time and resources from our technical staff and, if redesign were necessary, could delay the introduction of new products.

If our warranty expense estimates differ materially from our actual claims, or if we are unable to estimate future warranty expense for new products, our business and financial results could be harmed.

Our warranty for our products ranges from one to three years from the date of sale, depending on the type of product and its application. We expect that in the future some of our warranties may extend for longer periods. Because our supply arrangements are negotiated, the scope of our product warranties differ substantially depending upon the product, the purchaser and the intended use; however, we have granted and may grant broad warranties, addressing such issues as leakage, cycle life and decline in power. We have a limited product history on which to base our warranty estimates. Because of the limited operating history of our batteries and battery systems, our management is required to make assumptions and to apply judgment regarding a number of factors, including anticipated rate of warranty claims, the durability and reliability of our products, and service delivery costs. Our assumptions could prove to be materially different from the actual performance of our batteries and battery systems, which could cause us to incur substantial expense to repair or replace defective products in the future and may exceed expected levels against which we have reserved. If our estimates prove incorrect, we could be required to accrue additional expenses from the time we realize our estimates are incorrect and also face a significant unplanned cash burden at the time our customers make a warranty claim, which could harm our operating results.

In addition, with our new products and products that remain under development, we will be required to base our warranty estimates on historical experience of similar products, testing of our batteries under laboratory conditions and limited performance information learned during our development activities with the customer. As a result, actual warranty claims may be significantly different from our estimates and our financial results could vary significantly from period-to-period.

Product liability or other claims could cause us to incur losses or damage our reputation.

The risk of product liability claims and associated adverse publicity is inherent in the development, manufacturing and sale of batteries and battery system. Certain materials we use in our batteries, as well as our battery systems, could, if used improperly, cause injuries to others. Improperly charging or discharging our batteries could cause fires. Any accident involving our batteries or other products could decrease or even eliminate demand for our products. Because some of our batteries are designed to be used in electric and hybrid electric buses, and because vehicle accidents can cause injury to persons and damage to property, we are subject to a risk of claims for such injuries and damages. In addition, we could be harmed by adverse publicity resulting from problems or accidents caused by third party products that incorporate our batteries. We could even be harmed by problems or accidents involving competing battery systems, if the market viewed our batteries as being vulnerable to similar problems. Any such claims, loss of customers or reputation harm would harm our financial results and ability to continue as a going concern.

A majority of our revenue has historically been generated from low-margin contract research and development services; if we cannot expand revenues from other products and services, our business will fail.

Historically, a majority of our revenue has come from contract research and development services for businesses and government agencies. During the years ended December 31, 2010, 2009 and 2008, contract service revenues comprised 50%, 65% and 87% respectively, of our operating revenues. Contract services revenue is low margin, and is unlikely to grow at a rapid pace. In addition, a majority of our contract services revenue has historically been under contracts with, or related to, the U.S. military, which contracts we terminated and stopped bidding for in connection with the Share Subscription Agreement. Our business plan anticipates revenues from product sales and licensing, both of which have potential for higher margins than contract services and have potential for rapid growth, increasing in coming years. If we are not successful in significantly expanding our revenues from licensing and product sales, or if we are forced to continue to accept low or negative margins in order to achieve revenue growth, we may fail to reach profitability in the future.

S-10

Continuing adverse economic conditions could reduce, or delay demand for our products.

Although improving compared to recent years, the financial markets and general economic conditions are still relatively weak in certain geographic markets worldwide. Our products are targeted primarily at large power producers worldwide, bus manufacturers and other industrial parties. Due to declining revenues and concerns about liquidity, companies and government agencies in some of our target markets have reduced, delayed or eliminated many research and development initiatives, including those related to energy storage. This reduction or delay in development spending by targeted key customers is hindering our development and production efforts and will continue to do so until development spending increases from current depressed levels.

The commercialization of many of our products is dependent upon the efforts of commercial partners and other third parties over which we have no or little control.

The commercialization of our principal products requires the cooperation and efforts of commercial partners and customers. For example, because completion and testing of our large-scale stationary batteries for power suppliers requires input from utilities and connection to a power network, commercialization of such batteries can only be done in conjunction with a power or utility company. The commercialization of transportation and other applications of our technology are also dependent, in part, upon the expertise, resources and efforts of our commercial partners. This presents certain risks, including the following:

- we may not be able to enter into development, licensing, supply and other agreements with commercial partners with appropriate resources, technology and expertise on reasonable terms or at all;
- our commercial partners may not place the same priority on a project as we do, may fail to honor contractual commitments, may not have the level of resources, expertise, market strength or other characteristics necessary for the success of the project, may dedicate only limited resources to, and/or may abandon, a development project for reasons, including reasons such as a shift in corporate focus, unrelated to its merits;
- our commercial partners may be in the early stages of development and may not have sufficient liquidity to invest in joint development projects, expand their businesses and purchase our products as expected or honor contractual commitments;
- our commercial partners may terminate joint testing, development or marketing projects on the merits of the projects for various reasons, including determinations that a project is not feasible, cost-effective or likely to lead to a marketable end product;
- at various stages in the testing, development, marketing or production process, we may have disputes with our commercial partners, which may inhibit development, lead to an abandonment of the project or have other negative consequences; and
- even if the commercialization and marketing of jointly developed products is successful, our revenue share may be limited and may not exceed our associated development and operating costs.

As a result of the actions or omissions of our commercial partners, or our inability to identify and enter into suitable arrangements with qualified commercial partners, we may be unable to commercialize apparently viable products on a timely and cost-effective basis, or at all.

Interest in our nano lithium titanate batteries is affected by energy supply and pricing, political events, popular consciousness and other factors over which we have no control.

Currently, our marketing and development efforts for our batteries and battery materials are focused primarily on stationary power and transportation applications. In the transportation market, batteries containing our nano lithium titanate materials are designed to replace or supplement gasoline and diesel engines. In the stationary power applications, our batteries are designed to conserve and regulate the stable supply of electricity, including from renewable sources. The interest of our potential customers and business partners in our products and services is affected by a number of factors beyond our control, including:

- economic conditions and capital financing and liquidity constraints;
- short-term and long-term trends in the supply and price of natural gas, gasoline, diesel, coal and other fuels;
- the anticipated or actual granting or elimination by governments of tax and other financial incentives favoring electric or hybrid electric vehicles and renewable energy production;
- the ability of the various regulatory bodies to define the rules and procedures under which this new technology can be deployed into the electric grid;
 - the anticipated or actual funding, or elimination of funding, for programs that support renewable energy programs and electric grid improvements;

- changes in public and investor interest for financial and/or environmental reasons, in supporting or adopting alternatives to gasoline and diesel for transportation and other purposes;
- the overall economic environment and the availability of credit to assist customers in purchasing our large battery systems;
- the expansion or contraction of private and public research and development budgets as a result of global and U.S. economic trends; and
 - the speed of incorporation of renewable energy generating sources into the electric grid.

Adverse trends in one or more of these factors may inhibit our ability to commercialize our products and expand revenues from our battery materials and batteries.

Our nano lithium titanate battery materials and battery business is currently dependent upon a few customers and potential customers, which presents various risks.

Our nano lithium titanate battery materials and battery business is dependent upon a few current or potential customers, including a small number of power producers, an affiliate of Canon and smaller companies developing electric or hybrid electric buses. In addition, many of these customers are, or are expected to be, development partners who are subsidizing the research and development of products for which they may be the sole, or one of a few, potential purchasers. As a result of the small number of potential customers and partners, our existing or potential customers and partners may have significant leverage on pricing terms, exclusivity terms and other economic and noneconomic terms. This may harm our attempts to sell products at prices that reflect desired gross margins. In addition, the decision by a single customer to abandon use or development of a product, budget cutbacks, funding reductions, liquidity shortages and other events may harm the ability of a single customer to continue to purchase products or continue development and may significantly harm both our financial results and the development track of one or more products.

If we combine with other companies, we may be unable to successfully integrate our business, technology, management or other aspects of our business with the other party to the transaction.

As evidenced by our signing the Share Subscription Agreement with Canon and related agreements with YTE, we routinely consider entering into acquisition, strategic or combination transactions with other companies for strategic and/or financial reasons. We do not have extensive experience in conducting diligence on, evaluating, purchasing, merging with, selling to or integrating new businesses or technologies with other entities. If we do succeed in closing a combination with another company, we will be exposed to a number of risks, including:

- we may have difficulty integrating our assets, technologies, operations and personnel in connection with a business combination;
- our ongoing business and management's attention may be disrupted or diverted by transition or integration issues and the complexity of managing, or being a part of, a geographically or culturally diverse enterprises;
- we may find that the transaction does not further our business strategy or that the economic and strategic assumptions underlying the transaction have proved inaccurate;
 - we may encounter difficulty entering and competing in new product or geographic markets;
-

we may face business, product, structural or other limitations or prohibitions as our business becomes subject to the laws or customs of other jurisdictions; and

- we may experience significant problems or liabilities associated with product quality, technology and legal contingencies relating to the integrated business or technology, such as intellectual property or employment matters.

In addition, from time to time we may enter into negotiations for acquisitions, dispositions, mergers or other transactions that are not ultimately consummated. These negotiations could result in significant diversion of management time, substantial out-of-pocket costs and, while such transactions are pending, limitations on the operation of our business (including negotiation of alternative business combinations and capital raising transactions). To the extent we issue shares of capital stock or other rights to purchase capital stock in any such transactions, including options and warrants, existing stockholders would be diluted. Any of these issues will harm our business and financial condition.

We intend to expand our operations and increase our expenditures in an effort to grow our business. If we are unable to achieve or manage significant growth and expansion, or if our business does not grow as we expect, our operating results may suffer.

During the past several years, we have increased our research and development expenditures in an attempt to accelerate the commercialization of certain products, particularly our nano lithium titanate batteries. Our business plan anticipates continued expenditure on development, manufacturing and other growth initiatives. We may fail to achieve significant growth despite such expenditures.

If achieved, significant growth would place increased demands on our management, accounting systems, quality control and internal controls. We may be unable to expand associated resources and refine associated systems fast enough to keep pace with expansion, especially as we expand into multiple facilities at distant locations. If we fail to ensure that our management, control and other systems keep pace with growth, we may experience a decline in the effectiveness and focus of our management team, problems with timely or accurate reporting, issues with costs and quality controls and other problems associated with a failure to manage rapid growth, all of which would harm our results of operations.

Our competitors have more resources than we do, and may be supported by more prominent partners, which may give them a competitive advantage.

We have limited financial, personnel and other resources and, because of our early stage of development, have limited access to capital. We compete or may compete against entities that are much larger than we are, have more extensive resources than we do and have an established reputation and operating history. In addition, certain of our early stage competitors, including A123 Systems, are partnered with, associated with or supported by larger business or financial partners. This may increase their ability to raise capital, attract media attention, develop products and attract customers. Because of their size, resources, reputation and history (or that of their business and financial partners), certain of our competitors may be able to exploit acquisition, development and joint venture opportunities more rapidly, easily or thoroughly than we can. In addition, potential customers may choose to do business with our more established competitors, without regard to the comparative quality of our products, because of their perception that our competitors are more stable, are more likely to complete various projects, are more likely to continue as a going concern and lend greater credibility to any joint venture.

As manufacturing becomes a larger part of our operations, we will become exposed to accompanying risks and liabilities.

In-house and outsourced manufacturing is becoming an increasingly significant part of our business. As a result, we expect to become increasingly subject to various risks associated with the manufacturing and supply of products, including the following:

- If we fail to supply products in accordance with contractual terms, including terms related to time of delivery and performance specifications, we may be required to repair or replace defective products and may become liable for direct, special, consequential and other damages, even if manufacturing or delivery was outsourced;
- Raw materials used in the manufacturing process, labor and other key inputs may become scarce and expensive, causing our costs to exceed cost projections and associated revenues;
- Manufacturing processes typically involve large machinery, fuels and chemicals, any or all of which may lead to accidents involving bodily harm, destruction of facilities and environmental contamination and associated liabilities;
- As our manufacturing operations expand, we expect that a significant portion of our manufacturing will be done overseas, either by third-party contractors or in a plant owned by the company. Any manufacturing done overseas presents risks associated with quality control, currency exchange rates, foreign laws and customs, timing and loss risks associated with overseas transportation and potential adverse changes in the political, legal and social environment in the host county; and
- We have made, and may be required to make, representations as to our right to supply and/or license intellectual property and to our compliance with laws. Such representations are usually supported by indemnification provisions requiring us to defend our customers and otherwise make them whole if we license or supply products that infringe on third-party technologies or violate government regulations.

Any failure to adequately manage risks associated with the manufacture and supply of materials and products could lead to losses (or small gross profits) from that segment of our business and/or significant liabilities, which would harm our business, operations and financial condition.

Our past and future operations may lead to substantial environmental liability.

Virtually any prior or future use of our nanomaterials and titanium dioxide pigment technology is subject to federal, state and local environmental laws. Under such laws, we may be jointly and severally liable with prior property owners for the treatment, cleanup, remediation and/or removal of any hazardous substances discovered at any property we use. In addition, courts or government agencies may impose liability for, among other things, the improper release, discharge, storage, use, disposal or transportation of hazardous substances. If we incur any significant environmental liabilities, our ability to execute our business plan and our financial condition would be harmed.

S-13

Certain of our experts and directors reside in Canada or Dubai and may be able to avoid civil liability.

We are a Canadian corporation, and a majority of our directors reside outside the United States in Canada or the United Arab Emirates. As a result, investors may be unable to effect service of process upon such persons within the United States and may be unable to enforce court judgments against such persons predicated upon civil liability provisions of the U.S. securities laws. It is uncertain whether Canadian or Dubai courts would enforce judgments of U.S. courts obtained against us or such directors, officers or experts predicated upon the civil liability provisions of U.S. securities laws or impose liability in original actions against us or our directors, officers or experts predicated upon U.S. securities laws.

We are dependent on key personnel.

Our continued success will depend, to a significant extent, on the services of our executive management team and certain key scientists and engineers. We do not have key man insurance on any of these individuals. Nor do we have agreements requiring any of our key personnel to remain with our company. The loss or unavailability of any or all of these individuals could harm our ability to execute our business plan, maintain important business relationships and complete certain product development initiatives, which would harm our business.

We may issue substantial amounts of additional shares without stockholder approval.

Our articles of incorporation authorize the issuance of an unlimited number of common shares that may be issued without any action or approval by our stockholders. In addition, we have various stock option plans that have potential for diluting the ownership interests of our stockholders. The issuance of any additional common shares would further dilute the percentage ownership of our company held by existing stockholders.

The market price of our common shares is highly volatile and may increase or decrease dramatically at any time.

The market price of our common shares is highly volatile. Our stock price may change dramatically as the result of announcements of product developments, new products or innovations by us or our competitors, uncertainty regarding the viability of our technology or our product initiatives, significant customer contracts, significant litigation, our liquidity situation, revenues or losses, or other factors or events that would be expected to affect our business, financial condition, results of operations and future prospects.

The market price for our common shares may be affected by various factors not directly related to our business or future prospects, including the following:

- intentional manipulation of our stock price by existing or future shareholders or a reaction by investors to trends in our stock rather than the fundamentals of our business;
- a single acquisition or disposition, or several related acquisitions or dispositions, of a large number of our shares, including by short sellers covering their position;
- the interest of the market in our business sector, without regard to our financial condition, results of operations or business prospects;
- positive or negative statements or projections about our company or our industry, by analysts, stock gurus and other persons;
- the adoption of governmental regulations or government grant programs and similar developments in the United States or abroad that may enhance or detract from our ability to offer our products and services or affect our cost

structure; and

- economic and other external market factors, such as a general decline in market prices due to poor economic conditions, investor distrust or a financial crisis.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business or our market, or if they change their recommendations regarding our common shares, our stock price and trading volume could decline.

The trading market for our common shares is influenced by the research and reports that industry or securities analysts may publish about us, our business, our market or our competitors. If any of the analysts who may cover us change their recommendation regarding our common shares adversely, or provide more favorable relative recommendations about our competitors, the price of our common shares would likely decline. If any analyst who may cover us were to cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial market, which in turn could cause the price or trading volume of our common shares to decline.

We have never declared a cash dividend and do not intend to declare a cash dividend in the foreseeable future.

We have never declared or paid cash dividends on our common shares. We currently intend to retain any future earnings, if any, for use in our business and, therefore, do not anticipate paying dividends on our common shares in the foreseeable future.

S-14

We are subject to various regulatory regimes, and may be adversely affected by inquiries, investigations and allegations that we have not complied with governing rules and laws.

In light of our status as a public company and our lines of business, we are subject to a variety of laws and regulatory regimes in addition to those applicable to all businesses generally. For example, we are subject to the reporting requirements applicable to Canadian and United States reporting issuers, such as the Sarbanes-Oxley Act of 2002, the rules of the NASDAQ Capital Market and certain state and provincial securities laws. We are also subject to state and federal environmental, health and safety laws, and rules governing department of defense contracts. Such laws and rules change frequently and are often complex. In connection with such laws, we are subject to periodic audits, inquiries and investigations. Any such audits, inquiries and investigations may divert considerable financial and human resources and adversely affect the execution of our business plan.

Through such audits, inquiries and investigations, we or a regulator may determine that we are out of compliance with one or more governing rules or laws. Remedying such non-compliance diverts additional financial and human resources. In addition, in the future, we may be subject to a formal charge or determination that we have materially violated a governing law, rule or regulation. We may also be subject to lawsuits as a result of alleged violation of the securities laws or governing corporate laws. Any charge or allegation, and particularly any determination, that we had materially violated a governing law would harm our ability to enter into business relationships, recruit qualified officers and employees and raise capital.

FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus contain and incorporate by reference certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, regarding our anticipated financial condition, results of operations and businesses in the future, including management's beliefs, projections and assumptions concerning future results and events. These forward-looking statements generally are in the future tense and may, but do not necessarily, include words such as "believes," "expects," "anticipates," "intends," "plans," "estimates," "may," "will," "should," "could," "predicts," "potential," "continue" or similar expressions. Forward-looking statements are not guarantees. They involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Our future results may differ materially from those expressed in these forward-looking statements. Some of the factors that may cause actual results to differ materially from those contemplated by such forward-looking statements include, but are not limited to, those identified under "Risk Factors" above and in the annual and quarterly reports we file with the SEC.

Given these risks and uncertainties, you are cautioned not to place undue reliance on any forward-looking statements, which speak only as of the date of the document in which they are contained. We do not undertake any obligation to update any forward-looking statement or to publicly announce any revision of any forward-looking statement to reflect the occurrence of any future developments or events, unless required by law.

USE OF PROCEEDS

The estimated net proceeds we will receive from this offering will be approximately \$5,822,832 million after deducting the placement agent's fee and the estimated offering expenses assuming the maximum number of shares and warrants are sold in the offering. We will not receive any proceeds from the sale of common shares issuable upon exercise of the warrants unless and until such warrants are exercised. If the warrants were fully exercised for cash, we would receive additional proceeds of up to approximately \$4,608,000 million. The net proceeds from this offering will be added to our general corporate funds to be used for working capital and general corporate purposes. Pending these uses, the net proceeds will be invested in short-term marketable securities in accordance with our investment policy.

The amounts and timing of the expenditure of the net proceeds from this offering may vary significantly, based on the expenses of our operations and depending on numerous factors, including the success of our commercialization activities with third parties and the scope and amount of our research and development activities, among other things. Accordingly, our management will have broad discretion in the application of the net proceeds and investors will be relying on the judgment of our management regarding the application of the proceeds of this offering. We reserve the right to change the use of these proceeds as a result of certain contingencies such as the results of our research and development and third-party commercialization activities, competitive developments, opportunities to acquire technologies or businesses and other factors.

DILUTION

If you invest in our common shares and warrants in this offering, your ownership interest will be immediately diluted to the extent of the difference between the public offering price per unit and the net tangible book value per share of our common shares as adjusted to give effect to our sale of the units offered hereby. Our historical net tangible book value as of December 31, 2010 was \$16.9 million, or \$0.62 per common share. Historical net tangible book value per share represents the amount of our total tangible assets less total liabilities, divided by the number of outstanding common shares.

Dilution in net tangible book value per share represents the difference between the amount per unit paid by purchasers of our common shares and warrants to purchase common shares in this offering and the as adjusted net tangible book value per common share immediately after completion of this offering. After giving effect to our sale of 3,600,000 common shares and warrants to purchase 1,800,000 common shares in this offering at the public offering price of \$1.784 per unit (attributing no value to the warrant included in each unit or the adjustment common shares), and after deducting the placement agent's fee and estimated offering expenses payable by us, our as adjusted net tangible book value at December 31, 2010 would have been \$5.82 million, or \$0.74 per common share. This amount represents an immediate increase in net tangible book value of \$0.12 per share to our existing shareholders and an immediate dilution in net tangible book value of \$1.04 per share to purchasers of shares and warrants in this offering. Our net tangible book value calculation assumes no exercise of the warrants offered hereby.

The following table illustrates this dilution on a per share basis:

Public offering price per unit		\$1.784
Net tangible book value per share as of December 31, 2010	\$	0.62
Increase in net tangible book value per share attributable to this offering	\$	0.12
As adjusted net tangible book value per share after this offering		\$0.74
Dilution per share to new investors		\$1.04

The above discussion and table are based on 27,015,680 common shares issued and outstanding as of March 28, 2011 and exclude:

- 1,497,267 common shares issuable upon exercise of options outstanding under our equity incentive plans as of March 28, 2011, at a weighted-average exercise price of \$7.9476 per share
- 1,757,115 common shares issuable upon exercise of warrants outstanding as of March 28, 2011 at a weighted-average exercise price of \$4.61 per share;
- a number of common shares issuable to Canon pursuant to a Share Subscription Agreement dated September 20, 2011, as amended on February 16, 2011, such that, following closing, Canon will own 51% of our common shares on a fully-diluted basis;
 - 1,800,000 common shares issuable upon the exercise of the Series A warrants offered in this offering;

- up 1,800,000 common shares issuable if the Share Subscription Agreement with Canon is adversely amended or the transactions contemplated thereby do not close by July 17, 2011; and
- 390,249 common shares reserved as of March 28, 2011 for future grants under our equity incentive plans.

To the extent that outstanding options or warrants are exercised, you will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our shareholders.

S-17

DESCRIPTION OF UNITS

We are offering a maximum of 3,600,000 units, with each unit consisting of one common share and a Series A warrant to purchase .5 of a common share. In addition, if the Share Subscription Agreement with Canon is adversely amended or the transactions contemplated thereby do not close by July 17, 2011, we will issue an additional number of common shares, as an adjustment, to purchasers without any further consideration. The number of adjustment shares will be equal to: (i) the quotient of (A) the aggregate purchase price paid by the purchaser for the units at closing divided by (B) 85% of the volume weighted average price per common share during the ten trading days beginning on the earlier to occur of July 17, 2011 or the public announcement of the termination of, or adverse amendment to, the Share Subscription Agreement (ii) minus the number of units subscribed for and purchased in the offering. The maximum number of adjustment shares that may be issued will be capped at 1,800,000. This prospectus also relates to the offering of our common shares upon exercise, if any, of the warrants. Units will not be issued or certificated. The common shares and warrants are immediately separable and will be issued separately.

The units offered in this offering will be issued pursuant to a securities purchase agreement between each of the purchasers and us. A description of certain provisions of the securities purchase agreement is below (See “Description of Units – Securities Purchase Agreement” on page S-22. You should review a copy of the form of subscription agreement and the form of warrant, each of which have been filed by us as an exhibit to a Current Report on Form 8-K filed with the Securities and Exchange Commission in connection with this offering, for a complete description of the terms and conditions applicable to the units. This description of the units and the securities purchase agreement in this prospectus supplement is qualified in its entirety by reference to the warrants and subscription agreement.

Common Shares

We are authorized to issue an unlimited number of common shares, which do not have par value. Holders of common shares are entitled to one vote per share on all matters to be voted on by our stockholders. There is no cumulative voting with respect to the election of directors. The holders of common shares are entitled to receive dividends, if any, as may be declared from time to time by our Board of Directors in its discretion from funds legally available therefor. Upon liquidation, dissolution or winding up of the company, the holders of common shares are entitled to receive ratably any assets available for distribution to stockholders.

As of March 28, 2011, there were 27,015,680 common shares issued and outstanding. The common shares have no preemptive or other subscription rights, and there are no conversion rights or redemption or sinking fund provisions with respect to such shares. All of the outstanding common shares are fully paid and nonassessable. Each common share includes an attached right arising under, and subject to the terms described in, the Amended and Restated Shareholder Rights Plan Agreement dated October 15, 1999, as amended, between us and Equity Transfer Services, Inc., as the Rights Agent. The terms of such rights are summarized in “Change of Control Provisions Applicable to Our Common Shares” below.

As of March 28, 2011, we had outstanding options to acquire 1,497,267 common shares issued pursuant to our stock incentive plans, had issued and outstanding warrants to purchase 1,757,115 common shares issued in various series and had 390,249 common shares reserved for future issuance under our stock incentive plans. In addition, we had entered into the Share Subscription Agreement, as amended, with Canon, pursuant to which Canon has agreed, subject to certain conditions closing and termination provisions, to purchase a number of common shares such that, following closing, Canon would own 51% of the outstanding common shares on a fully-diluted basis.

Change of Control Provisions Applicable to Our Common Shares

Neither our articles of continuance nor our bylaws contain any provision that would delay, defer or prevent a change in control of the company. We have, however, adopted a Shareholders Rights Plan Agreement dated November 27,

1998, amended and restated by the Amended and Restated Shareholder Rights Plan Agreement dated October 15, 1999 and subsequent amendments with Equity Transfer Services, Inc., as the Rights Agent.

Pursuant to the Rights Agreement, on November 27, 1998, which is the record date, our Board of Directors authorized and declared a distribution of one right with respect to each common share issued and outstanding as of the record date and each common share issued thereafter prior to the expiration time (as defined below). The rights are subject to the terms and conditions of the Rights Agreement, a copy of which is attached as an exhibit to the Current Report on Form 8-K filed with the SEC on November 18, 1999. Amendments to the Rights Agreement are attached as exhibits to a Current Report on Form 8-K filed with the SEC on October 6, 2008 and on September 20, 2010. A copy of the Rights Agreement, as amended, is also available upon written request to us. Because it is a summary, the following description of the rights and the Rights Agreement necessarily omits certain terms, exceptions, or qualifications to the affirmative statements made therein. The reader is advised to review the entire Rights Agreement prior to making any investment decision.

S-18

Certain Key Terms of the Rights Prior to Flip-In Date.

Prior to the date a transaction or event occurs by which a person, called an acquiring person (but excluding Al Yousuf, LLC and Canon subject to certain limitations), becomes the owner of 15% or more of the outstanding common shares and other shares entitled to vote for the election of directors, which event is a Flip-in Event, each right entitles the holder thereof to purchase one-half common share for the price of \$20 (which exercise price and number are subject to adjustment as set forth in the Rights Agreement). Notwithstanding the foregoing, no Right shall be exercisable prior to the commencement date. The commencement date is the close of business on the eighth business day after the earlier of (a) the date of a public announcement or disclosure by the company or an acquiring person of facts indicating that a person has become an acquiring person, or (b) the date of commencement of, or first public announcement of, the intent of any person to commence a bid for a number of voting shares that would give the bidder beneficial ownership of 15% or more of the issued and outstanding voting shares, referred to as a Take-over Bid.

Certain Key Terms of the Rights Following Flip-In Date.

Section 3.1 of the Rights Agreement includes a provision, referred to as a conversion provisions, which provides that, subject to certain exceptions, upon the occurrence of a Flip-in Event, each right shall be adjusted so as to constitute a right to purchase from us for the \$20, as adjusted, a number of common shares having an aggregate market price of four times \$20 (as adjusted). The market price is determined by averaging the closing price of the common shares on the primary exchange for the common shares for the 20 trading days preceding the date of determination. In addition, upon the occurrence of any Flip-in Event (which is not subsequently deemed not to have occurred under the Rights Agreement), any rights owned by the acquiring person, its affiliates, or certain assignees become null and void. Any rights certificate subsequently issued upon transfer, exchange, replacement, adjustment, or otherwise with respect to common shares owned by any of the foregoing persons shall bear a legend indicating the extent to which such rights are void. Rights held by us or our subsidiaries are also void.

Exceptions, Redemption and Waiver.

The definitions of Flip-in Event and certain related terms are subject to exceptions, certain of which are summarized below. Nevertheless, to understand each such exception and how they may interrelate, the reader is advised to review the Rights Agreement. Despite a person's acquisition of 15% or more of our voting shares, a Flip-in Event shall be deemed not to have occurred or shall have no effect if:

- (1) the acquiring person is the company or an entity controlled by the company;
- (2) the acquiring person is an underwriter who becomes the beneficial owner of 15% or more voting shares in connection with a distribution of securities pursuant to an underwriting agreement with us;
- (3) the transaction by which the person becomes an acquiring person is a voting share reduction, which is an acquisition or redemption of voting shares by us which, by reducing the number of outstanding common shares, has the incidental effect of increasing the acquiring person's ownership percentage;
- (4) the transaction by which the person becomes an acquiring person is an acquisition with respect to which our Board of Directors has waived the conversion provision because:
 - (a) our Board of Directors has determined prior to the commencement date that a person became an acquiring person by inadvertence and, within 10 days of such determination, such person has reduced its beneficial ownership of common shares so as not to be an acquiring person;

(b) our Board of Directors acting in good faith has determined, prior to the occurrence of a Flip-in Event, to waive application of the conversion provision, referred to as a discretionary waiver;

(c) our Board of Directors determines within a specified time period to waive application of the conversion provision to a Flip-in Event, provided that the acquiring person has reduced, or agreed to reduce, its beneficial ownership of voting shares to less than 15% of the outstanding issue of voting shares, referred to as a waiver following withdrawal.

(5) the acquisition by which the person becomes an acquiring person is an acquisition pursuant to (a) a dividend reinvestment plan or share purchase plan made available to all holders of voting shares; (b) a stock dividend, stock split or similar event pursuant to which the acquiring person receives common shares on pro rata basis with all members of the same class or series; (c) the acquisition or exercise of rights to purchase voting shares distributed to all holders of voting shares; (d) a distribution of voting shares or securities convertible into voting shares offered pursuant to a prospectus or by way of a private placement, provided the acquiring person does not thereby acquire a greater percentage of the voting shares or convertible securities offered than the person's percentage of voting shares beneficially owned immediately prior to such acquisition.

(6) such person is Al Yousuf, LLC, a United Arab Emirates limited liability company (“Al Yousuf”); provided, however, such exception is not applicable to Al Yousuf in the event that Al Yousuf shall, after its execution of that certain Stock Purchase and Settlement Agreement (the “Purchase and Settlement Agreement”), dated October 6, 2008, by and between the Company and Al Yousuf (a) increase its beneficial ownership percentage of voting shares by more than 1% above its beneficial ownership percentage of voting shares as a result of its execution of the Purchase and Settlement Agreement, other than through the issuance of shares pursuant to the Purchase and Settlement Agreement, a voting share reduction, an exempt acquisition or a pro rata acquisition, or (b) commence a Take-over Bid that would, if consummated, increase its beneficial ownership percentage of voting shares by more than 1% above its beneficial ownership percentage of voting shares as a result of its execution of the Purchase and Settlement Agreement.

In addition, (i) when a Take-over Bid is withdrawn or otherwise terminated after the commencement date has occurred, but prior to the occurrence of a Flip-in Date, or (ii) if the Board of the Directors grants a waiver following withdrawal, our Board of Directors may elect to redeem all outstanding rights at the price of Cdn. \$.0000004 per right (as adjusted). Upon the rights being redeemed pursuant to the foregoing provision, all provisions of the Rights Agreement shall continue to apply as if the commencement date had not occurred, and we shall be deemed to have issued replacement rights to the holders of its then outstanding common shares.

In addition, our Board of Directors may, at any time prior to the first date of public announcement or disclosure by us or an acquiring person of facts indicating that a person has become an acquiring person, or announcement date, elect to redeem all, but not less than all, of the then outstanding rights at the \$.0000004 per share (as adjusted). Moreover, in the event a person acquires voting shares pursuant to a discretionary waiver, our Board of Directors shall be deemed to have elected to redeem the rights at \$.0000008 per share (as adjusted). Within 10 days after our Board of Directors elects, or is deemed to have elected, to redeem the rights, our Board of Directors shall give notice of redemption to the holders of the then outstanding rights and, in such notice, described the method of payment by which the redemption price will be paid. The rights of any person under the Rights Agreement or any right, except rights to receive cash or other property that have already accrued, shall terminate at the expiration time, which is the date of a discretionary redemption or a deemed redemption described in this paragraph.

Exercise of the Rights.

The rights shall not be exercisable prior to the commencement date. Until the commencement date, each right shall be evidenced by the certificate for the associated common share and will be transferable only together with, and will be transferred by the transfer of, its associated common share. New common share certificates issued after the effective date of the Rights Agreement will contain a legend incorporating the Rights Agreement by reference. Certificates issued and outstanding at the effective date of the Rights Agreement shall evidence one right for each common share evidenced thereby, notwithstanding the absence of a legend incorporating the Rights Agreement, until the earlier of the commencement date or the expiration time. Each common share issued for new value after the effective date of the Rights Agreement, but prior to the expiration time, shall automatically have one new right associated with it and shall bear the appropriate legend.

From and after the commencement date, the rights may be exercised, and the registration and transfer of the rights shall be separate from and independent of the common shares. Following the commencement date, we shall mail to each holder of common shares as of the commencement date, or such holder's nominee, a rights certificate representing the number of rights held by such holder at the commencement date and a disclosure statement describing the rights.

Rights may be exercised in whole or in part on any business day after the commencement date and prior to the expiration time by submitting to the rights certificate, an election to exercise, and payment of the sum equal to \$.0000004 per share (as adjusted) multiplied by the number of rights being exercised. Upon receipt of such materials,

the Rights Agent will promptly deliver certificates representing the appropriate number of common shares to the registered holder of the relevant rights certificate and, if not all rights were exercised, issue a new rights certificate evidencing the remaining unexercised rights.

The foregoing descriptions do not purport to be complete and are qualified by reference to the definitive Rights Agreement.

S-20

Series A Warrants

Exercisability. The Series A warrants are exercisable beginning six months after the date of original issuance and at any time up to the date that is five years after such date. The Series A warrants will be exercisable, at the option of each holder, in whole or in part by delivering to us a duly executed exercise notice accompanied by payment in full for the number of common shares purchased upon such exercise (except in the case of a cashless exercise as discussed below). Unless otherwise specified in the Series A warrant, except upon at least 61 days' prior notice from the holder to us, the holder will not have the right to exercise any portion of the Series A warrant if the holder (together with its affiliates) would beneficially own in excess of 4.99% or 9.99%, as applicable, of the number of common shares outstanding immediately after giving effect to the exercise, as such percentage ownership is determined in accordance with the terms of the Series A warrants.

Cashless Exercise. In the event that a registration statement covering common shares underlying the Series A warrants, or an exemption from registration, is not available for the issuance or resale of such common shares underlying the warrants, the holder may, in its sole discretion, exercise the Series A warrant in whole or in part and, in lieu of making the cash payment otherwise contemplated to be made to us upon such exercise in payment of the aggregate exercise price, elect instead to receive upon such exercise the net number of common shares determined according to the formula set forth in the Series A warrant.

Exercise Price. The exercise price per common share purchasable upon exercise of the Series A warrants is \$2.56 per common share being purchased. The exercise price is subject to appropriate adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting our common shares and also upon any distributions of assets, including cash, stock or other property to our shareholders. In addition, with exceptions for certain exempt issuances, including the Canon transaction and employee options, if we sell securities at a purchase price per share that is below the then existing exercise price of the Series A warrants, the exercise price of the Series A warrants will be reduced to be equal to the sale price in the triggering transaction. Notwithstanding the foregoing, without shareholder approval, the exercise price per common share purchasable upon exercise of the Series A warrants will not be adjusted to an amount less than \$2.23.

Fractional Shares. No fractional common shares will be issued in connection with the exercise of a Series A warrant. In lieu of fractional shares, we will pay the holder an amount in cash equal to the fractional amount multiplied by the exercise price of the Series A warrant.

Transferability. Subject to applicable laws, the Series A warrants may be offered for sale, sold, transferred or assigned without our consent.

Exchange Listing. We do not plan on making an application to list the Series A warrants on the Nasdaq Capital Market, any other national securities exchange or other nationally recognized trading system.

Fundamental Transactions. We will not enter into or be party to a fundamental transaction, which is a merger or other change of control transaction, as described in the Series A warrants, unless the successor entity, as described in the Series A warrants, assumes the Series A warrants and delivers new warrants that are substantially similar. If we enter into, or are a party to, a fundamental transaction pursuant to which our shareholders are entitled or required to receive securities issued by another company or cash or other assets in exchange for common shares, which we refer to as a fundamental transaction, a holder of a Series A warrant will have the right to receive, upon an exercise of the Series A warrant, consideration as if the holder had exercised its Series A warrant immediately prior to such fundamental transaction. In the event of a fundamental transaction, at the request of a holder of a Series A warrant delivered before the 15th day after such fundamental transaction, we (or the successor entity) will purchase the warrant by paying to the holder, cash in an amount equal to the Black-Scholes value, as described in the warrant, of the remaining unexercised portion of the Series A warrant, provided that for the purposes of the redemption obligation described

above, the Canon transaction shall not constitute a fundamental transaction.

Restrictions on Market-Based Convertible Securities and Rights. In the subscription agreement, we agree that, for so long as any Series A warrants remain outstanding, we will not issue or sell any rights, warrants or options to subscribe for or purchase common shares, or directly or indirectly convertible into or exchangeable for common shares at a price which resets as a function of market price of the common shares.

Rights as a Stockholder. Except as otherwise provided in the warrants or by virtue of such holder's ownership of common shares, the holder of a Series A warrant does not have the rights or privileges of a holder of our common shares, including any voting rights, until the holder exercises the warrant.

Waivers and Amendments. Subject to the 61-day prior notice requirement with respect to certain ownership limitations, any term of the Series A warrants may be amended or waived with our written consent and the written consent of the holders of warrants.

Securities Purchase Agreement

Each purchaser of units in the offering will be required to execute a securities purchase agreement in the form provided to the purchasers and incorporated by reference into this prospectus supplement. The terms and conditions of the securities purchase agreement include the terms of purchase described on the cover page and other places in the prospectus and include, without limitation, the following:

Adjustment Shares. In addition, if the Share Subscription Agreement with Canon is adversely amended or the transactions contemplated thereby do not close by July 17, 2011, we will issue an additional number of common shares, as an adjustment, to purchasers without any further consideration. The number of adjustment shares will be equal to: (i) the quotient of (A) the aggregate purchase price paid by the purchaser for the units at closing divided by (B) 85% of the volume weighted average price per common share during the ten trading days beginning on the earlier to occur of July 17, 2011 or the public announcement of the termination of, or adverse amendment to, the Share Subscription Agreement (ii) minus the number of units subscribed for and purchased in the offering.

If (i) the registration statement covering the issuance of the adjustment shares is not effective, (ii) the SEC has issued a stop order, (iii) we are otherwise not legally permitted to issue adjustment shares on the due date for the issuance of the adjustment shares, or (iv) we cannot or do not issue adjustment shares without restrictive legend or without any restrictions or limitations on resale by any applicable purchaser, in lieu of such adjustment shares, we shall pay to the respective purchaser, in cash, as liquidated damages and not as a penalty, an amount equal to 125% of the product of (A) the volume weighted average price of the common shares on the applicable due date, multiplied by (B) the number of adjustment shares the purchaser is entitled to receive as of such due date.

Representations and Warranties. The securities purchase agreement contains representations and warranties by us to purchasers, and certain representations and warranties by purchasers to us, as are standard in transactions similar to the offering described herein. With limiting the foregoing, each purchaser will be required to represent and warrant as follows:

- such purchaser is an “institutional investor” in that it is an entity which is in the business of purchasing and selling securities for its own account with net assets in excess of US\$15,000,000 and was not formed for the purpose of purchasing the securities;
- such purchaser is not domiciled in Canada, is not purchasing the securities for the account or benefit of any resident of any province or territory of Canada and is not purchasing the securities with a view to resale into Canada of the Securities;
 - the securities were not offered to the investor in Canada;
 - the purchase agreement was not received or executed in Canada; and
- such purchaser will not, as a result to the issuance of the securities in the offering, be the beneficial owner of 15% of more of the common shares.

Use of Proceeds. Except as otherwise provided for in the securities purchase agreement, we have agreed to use the net proceeds from the sale of the units for working capital purposes and are prohibited from using such proceeds: (a) for the satisfaction of any portion of our debt (other than payment of trade payables in the ordinary course of our business and prior practices), (b) for the redemption of any of our securities, (c) for the settlement of any outstanding litigation or (d) in violation of the Foreign Corrupt Practices Act or the Office of Foreign Assets Control regulations.

Indemnification of Purchasers. In accordance with the terms of the securities purchase agreement, we will indemnify and hold each purchaser of units and its directors, officers, shareholders, members, partners, employees and agents harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys’ fees and costs of investigation that any such person may suffer or incur as a result of or relating to (a) any breach of any of the representations, warranties, covenants or agreements made by us in the securities purchase agreement or in the other transaction documents or (b) any action instituted against such person in any capacity by any of our shareholders with respect to any of the offering.

Participation in Future Financing. In accordance with the provisions of the securities purchase agreement purchasers will have the right, until the 15 month anniversary of the closing date, to participate in any issuance by us or our subsidiaries of common shares or other securities related to our common shares, excluding exempt issuances or registered public offerings, in an amount equal to the purchaser's pro rata share of the least of (i) 50% of the amount of the subsequent financing, (ii) the subscription amount of such purchaser in this offering and (iii) the amount of the subsequent financing remaining after the exercise, or waiver, of rights of first offer held by Al Yousuf LLC and to be held by Canon if the Canon transaction closes.

Exempt issuances include the issuance of:

- common shares or options to employees, officers or directors of the Company pursuant to any stock or option plan duly adopted for such purpose,

S-22

- securities upon the exercise or exchange of or conversion of any securities issued in the offering or outstanding on the date of the offering (provided such securities have not been amended since the date of the securities purchase agreement),
- securities issued pursuant to acquisitions or strategic transactions approved by a majority of our disinterested directors of the Company, provided that any such issuance shall only be to an unaffiliated person which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with our business and shall provide us with additional benefits in addition to the investment of funds (but this exception shall not include a transaction in which we are issuing securities for the purpose of raising capital or to an entity whose primary business is investing in securities or any securities issued in an otherwise strategic transaction to raise equity capital), or
- securities issued pursuant to Canon pursuant to the Share Subscription Agreement and securities issued pursuant to any existing rights of first offer and similar rights (except that issuances for rights of first offer shall not be exempt issuances for purposes of the warrants).

Restrictions on Subsequent Equity Sales. With exceptions for exempt issuances, we are prohibited from:(a) issuing any of our securities for a period of 100 days after closing of the transactions contemplated by the securities purchase agreement; (b) issuing any securities for an effective price per share less than \$2.23 until the earlier of the two year anniversary of the closing of the offering or the date that shareholder approval has been obtained.

Exchanges and Issues. We cannot: (i) effect an exchange of our securities pursuant to Section 3(a)(9) of the Securities Act (other than an employee stock option exchange conducted on an equivalent value basis or the conversion or exercise on a cashless basis of any Common Share Equivalents as long as any Common Share Equivalents outstanding on the closing date of the offering are not subsequently amended or modified after the closing date of the offering) or (ii) issue any of its securities pursuant to Section 3(a)(10) of the Securities Act until such time as no purchaser holds any of the Series A Warrants.

Fundamental Transaction. We will not enter into or be party to a fundamental transaction, which is a merger or other change of control transaction, as described in the securities purchase agreement, unless the successor entity assumes our obligation with respect to the adjustment shares. If we enter into, or are a party to, a fundamental transaction pursuant to which our shareholders are entitled or required to receive securities issued by another company or cash or other assets in exchange for common shares, the purchasers will have the right to receive, with respect to the adjustment shares, consideration as if the adjustment shares had been issued immediately prior to such fundamental transaction. If a fundamental transaction is publicly announced or occurs prior to occurrence of an event triggering the obligation to issue adjustment shares, each purchaser will have the option to receive cash, in lieu of the right to receive adjustment shares, in an amount equal to the product of (A) 125% times (B) the per share transaction value times (C) the number of adjustment shares that would otherwise be issuable under the securities purchase agreement.

Capital Changes. Until the one year anniversary of the closing of the offering, we cannot undertake a reverse or forward stock split or reclassification of our common shares without the prior written consent of the purchasers holding a majority in interest of the units.

CERTAIN REGISTRATION AND OTHER RIGHTS

Canon Share Subscription Agreement and Investor Rights. We entered into the Share Subscription Agreement with Canon on September 20, 2010 and a First Amendment to Share Subscription Agreement on February 16, 2011. Pursuant to the terms of the Share Subscription Agreement, Canon has agreed to acquire the number of common shares such that immediately following closing it will own 51% of our outstanding common shares on a fully diluted basis. The purchase price will be \$1.5528 per share. Based upon the number of common shares and the rights

to acquire common shares outstanding as of December 31, 2010, we estimate that the number of shares to be purchased will be 31,523,017, at an aggregate purchase price of \$48,948,799.16. If we issue additional common shares and warrants to purchase common shares in this offering, the number of shares to be purchased, and the aggregate purchase price, will increase.

Simultaneous to our execution of the Share Subscription Agreement, we and Canon also entered into an Investor Rights Agreement, pursuant to which we granted certain rights to Canon following closing, including (i) rights to proportional representation on our Board of Directors, rounded up to the nearest director, (ii) the right to cause us to file a shelf registration statement two years after closing, together with certain demand and piggy-back registration rights, (iii) certain indemnification rights related to the registration rights, and (iv) an option to purchase our common shares at market price in an amount sufficient to maintain proportionate ownership in connection with future dilutive issuances.

S-23

Al Yousuf Registration Rights, Right of First Offer and Lock Up. Pursuant to the terms of a Purchase Agreement dated November 29, 2007 and a Stock Purchase and Settlement Agreement dated October 6, 2008, Al Yousuf, LLC, a United Arab Emirates limited liability company, purchased an aggregate of 4,857,143 common shares. Pursuant to a Registration Rights Agreement, as amended, we agreed to register the re-sale of the shares issued to Al Yousuf, LLC; a registration statement on Form S-3 with respect to such shares is currently effective. The Registration Rights Agreement also includes demand registration rights and customary provisions related to indemnification of Al Yousuf, LLC and continued effectiveness of the registration statement.

Each of the Purchase Agreement and the Settlement Agreement includes a lock-up provision under which Al Yousuf, LLC is prohibited from transferring any of the shares issued pursuant to such agreement for at least two years and providing for the release of one-third of the shares on each of the second, third, and fourth anniversaries of the initial closing under the agreement. The table sets forth the date on which such Al Yousuf Shares have been, or will be, released from lock-up restrictions, the number of Al Yousuf Shares to be released on each date and the total number of Al Yousuf Shares released from lock-up restrictions as of such date.

	Number of Total	
Date of Release from Lockup	Shares Released on Date	Released as of Such Date
11/29/2009	952,381	952,381
9/30/2010	666,667	1,619,048
11/29/2010	952,381	2,571,429
9/30/2011	666,667	3,238,095
11/22/2011	952,381	4,190,476
9/30/2012	666,667	4,857,143

Al Yousuf, LLC has agreed to certain lock-up provisions with regard to future sales of our common shares and other securities convertible into or exercisable or exchangeable for common shares for a period of 90 days after the effective date of the Placement Agent Agreement.

Al Yousuf, LLC has also been granted a right of first offer, permitting it to purchase a percentage of the common shares offered in certain future offerings equal to its percentage ownership of our common shares. Al Yousuf, LLC has waived such right in connection with this offering.

CERTAIN CANADIAN FEDERAL INCOME TAX CONSIDERATIONS

Dividends paid on our common shares which are owned by non-residents of Canada (for purposes of the Income Tax Act (Canada)(the “Tax Act”)(a “Non-Resident”) will be subject to Canadian withholding tax generally at the rate of 25%. However, Article X of the Canada -United States Income Tax Convention (1980), as amended, (the “Treaty”) generally limits the rate of withholding tax on dividends paid to a United States resident that is the beneficial owner of the dividend and is entitled to the full benefit of the Treaty to 15%. The Treaty further limits the rate of withholding

tax to 5% if the beneficial owner of the dividends is a U.S. Resident company that owns at least 10% of the voting shares of the Company and is entitled to the full benefit of the Treaty.

A capital gain realized on the disposition of our common shares by a Non-Resident will generally not be subject to tax under the Tax Act provided the shares are not “taxable Canadian property” of the Non-Resident. In general, our common shares will not be taxable Canadian property of a Non-Resident at a particular time provided that: (i) such shares are listed on a “designated stock exchange” (which currently includes NASDAQ) for the purposes of the Tax Act at the time of disposition; and (ii) at no time during the 60 month period immediately preceding the disposition of such shares (a) was more than 50% of the fair market value of the common shares derived directly or indirectly from one or any combination of real or immovable property situated in Canada, Canadian resource properties (as defined in the Tax Act), timber resource properties (as defined in the Tax Act) and options in respect of interests or rights in such property; and (b) were 25% or more of the issued shares of any class or series of the our capital stock owned by the Non-Resident, by persons with whom the Non-Resident did not deal at arm’s length, or by the Non-Resident together with such persons.

This summary is of a general nature only and is not intended to be, nor shall be construed to be, legal or tax advice to any particular Non-Resident. Accordingly, Non-Resident holders of our common shares are urged to consult their own tax advisors for advice with regard to their particular circumstances.

PLAN OF DISTRIBUTION

We are offering units through a placement agent, with each unit consisting of one common share and a Series A warrant to purchase .5 of a common share. In addition, we will issue an additional number of common shares, as an adjustment, to purchasers without any further consideration. The number of adjustment shares will be equal to: (i) the quotient of (A) the aggregate purchase price paid by the purchaser for the units at closing divided by (B) 85% of the volume weighted average price per common share during the ten trading days beginning on the earlier to occur of July 17, 2011 or the public announcement of the termination of, or adverse amendment to, the Share Subscription Agreement (ii) minus the number of units subscribed for and purchased in the offering. The maximum number of adjustment shares that may be issued will be capped at 1,800,000 common shares.

Each common share includes an attached right arising under an Amended and Restated Shareholder Rights Plan Agreement dated October 15, 1999, as amended. Subject to the terms and conditions contained in the placement agent agreement, dated March 28, 2011, JMP Securities LLC has agreed to act as the placement agent for the sale of up to an aggregate of 3,600,000 units. The placement agent is not purchasing or selling any units by this prospectus supplement or the accompanying prospectus, nor is it required to arrange for the purchase or sale of any specific number or dollar amount of units, but has agreed to use reasonable efforts to arrange for the sale of all of the units.

The placement agent agreement provides that the obligations of the placement agent and the investors are subject to certain conditions precedent, including the absence of any material adverse change in our business and the receipt of customary legal opinions, letters and certificates.

Confirmations and definitive prospectuses will be distributed to all investors who agree to purchase the units, informing investors of the closing date as to such units. We currently anticipate that closing of the sale of the units will take place on or about March 30, 2011. Investors will also be informed of the date and manner in which they must transmit the purchase price for their units. On the scheduled closing date, the following will occur:

- we will receive funds in the amount of the aggregate purchase price; and
- JMP Securities LLC will receive the placement agent's fee in accordance with the terms of the placement agent agreement.

We will pay the placement agent a commission equal to 7.0% of the gross proceeds in the offering. We will also reimburse the placement agent for certain legal expenses incurred by it in connection with this offering not to exceed 1.0% of the gross offering proceeds. In no event will the total amount of compensation paid to the placement agent and other securities brokers and dealers upon completion of this offering exceed 8.0% of the gross proceeds of this offering. The placement agent will not receive any commission with respect to the common shares issuable upon exercise of the warrants. The estimated offering expenses payable by us, in addition to the placement agent's fee of \$449,568, are approximately \$104,224, which includes legal, accounting and printing costs and various other fees associated with registering and listing the common shares. After deducting certain fees due to the placement agent and our estimated offering expenses of \$150,000, we expect the net proceeds from this offering to be approximately \$5,822,832. If all of the warrants offered hereby are exercised for cash, we would receive additional proceeds of up to a maximum of approximately \$4,608,000.

We have agreed to indemnify the placement agent against certain liabilities, including liabilities under the Securities Act of 1933, as amended, and liabilities arising from breaches of representations and warranties contained in the placement agent agreement. We have also agreed to contribute to payments the placement agent may be required to make in respect of such liabilities. The placement agent agreement is included as an exhibit to our Current Report on Form 8-K that will be filed with the SEC in connection with the consummation of this offering.

We, along with our executive officers and directors have agreed to certain lock-up provisions with regard to future sales of our common shares and other securities convertible into or exercisable or exchangeable for common shares for a period of ninety (90) days after the offering as set forth in the placement agent agreement.

The transfer agent for our common shares is Equity Transfer Services, Inc., located in Ontario, Canada. Our common shares are listed on the NASDAQ Capital Market under the symbol "ALTI."

S-25

INVESTOR SUITABILITY STANDARDS

Each investor will be required to represent and warrant that:

- such investor is an “institutional investor” in that it is an entity which is in the business of purchasing and selling securities for its own account with net assets in excess of US\$15,000,000 and was not formed for the purpose of purchasing the securities;
- such investor is not domiciled in Canada, is not purchasing the securities for the account or benefit of any resident of any province or territory of Canada and is not purchasing the securities with a view to resale into Canada of the Securities;
 - the securities were not offered to the investor in Canada,
 - the purchase agreement was not received or executed in Canada; and
- such investor will not, as a result to the issuance of the securities in the offering, be the beneficial owner of 15% or more of the common shares.

S-26

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

As permitted by SEC rules, this prospectus supplement and the accompanying prospectus do not contain all of the information that prospective investors can find in the registration statement of which it is a part or the exhibits to the registration statement. The SEC permits us to incorporate by reference, into this prospectus supplement and the accompanying prospectus, information filed separately with the SEC.

This prospectus supplement incorporates by reference the documents set forth below that we previously have filed with the SEC pursuant to the Securities Exchange Act of 1934, as amended (File no. 001-12497). These documents contain important information about us and our financial condition.

- Our Annual Report on Form 10-K for the year ended December 31, 2010, filed with the SEC on February 28, 2011.
- Our Current Reports on Form 8-K filed with the SEC on February 15, 2011, February 16, 2011, February 24, 2011, and March 16, 2011.
- The description of our common shares contained in our Registration Statement on Form 10-SB, SEC File No. 1-12497 filed with the SEC pursuant to the Securities Exchange Act, including any amendment or report filed under the Securities Exchange Act for the purpose of updating such description.

All documents filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act after the date of the registration statement of which this prospectus supplement and accompanying prospectus are a part, and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which de-registers all securities then remaining unsold, shall be deemed to be incorporated by reference into the registration statement are a part and to be a part hereof from the date of filing of such documents. Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus supplement or the accompanying prospectus.

Upon written or oral request, we will provide without charge to each person to whom a copy of this prospectus supplement or the accompanying prospectus is delivered, including any beneficial owner, a copy of the information that has been or may be incorporated by reference in this prospectus supplement or the accompanying prospectus. Direct any request for copies to John Fallini, Chief Financial Officer, at our corporate headquarters, located at 204 Edison Way, Reno, Nevada 89502, telephone number (775) 858-3750.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, information statements and other information with the SEC. You may read and copy any reports, statements or other information that we file at the SEC's public reference rooms at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of this information by mail from the Public Reference Section of the SEC, 100 F Street, N.E., Washington, DC 20549 at prescribed rates. Please call the SEC at 1 (800) SEC-0330 for further information on the public reference rooms. The SEC also maintains a web site at <http://www.sec.gov>, at which reports, proxy and information statements and other information regarding our company are available.

LEGAL MATTERS

The validity of the securities offered by us has been passed upon for us by Cassels Brock & Blackwell, LLP, of Toronto, Ontario, Canada. Additional legal matters are being passed upon for us by Parr Brown Gee & Loveless, PC, of Salt Lake City, Utah. Morrison & Foerster LLP, of San Francisco, California, is acting as counsel to the placement agent in connection with this offering.

EXPERTS

The consolidated financial statements as of December 31, 2010 and 2009 and for each of the three-years in the period ended December 31, 2010, and the effectiveness of internal control over financial reporting incorporated by reference in this prospectus supplement have been audited by Perry-Smith LLP, an independent registered public accounting firm, as stated in their reports and incorporated herein by reference, and are incorporated in reliance upon such reports and upon the authority of such firm as experts in accounting and auditing.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers or persons controlling the registrant, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act of 1933, and is, therefore, unenforceable.

PROSPECTUS

ALTAIR NANOTECHNOLOGIES, INC.

\$150,000,000

COMMON SHARES
WARRANTS
UNITS

We may from time to time offer in one or more series, together or separately:

- common shares,
- warrants to purchase common shares and
- units of warrants and common shares.

We will set forth the amounts, prices and terms of these securities in supplements to this prospectus. Each common share includes an associated right arising under an Amended and Restated Shareholder Rights Plan Agreement dated October 15, 1999, as amended by that certain Amendment No. 1 dated October 6, 2008 and any additional amendments. Until the occurrence of events described in such agreement, the rights are not exercisable, are evidenced by our common shares and transfer automatically with, and only with, the common shares.

This prospectus describes the general terms that may apply to these securities. The specific terms of any such securities to be offered and the plan of distribution for that offering will be described in supplements to this prospectus. The prospectus supplements also may add, update or change information in this prospectus. You should read this prospectus and any applicable prospectus supplement before you make your investment decision.

This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.

We may offer and sell these securities through one or more underwriters, dealers and agents, securities through underwriting syndicates managed or co-managed by one or more underwriters, or directly to purchasers, on a continuous basis or a delayed basis. If any underwriters, dealers or agents are involved, their names and information about any commissions and discounts will be set forth in a prospectus supplement.

Our common shares are listed on the NASDAQ Capital Market under the symbol "ALTI." On October 12, 2009, the last reported sale price of our common shares was \$1.07 per share.

Investing in the securities offered by this prospectus and the accompanying prospectus supplement involves risks. See "Risk Factors" beginning on page 2.

Neither the Securities Exchange Commission nor any other government body has approved or disapproved of these securities or passed upon the accuracy of this prospectus. Any representation to the contrary is a criminal offense.

This prospectus is dated October 26, 2009

TABLE OF CONTENTS

	Page
Overview	1
About this Prospectus	1
Risk Factors	2
Forward-Looking Statements	10
Use of Proceeds	10
The Securities We May Offer	10
Plan of Distribution	15
Incorporation of Certain Information by Reference	19
Where You Can Find More Information	19
Legal Matters	19
Experts	20
Disclosure of Commission Position on Indemnification for Securities Act Liabilities	20

OVERVIEW

We are a Canadian corporation, with principal assets and operations in the United States, whose primary business is developing and commercializing nanomaterial technologies. Our research, development, production and marketing efforts are currently directed toward the design, development, and production of our nano-lithium Titanate battery cells, batteries, and battery packs, as well as related design and test services. We are currently focused on the commercialization of our nano-lithium Titanate electrode materials and batteries for use in the power and energy storage industries. We also continue developing and testing efforts of our nano-lithium Titanate electrode materials and batteries for use in military applications and in the transportation segment.

Our other operations as of the date of this prospectus include supporting AlSher Titania, LLC (“AlSher”) in the development and production of high quality titanium dioxide pigment for use in paint and coatings, and nano titanium dioxide materials for use in a variety of applications including those related to removing contaminants from air and water. In this area, we are seeking to identify and qualify an interested third party to purchase our interest in the AlSher joint venture. We are also providing limited support to Spectrum Pharmaceuticals Inc. pursuant to our obligations under the amended and restated agreement for development of RenaZorb and Renalan, which are pre-clinical pharmaceutical ingredients designed to be useful in the treatment of chronic kidney disease, hyperphosphatemia, and high phosphate levels in blood, associated with end-stage renal disease.

ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the SEC using a “shelf” registration, or continuous offering process.

Each time that we sell any securities under this prospectus, we will provide a prospectus supplement that will contain specific information about the terms of that offering and certain other offering-specific information. The prospectus supplement also may add, update or change information contained in this prospectus. Any statement that we make in this prospectus will be modified or superseded by any inconsistent statement made by us in a prospectus supplement.

The registration statement we filed with the SEC includes exhibits that provide more detail on descriptions of the matters discussed in this prospectus. You should carefully read this prospectus, the related exhibits filed with the SEC and the applicable prospectus supplement together with the additional information described under the heading “Where You Can Find More Information” on page 18 of this prospectus. You should not assume that the information in this prospectus, the prospectus supplements or any documents incorporated by reference is accurate as of any date other than the date of the applicable document.

You should rely only on the information incorporated by reference or provided in this prospectus and any prospectus supplement. We have authorized no one to provide you with different information.

Unless we indicate otherwise, the terms “Altair,” “we,” “our” and “us” as used in this prospectus refers to Altair Nanotechnologies Inc. and its subsidiaries as a combined entity, except where it is made clear that the term only means the parent company or an identified subsidiary. Our principal executive offices are located at 204 Edison Way, Reno, NV, and our phone number is (775) 856-2500. Our website is www.altairnano.com. Information contained on our website is not a part of this prospectus or any prospectus supplement.

RISK FACTORS

You should carefully consider the risks described in this prospectus and the accompanying prospectus supplement, in addition to the other information contained or incorporated by reference in this prospectus and the accompanying prospectus supplement before making an investment decision. Any of these risks could materially and adversely affect our business, financial condition or results of operations. In such case, you may lose all or part of your investment. Some factors in this section are forward-looking statements.

We may continue to experience significant losses from operations.

We have experienced a net loss in every fiscal year since our inception. Our losses from operations were \$30.1 million in 2008, and \$13.0 million for the six months ended June 30, 2009. Even if we do generate operating income in one or more quarters in the future, subsequent developments in the economy, our industry, customer base, business or cost structure, or an event such as significant litigation or a significant transaction, may cause us to again experience operating losses. We may never become profitable.

Our quarterly operating results have fluctuated significantly in the past and will continue to fluctuate in the future, which could cause our stock price to decline.

Our quarterly operating results have fluctuated significantly in the past, and we believe that they will continue to fluctuate in the future, due to a number of factors, many of which are beyond our control. Factors that may affect our quarterly operating results include the following:

- fluctuations in the size and timing of customer orders from one quarter to the next;
 - timing of delivery of our services and products;
 - additions of new customers or losses of existing customers;
- positive or negative business or financial developments announced by our key customers;
 - our ability to commercialize and obtain orders for products we are developing;
 - costs associated with developing our manufacturing capabilities;
- new product announcements or introductions by our competitors or potential competitors;
- the effect of variations in the market price of our common shares on our equity-based compensation expenses;
 - technology and intellectual property issues associated with our products; and
 - general political, social, geopolitical and economic trends and events.

If in future periods our operating results do not meet the expectations of investors or analysts who choose to follow our company, our stock price may fall.

A majority of our revenue has historically been generated from low-margin contract research and development services; if we cannot expand revenues from other products and services, our business will fail.

Historically, a majority of our revenue has come from contract research and development services for businesses and government agencies. During the years ended December 31, 2008, 2007 and 2006, contract service revenues comprised 87%, 55% and 67% respectively, of our operating revenues. Contract services revenue is low margin, or has negative margins, and is unlikely to grow at a rapid pace. Our business plan anticipates revenues from product sales and licensing, both of which have potential for higher margins than contract services and have potential for rapid growth, increasing in coming years. If we are not successful in significantly expanding our revenues, or if we are forced to accept low or negative margins in order to achieve revenue growth, we may fail to reach profitability in the future.

Adverse economic conditions and government initiatives could reduce, delay or harm demand for our products.

The current financial markets and general economic environment are substantially weaker at present than they were during 2008. Our products are targeted primarily at large power producers, the U.S. and British military, military contractors and, to a lesser extent, automobile manufacturers. Due to declining revenues and concerns about liquidity, companies and branches of the military in our target market have reduced, delayed or eliminated many research and development initiatives, including those related to energy storage. This reduction or delay in development spending is harming our development and production efforts and will continue to harm such efforts unless and until development spending increases to prior levels.

In addition, certain of our customers or potential customers who have the liquidity to fund development projects have deferred orders in anticipation of qualifying for funds dispensed in accordance with the American Recovery and Reinvestment Act of 2009. We are likely to experience reduced product demand until companies seeking funding under these energy initiatives within the American Recovery and Reinvestment Act of 2009 receive funding and/or learn that they will not receive funding.

We depend upon several sole-source third-party suppliers.

We rely on certain suppliers as the sole-source of certain services, raw materials and other components of our products. We do not have long-term supply or service agreements with most of them. As a result, the providers of such services and components could terminate or alter the terms of service or supply with little or no advance notice. If our arrangements with any sole-source supplier were terminated or such a supplier failed to provide essential services or deliver essential components on a timely basis or introduced unacceptable price increases, our production schedule would be delayed, possibly by as long as six months. Any such delay in our production schedule would result in delayed product delivery and may also result in additional production costs, customer losses and litigation.

Our patents and other protective measures may not adequately protect our proprietary intellectual property, and we may be infringing on the rights of others.

We regard our intellectual property, particularly our proprietary rights in our nanomaterials technology, as critical to our success. We have received various patents, and filed other patent applications, for various applications and aspects of our nanomaterials technology and other intellectual property. In addition, we generally enter into confidentiality and invention agreements with our employees and consultants. Such patents and agreements and various other measures we take to protect our intellectual property from use by others may not be effective for various reasons, including the following:

- our pending patent applications may not be granted for various reasons, including the existence of conflicting patents or defects in our applications;
- the patents we have been granted may be challenged, invalidated or circumvented because of the pre-existence of similar patented or unpatented intellectual property rights or for other reasons;
- parties to the confidentiality and invention agreements may have such agreements declared unenforceable or, even if the agreements are enforceable, may breach such agreements;
- the costs associated with enforcing patents, confidentiality and invention agreements or other intellectual property rights may make aggressive enforcement cost prohibitive;
- even if we enforce our rights aggressively, injunctions, fines and other penalties may be insufficient to deter violations of our intellectual property rights; and
- other persons may independently develop proprietary information and techniques that, although functionally equivalent or superior to our intellectual proprietary information and techniques, do not breach our patented or unpatented proprietary rights.

Because the value of our company and common shares is rooted primarily in our proprietary intellectual property rights, our inability to protect our proprietary intellectual property rights or gain a competitive advantage from such rights could harm our ability to generate revenues and, as a result, our business and operations.

In addition, we may inadvertently be infringing on the proprietary rights of other persons and may be required to obtain licenses to certain intellectual property or other proprietary rights from third parties. Such licenses or proprietary rights may not be made available under acceptable terms, if at all. If we do not obtain required licenses or proprietary rights, we could encounter delays in product development or find that the development or sale of products requiring such licenses is foreclosed.

The commercialization of many of our technologies is dependent upon the efforts of commercial partners and other third parties over which we have no or little control.

We do not have the expertise or resources to commercialize all potential applications of our nanomaterials and titanium dioxide pigment technology. For example, transportation applications of our nano-lithium Titanate batteries are likely to be developed only in conjunction with the manufacturer of all-electric or hybrid-electric cars, trucks or buses, and stationary power applications are likely to be developed only in cooperation with utility companies or other potential users of the technology. With respect to these and substantially all other applications of our technology, the commercialization of a potential application of our technology is dependent, in part, upon the expertise, resources and efforts of our commercial partners. This presents certain risks, including the following:

- we may not be able to enter into development, licensing, supply and other agreements with commercial partners with appropriate resources, technology and expertise on reasonable terms or at all;
- our commercial partners may not place the same priority on a project as we do, may fail to honor contractual commitments, may not have the level of resources, expertise, market strength or other characteristics necessary for the success of the project, may dedicate only limited resources to, and/or may abandon, a development project for reasons, including reasons, such as a shift in corporate focus, unrelated to its merits;
- our commercial partners may be in the early stages of development and may not have sufficient liquidity to invest in joint development projects, expand their businesses and purchase our products as expected or honor contractual commitments;
- our commercial partners may terminate joint testing, development or marketing projects on the merits of the projects for various reasons, including determinations that a project is not feasible, cost-effective or likely to lead to a marketable end product;
- at various stages in the testing, development, marketing or production process, we may have disputes with our commercial partners, which may inhibit development, lead to an abandonment of the project or have other negative consequences; and
- even if the commercialization and marketing of jointly developed products is successful, our revenue share may be limited and may not exceed our associated development and operating costs.

As a result of the actions or omissions of our commercial partners, or our inability to identify and enter into suitable arrangements with qualified commercial partners, we may be unable to commercialize apparently viable products on a timely and cost-effective basis, or at all.

Interest in our nano-lithium Titanate battery materials and batteries is affected by energy supply and pricing, political events, popular consciousness and other factors over which we have no control.

Currently, our marketing and development efforts for our batteries and battery materials are focused primarily on transportation, military and stationary power applications. In the transportation and military markets, batteries containing our nano-lithium Titanate materials are designed to replace or supplement gasoline and diesel engines. In the stationary power applications, our batteries are designed to conserve and regulate the stable supply of electricity, including from renewable sources. The interest of our potential customers and business partners in our products and services is affected by a number of factors beyond our control, including:

- economic conditions and capital financing and liquidity constraints;
 - short-term and long-term trends in the supply and price of gasoline, diesel, coal, natural gas and other fuels;
- the anticipated or actual granting or elimination by governments of tax and other financial incentives favoring electric or hybrid electric vehicles and renewable energy production;
- the anticipated or actual funding, or elimination of funding for, programs that support renewable energy programs, electric grid improvements, certain military electric vehicle initiatives and related programs;
-

- changes in public and investor interest, for financial and/or environmental reasons, in supporting or adopting alternatives to gasoline and diesel for transportation and other purposes;
- the overall economic environment and the availability of credit to assist customers in purchasing our large battery systems;
 - the expansion or contraction of private and public research and development budgets as a result of global and U.S. economic trends; and
 - the speed of incorporation of renewable energy generating sources into the electric grid.

Our government grants and contracts are subject to termination or delays by the government.

The grants and contracts we enter into with governmental entities are subject to termination or delay of funding at the election of the government. A substantial portion of our revenue is derived from government grants and contracts. As a result, any termination of such agreements would significantly reduce revenue and the capital to sustain operations and research.

Our success is primarily dependent upon our nano-lithium Titanate battery materials and batteries business.

We recently determined to focus our financial and other resources primarily on our Power and Energy Group, in which our principal products are our nano-lithium Titanate battery materials and batteries. As a result, we ceased devoting financial and human resources to any new development in our former Performance Materials Group, in which our principal focus (through Alsher) had been the development of titanium dioxide pigment and various coatings, and in our former Life Sciences Group, in which our principal focus had been supporting Spectrum Pharmaceuticals Inc. in the development of RenaZorb under a licensing agreement. Because we are not expending significant resources on any of our historical products or lines of business other than our nano-lithium Titanate battery materials and batteries, such other products and lines of business are unlikely to generate substantial revenue in the future. As a result, our success is primarily dependent upon our ability to develop, market and sell our nano-lithium Titanate battery materials and batteries.

Our nano-lithium Titanate battery materials and battery business is currently dependent upon a few customers and potential customers, which presents various risks.

Our nano-structure LTO battery materials and battery business has historically been dependent upon a few customers, including the U.S. government, affiliates of The AES Corporation and smaller companies developing electric or hybrid electric cars and buses. In addition, most of these customers are development partners, who are subsidizing the research and development of products for which they may be the sole, or one of a few, potential purchasers. As a result of the small number of potential customers and partners, our existing customers and partners may have significant leverage on pricing terms, exclusivity terms and other economic and noneconomic terms. This may harm our attempts to sell products at prices that reflect desired gross margins. In addition, the decision by a single customer to abandon use or development of a product, or budget cutbacks and other events harming the ability of a single customer to continue to purchase products or continue development, may significantly harm both our financial results and the development track of one or more products.

If we acquire or invest in other companies, assets or technologies and we are not able to integrate them with our business, or we do not realize the anticipated financial and strategic goals for any of these transactions, our financial performance may be impaired.

As part of our growth strategy, we routinely consider acquiring or making investments in companies, assets or technologies that we believe are strategic to our business. We do not have extensive experience in conducting diligence on, evaluating, purchasing or integrating new businesses or technologies, and if we do succeed in acquiring or investing in a company or technology, we will be exposed to a number of risks, including:

- we may find that the acquired company or technology does not further our business strategy, that we overpaid for the company or technology or that the economic conditions underlying our acquisition decision have changed;
- we may have difficulty integrating the assets, technologies, operations or personnel of an acquired company, or retaining the key personnel of the acquired company;
- our ongoing business and management's attention may be disrupted or diverted by transition or integration issues and the complexity of managing geographically or culturally diverse enterprises;
-

we may encounter difficulty entering and competing in new product or geographic markets or increased competition, including price competition or intellectual property litigation; and

- we may experience significant problems or liabilities associated with product quality, technology and legal contingencies relating to the acquired business or technology, such as intellectual property or employment matters.

In addition, from time to time we may enter into negotiations for acquisitions or investments that are not ultimately consummated. These negotiations could result in significant diversion of management time, as well as substantial out-of-pocket costs. If we were to proceed with one or more significant acquisitions or investments in which the consideration included cash, we could be required to use a substantial portion of our available cash. To the extent we issue shares of capital stock or other rights to purchase capital stock, including options and warrants, existing stockholders would be diluted. In addition, acquisitions and investments may result in the incurrence of debt, large one-time write-offs, such as acquired in-process research and development costs, and restructuring charges.

We intend to expand our operations and increase our expenditures in an effort to grow our business. If we are unable to achieve or manage significant growth and expansion, or if our business does not grow as we expect, our operating results may suffer.

During the past several years, we have increased our research and development expenditures in an attempt to accelerate the commercialization of certain products, particularly our nano-lithium Titanate electrode materials and battery systems. Our business plan anticipates continued expenditure on development, manufacturing and other growth initiatives. We may fail to achieve significant growth despite such expenditures. If achieved, significant growth would place increased demands on our management, accounting systems, network infrastructure and systems of financial and internal controls. We may be unable to expand associated resources and refine associated systems fast enough to keep pace with expansion, especially as we expand into multiple facilities at distant locations. If we fail to ensure that our management, control and other systems keep pace with growth, we may experience a decline in the effectiveness and focus of our management team, problems with timely or accurate reporting, issues with costs and quality controls and other problems associated with a failure to manage rapid growth, all of which would harm our results of operations.

Our competitors have more resources than we do, and may be supported by more prominent partners, which may give them a competitive advantage.

We have limited financial, personnel and other resources and, because of our early stage of development, have limited access to capital. We compete or may compete against entities that are much larger than we are, have more extensive resources than we do and have an established reputation and operating history. In addition, certain of our early stage competitors may be partnered with, associated with or supported by larger business or financial partners. This may increase their ability to raise capital, attract media attention, develop products and attract customers despite their short operating history and small size. Because of their size, resources, reputation and history (or that of their business and financial partners) certain of our competitors may be able to exploit acquisition, development and joint venture opportunities more rapidly, easily or thoroughly than we can. In addition, potential customers may choose to do business with our more established competitors, without regard to the comparative quality of our products, because of their perception that our competitors are more stable, are more likely to complete various projects, are more likely to continue as a going concern and lend greater credibility to any joint venture.

We will not generate substantial revenues from our life science products unless proposed products receive FDA approval and achieve substantial market penetration.

We have entered into development and license agreements with respect to RenaZorb, a potential drug candidate for humans with kidney disease, and other products. Most of the potential life sciences applications of our technologies are subject to regulation by the FDA and similar regulatory bodies. In general, license agreements in the life sciences area call for milestone payments as certain milestones related to the development of the products and the obtaining of regulatory approval are met; however, the receipt by the licensor of substantial recurring revenues is generally tied to the receipt of marketing approval from the FDA and the amount of revenue generated from the sale of end products. There are substantial risks associated with licensing arrangements, including the following:

- Further testing of potential life science products using our technology may indicate that such products are less effective than existing products, unsafe, have significant side effects or are otherwise not viable;
 - The licensees may be unable to obtain FDA or other regulatory approval for technical, political or other reasons or, even if it obtains such approval, may not obtain such approval on a timely basis; in this regard, we note that Spectrum Pharmaceuticals, Inc., the licensee of RenaZorb, has been significantly delayed in testing on RenaZorb; and
- End products for which FDA approval is obtained, if any, may fail to obtain significant market share for various reasons, including questions about efficacy, need, safety and side effects or because of poor marketing by the

licensee.

6

If any of the foregoing risks, or other risks associated with our life science products were to occur, we would not receive substantial, recurring revenue from our life science efforts, which would adversely affect our overall business, operations and financial condition.

We and Sherwin-Williams may be unable to find a new investor to participate in AlSher, and consequently terminate the joint venture disposing of its remaining assets.

We are currently working with Sherwin-Williams to identify an interested third party to invest in AlSher and undertake the next phase in the proposed development of our titanium dioxide pigment manufacturing process, which is the construction of an approximately 5,000 ton per year demonstration plant. Neither Sherwin-Williams nor Altair has indicated a willingness to fund this next phase of development. Should the parties be unable to find an acceptable third party investor, the AlSher joint venture will in all likelihood be terminated and its remaining assets sold or written off. If this joint venture is terminated, it is unlikely that we will realize any material revenue from its titanium dioxide pigment production process.

If manufacturing becomes a larger part of our operations, we will become exposed to accompanying risks and liabilities.

We have not produced any products using our nanomaterials and titanium dioxide pigment technology and equipment on a sustained commercial basis. In-house or outsourced manufacturing is expected to become an increasingly significant part of our business over the next few years. As a result, we expect to become increasingly subject to various risks associated with the manufacturing and supply of products, including the following:

- If we fail to supply products in accordance with contractual terms, including terms related to time of delivery and performance specifications, we may be required to repair or replace defective products and may become liable for direct, special, consequential and other damages, even if manufacturing or delivery was outsourced;
- Raw materials used in the manufacturing process, labor and other key inputs may become scarce and expensive, causing our costs to exceed cost projections and associated revenues;
- Manufacturing processes typically involve large machinery, fuels and chemicals, any or all of which may lead to accidents involving bodily harm, destruction of facilities and environmental contamination and associated liabilities;
- As our manufacturing operations expand, we expect that a significant portion of our manufacturing will be done overseas, either by third-party contractors or in a plant owned by the company. Any manufacturing done overseas presents risks associated with quality control, currency exchange rates, foreign laws and customs, timing and loss risks associated with overseas transportation and potential adverse changes in the political, legal and social environment in the host country; and
- We may have made, and may be required to make, representations as to our right to supply and/or license intellectual property and to our compliance with laws. Such representations are usually supported by indemnification provisions requiring us to defend our customers and otherwise make them whole if we license or supply products that infringe on third-party technologies or violate government regulations.

Any failure to adequately manage risks associated with the manufacture and supply of materials and products could lead to losses (or small gross profits) from that segment of our business and/or significant liabilities, which would harm our business, operations and financial condition.

We may not be able to raise sufficient capital to meet future obligations.

As of June 30, 2009, we had approximately \$28.7 million in cash and cash equivalents. As we take additional steps to enhance our commercialization and marketing efforts, or respond to acquisition and joint venture opportunities or potential adverse events, our use of working capital may increase. In any such event, absent a comparatively significant increase in revenue, we will need to raise additional capital in order to sustain our ongoing operations,

continue unfinished testing and additional development work and, if certain of our products are commercialized, construct and operate facilities for the production of those products.

We may not be able to obtain the amount of additional capital needed or may be forced to pay an extremely high price for capital. Factors affecting the availability and price of capital may include the following:

7

- market factors affecting the availability and cost of capital generally, including recent increases or decreases in major stock market indexes, the stability of the banking and investment banking systems and general economic stability or instability;
 - the price, volatility and trading volume of our common shares;
 - our financial results, particularly the amount of revenue we are generating from operations;
 - the amount of our capital needs;
 - the market's perception of companies in one or more of our lines of business;
 - the economics of projects being pursued; and
- the market's perception of our ability to execute our business plan and any specific projects identified as uses of proceeds.

If we are unable to obtain sufficient capital or are forced to pay a high price for capital, we may be unable to meet future obligations or adequately exploit existing or future opportunities. If we are unable to obtain sufficient capital in the long run, we may be forced to curtail or discontinue operations.

Our past and future operations may lead to substantial environmental liability.

Virtually any prior or future use of our nanomaterials and titanium dioxide pigment technology is subject to federal, state and local environmental laws. In addition, we are in the process of reclaiming mineral property that we leased in Tennessee. Under applicable environmental laws, we may be jointly and severally liable with prior property owners for the treatment, cleanup, remediation and/or removal of any hazardous substances discovered at any property we use. In addition, courts or government agencies may impose liability for, among other things, the improper release, discharge, storage, use, disposal or transportation of hazardous substances. If we incur any significant environmental liabilities, our ability to execute our business plan and our financial condition would be harmed.

Certain of our experts and directors reside in Canada or Dubai and may be able to avoid civil liability.

We are a Canadian corporation, and two of our directors and our Canadian legal counsel are residents of Canada. Two additional directors are residents of the United Arab Emirates. As a result, investors may be unable to effect service of process upon such persons within the United States and may be unable to enforce court judgments against such persons predicated upon civil liability provisions of the U.S. securities laws. It is uncertain whether Canadian or United Arab Emirates courts would enforce judgments of U.S. courts obtained against us or such directors, officers or experts predicated upon the civil liability provisions of U.S. securities laws or impose liability in original actions against us or our directors, officers or experts predicated upon U.S. securities laws.

We are dependent on key personnel.

Our continued success will depend, to a significant extent, on the services of our executive management team and certain key scientists and engineers. We do not have key man insurance on any of these individuals. Nor do we have agreements requiring any of our key personnel to remain with our company. The loss or unavailability of any or all of these individuals could harm our ability to execute our business plan, maintain important business relationships and complete certain product development initiatives, which would harm our business.

We may issue substantial amounts of additional shares without stockholder approval.

Our articles of incorporation authorize the issuance of an unlimited number of common shares that may be issued without any action or approval by our stockholders. In addition, we have various stock option plans that have potential for diluting the ownership interests of our stockholders. The issuance of any additional common shares would further dilute the percentage ownership of our company held by existing stockholders.

The market price of our common shares is highly volatile and may increase or decrease dramatically at any time.

The market price of our common shares is highly volatile. Our stock price may change dramatically as the result of announcements of product developments, new products or innovations by us or our competitors, uncertainty regarding the viability of our technology or any of our product initiatives, significant customer contracts, significant litigation or other factors or events that would be expected to affect our business, financial condition, results of operations and future prospects.

The market price for our common shares may be affected by various factors not directly related to our business or future prospects, including the following:

- intentional manipulation of our stock price by existing or future shareholders;
- a reaction by investors to trends in our stock rather than the fundamentals of our business;
- a single acquisition or disposition, or several related acquisitions or dispositions, of a large number of our shares, including by short sellers covering their position;
- the interest of the market in our business sector, without regard to our financial condition, results of operations or business prospects;
- positive or negative statements or projections about our company or our industry, by analysts, stock gurus and other persons;
- the adoption of governmental regulations or government grant programs and similar developments in the United States or abroad that may enhance or detract from our ability to offer our products and services or affect our cost structure; and
- economic and other external market factors, such as a general decline in market prices due to poor economic conditions, investor distrust or a financial crisis.

We may be delisted from the NASDAQ Capital Market if the closing bid price of our common shares does not remain above \$1.00 per share.

Under NASDAQ rules, a stock listed on NASDAQ Capital Market must maintain a minimum per share closing bid price of at least \$1.00 per share. During 2009, the minimum per share closing bid price for our common shares has fallen below \$1.00 on several occasions. As a matter of practice, NASDAQ generally gives a company a notice of delisting if the per share closing bid price of its common shares is below \$1.00 for 30 consecutive trading days. After receiving the notice, the company will generally be delisted if the per share closing bid price for its common shares has not exceeded \$1.00 for 10 consecutive days within 180 days of the date of the notice. If the price of our common shares trades below \$1.00 for a sustained period of time, or if NASDAQ decides to delist our common shares based upon a one-time violation of the bid-price rule or any other rule, we may be delisted from the NASDAQ Capital Market.

Following any such delisting, our common shares would likely be eligible for quotation on the OTC Bulletin Board or other quotation service. Nonetheless, even if our common shares are quoted on an alternative quotation service, the fact of being delisted from the NASDAQ Capital Market will likely harm the price and trading volume for our common shares. Once delisted, our common shares would not be eligible for relisting until, among other things, our common shares traded at or above \$4.00 per share.

We have never declared a cash dividend and do not intend to declare a cash dividend in the foreseeable future.

We have never declared or paid cash dividends on our common shares. We currently intend to retain any future earnings, if any, for use in our business and, therefore, do not anticipate paying dividends on our common shares in the foreseeable future.

We are subject to various regulatory regimes, and may be adversely affected by inquiries, investigations and allegations that we have not complied with governing rules and laws.

In light of our status as a public company and our lines of business, we are subject to a variety of laws and regulatory regimes in addition to those applicable to all businesses generally. For example, we are subject to the reporting requirements applicable to Canadian and United States reporting issuers, such as the Sarbanes-Oxley Act of 2002, the rules of the NASDAQ Capital Market and certain state and provincial securities laws. We are also subject to state and federal environmental, health and safety laws, and rules governing department of defense contracts. Such laws and

rules change frequently and are often complex. In connection with such laws, we are subject to periodic audits, inquiries and investigations. Any such audits, inquiries and investigations may divert considerable financial and human resources and adversely affect the execution of our business plan.

Through such audits, inquiries and investigations, we or a regulator may determine that we are out of compliance with one or more governing rules or laws. Remedying such non-compliance diverts additional financial and human resources. In addition, in the future, we may be subject to a formal charge or determination that we have materially violated a governing law, rule or regulation. We may also be subject to lawsuits as a result of alleged violation of the securities laws or governing corporate laws. Any charge or allegation, and particularly any determination, that we had materially violated a governing law would harm our ability to enter into business relationships, recruit qualified officers and employees and raise capital.

FORWARD-LOOKING STATEMENTS

This prospectus contains and incorporates by reference certain forward-looking statements regarding our anticipated financial condition, results of operations and businesses in the future, including management's beliefs, projections and assumptions concerning future results and events. These forward-looking statements generally are in the future tense and may, but do not necessarily, include words such as "believes," "expects," "anticipates," "intends," "plans," "estimates," "may," "will," "should," "could," "predicts," "potential," "continue" or similar expressions. Forward-looking statements are not guarantees. They involve known and unknown risks, uncertainties and other factors that may cause actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Our future results may differ materially from those expressed in these forward-looking statements. Some of the factors that may cause actual results to differ materially from those contemplated by such forward-looking statements include, but are not limited to, those identified under "Risk Factors" above and in the annual and quarterly reports we file with the SEC.

Given these risks and uncertainties, you are cautioned not to place undue reliance on any forward-looking statements, which speak only as of the date of the document in which they are contained. We do not undertake any obligation to update any forward-looking statement or to publicly announce any revision of any forward-looking statement to reflect the occurrence of any future developments or events.

USE OF PROCEEDS

Unless the applicable prospectus supplement states otherwise, the net proceeds from the securities sold by us will be added to our general corporate funds and be used for working capital and general corporate purposes. Until the net proceeds have been used, they will be invested in short-term marketable securities in accordance with our investment policy. If we elect at the time of the issuance of the securities to make different or more specific use of proceeds other than as described in this prospectus, the change in use of proceeds will be described in the applicable prospectus supplement.

When we issue a particular series of securities, we will describe in the applicable prospectus supplement the intended use of proceeds from the sale of those securities.

THE SECURITIES WE MAY OFFER

We may use this prospectus to offer common shares, including associated rights, warrants to purchase common shares and units of common shares and warrants in any combination.

The following briefly summarizes the general terms and provisions of the securities that we may offer. A prospectus supplement will describe the specific types, amounts, prices and detailed terms of any of these offered securities. You should read the particular terms of the securities as described in any prospectus supplement, together with the provisions of our articles of continuance, bylaws and any relevant instrument and agreement relating to such securities. The specific terms of the securities offered may differ from the terms discussed below and you should always read the entire instruments and agreements defining the terms of the securities before you make an investment

decision with respect to such securities.

10

General

Our authorized capital stock consists of an unlimited number of common shares, without par value. The rights of our stockholders are governed by our charter documents. In addition, associated with each common share is a right granted under, and subject to, that certain Amended and Restated Shareholder Rights Plan Agreement, dated October 15, 1999, by and between the Company and Equity Transfer Services Inc. (the "Rights Agent"), as further amended by that certain Amendment No. 1 to Amended and Restated Shareholder Rights Plan Agreement dated October 6, 2008 (collectively, the "Rights Agreement").

Common Shares

We are authorized to issue an unlimited number of common shares, which do not have par value. As of August 31, 2009, there were 105,519,855 common shares issued and outstanding. Holders of common shares are entitled to one vote per share on all matters to be voted on by our shareholders. There is no cumulative voting with respect to the election of directors. The holders of common shares are entitled to receive dividends, if any, as may be declared from time to time by our Board of Directors in its discretion from funds legally available therefor. Upon liquidation, dissolution or winding up of the company, the holders of common shares are entitled to receive ratably any assets available for distribution to shareholders. The common shares have no preemptive or other subscription rights, and there are no conversion rights or redemption or sinking fund provisions with respect to such shares. All of the outstanding common shares are fully paid and nonassessable. Each common share includes an associated right arising under, and subject to the terms described in, the Rights Agreement. The terms of such rights are summarized in "Change of Control Provisions Applicable to Our Common Shares" below.

As of August 31, 2009, we had issued and outstanding options to acquire 4,906,709 common shares issued pursuant to our stock incentive plans, had 4,140,817 shares reserved for future grants under our stock incentive plans and 7,028,440 common shares were issuable and reserved for issuance pursuant to other securities exercisable for, or convertible into or exchangeable for any shares of capital stock of the Company. In addition, pursuant to a Warrant Issuance Agreement dated July 20, 2007, we agreed to issue to an affiliate of The AES Corporation additional warrants (each, a "Milestone Warrant") to purchase Company common shares based on a formula derived from revenue received from sales of energy storage systems to AES and its affiliates during the term of a Joint Development Agreement. The number of Milestone Warrants the Company may be required to issue is subject to an aggregate cap of 1.8 million Milestone Warrants. The Milestone Warrants are to be issued annually by March 31 with respect to the prior year, have a four-year term and have an exercise price equal to the greater of (i) \$3.64 and (ii) the closing price on January 31 of the year of issuance less \$5.00.

Change of Control Provisions Applicable to Our Common Shares

Neither our articles of continuance nor our bylaws contain any provision that would delay, defer or prevent a change in control of the company. We have, however, adopted the Rights Agreement.

Pursuant to the Rights Agreement, on November 27, 1998, which is the record date, our Board of Directors authorized and declared a distribution of one right with respect to each common share issued and outstanding as of the record date and each common share issued thereafter prior to the expiration time (as defined below). The rights are subject to the terms and conditions of the Rights Agreement. A copy of the Amended and Restated Shareholder Rights Plan Agreement is attached as Exhibit 10.1 to the Current Report on Form 8-K filed with the SEC on November 18, 1999 and a copy of the Amendment No. 1 to such agreement is attached as Exhibit 10.3 to the Current Report on Form 8-K filed with the SEC on October 6, 2008. A copy of the Rights Agreement is also available upon written request to us. Because it is a summary, the following description of the rights and the Rights Agreement necessarily omits certain terms, exceptions, or qualifications to the affirmative statements made therein. The reader is advised to review the entire Rights Agreement prior to making any investment decision.

Certain Key Terms of the Rights Prior to Flip-In Date.

Prior to the date a transaction or event occurs by which a person, called an acquiring person, becomes the owner of 15% or more of the outstanding common shares and other shares entitled to vote for the election of directors, which event is a Flip-in Event, each right entitles the holder thereof to purchase one-half common share for the price of \$20 (which exercise price and number are subject to adjustment as set forth in the Rights Agreement). Notwithstanding the foregoing, no Right shall be exercisable prior to the commencement date. The commencement date is the close of business on the eighth business day after the earlier of (a) the date of a public announcement or disclosure by the company or an acquiring person of facts indicating that a person has become an acquiring person, or (b) the date of commencement of, or first public announcement of, the intent of any person to commence a bid for a number of voting shares that would give the bidder beneficial ownership of 15% or more of the issued and outstanding voting shares, referred to as a Take-over Bid.

Certain Key Terms of the Rights Following Flip-In Date.

Section 3.1 of the Rights Agreement includes a provision, referred to as a conversion provision, which provides that, subject to certain exceptions, upon the occurrence of a Flip-in Event, each right shall be adjusted so as to constitute a right to purchase from us for \$20, as adjusted, a number of common shares having an aggregate market price of four times \$20 (as adjusted). The market price is determined by averaging the closing price of the common shares on the primary exchange for the common shares for the 20 trading days preceding the date of determination. In addition, upon the occurrence of any Flip-in Event (if not subsequently deemed not to have occurred under the Rights Agreement), any rights owned by the acquiring person, its affiliates, or certain assignees become null and void. Any rights certificate subsequently issued upon transfer, exchange, replacement, adjustment, or otherwise with respect to common shares owned by any of the foregoing persons shall bear a legend indicating the extent to which such rights are void. Rights held by us or our subsidiaries are also void.

Exceptions, Redemption and Waiver.

The definitions of Flip-in Event and certain related terms are subject to exceptions, certain of which are summarized below. Nevertheless, to understand each such exception and how they may interrelate, the reader is advised to review the Rights Agreement. Despite a person's acquisition of 15% or more of our voting shares, a Flip-in Event shall be deemed not to have occurred or shall have no effect if:

- (1) the acquiring person is the company or an entity controlled by the company;
- (2) the acquiring person is an underwriter who becomes the beneficial owner of 15% or more voting shares in connection with a distribution of securities pursuant to an underwriting agreement with us;
- (3) the transaction by which the person becomes an acquiring person is a voting share reduction, which is an acquisition or redemption of voting shares by us which, by reducing the number of outstanding common shares, has the incidental effect of increasing the acquiring person's ownership percentage;
- (4) the transaction by which the person becomes an acquiring person is an acquisition with respect to which our Board of Directors has waived the conversion provision because:
 - (a) our Board of Directors has determined prior to the commencement date that a person became an acquiring person by inadvertence and, within 10 days of such determination, such person has reduced its beneficial ownership of common shares so as not to be an acquiring person;
 - (b) our Board of Directors acting in good faith has determined, prior to the occurrence of a Flip-in Event, to waive application of the conversion provision, referred to as a discretionary waiver;
 - (c) our Board of Directors determines within a specified time period to waive application of the conversion provision to a Flip-in Event, provided that the acquiring person has reduced, or agreed to reduce, its beneficial ownership of voting shares to less than 15% of the outstanding issue of voting shares, referred to as a waiver following withdrawal.
- (5) the acquisition by which the person becomes an acquiring person is an acquisition pursuant to (a) a dividend reinvestment plan or share purchase plan made available to all holders of voting shares; (b) a stock dividend, stock split or similar event pursuant to which the acquiring person receives common shares on pro rata basis with all members of the same class or series; (c) the acquisition or exercise of rights to purchase voting shares distributed to all holders of voting shares; (d) a distribution of voting shares or securities convertible into voting shares offered pursuant to a prospectus or by way of a private placement, provided the acquiring person does not thereby acquire a greater percentage of the voting shares or convertible securities offered than the person's percentage of voting shares

beneficially owned immediately prior to such acquisition.

(6) such person is Al Yousuf, LLC, a United Arab Emirates limited liability company (“Al Yousuf”); provided, however, such exception is not applicable to Al Yousuf in the event that Al Yousuf shall, after its execution of that certain Stock Purchase and Settlement Agreement (the “Purchase and Settlement Agreement”), dated October 6, 2008, by and between the Company and Al Yousuf (a) increase its beneficial ownership percentage of voting shares by more than 1% above its beneficial ownership percentage of voting shares as a result of its execution of the Purchase and Settlement Agreement, other than through the issuance of shares pursuant to the Purchase and Settlement Agreement, a voting share reduction, an exempt acquisition or a pro rata acquisition, or (b) commence a Take-over Bid that would, if consummated, increase its beneficial ownership percentage of voting shares by more than 1% above its beneficial ownership percentage of voting shares as a result of its execution of the Purchase and Settlement Agreement

In addition, (i) when a Take-over Bid is withdrawn or otherwise terminated after the commencement date has occurred, but prior to the occurrence of a Flip-in Date, or (ii) if the Board of the Directors grants a waiver following withdrawal, our Board of Directors may elect to redeem all outstanding rights at the price of Cdn. \$.0000001 per right (as adjusted). Upon the rights being redeemed pursuant to the foregoing provision, all provisions of the Rights Agreement shall continue to apply as if the commencement date had not occurred, and we shall be deemed to have issued replacement rights to the holders of its then outstanding common shares.

In addition, our Board of Directors may, at any time prior to the first date of public announcement or disclosure by us or an acquiring person of facts indicating that a person has become an acquiring person, or announcement date, elect to redeem all, but not less than all, of the then outstanding rights at the \$.0000001 per share (as adjusted). Moreover, in the event a person acquires voting shares pursuant to a discretionary waiver, our Board of Directors shall be deemed to have elected to redeem the rights at \$.0000002 per share (as adjusted). Within 10 days after our Board of Directors elects, or is deemed to have elected, to redeem the rights, our Board of Directors shall give notice of redemption to the holders of the then outstanding rights and, in such notice, described the method of payment by which the redemption price will be paid. The rights of any person under the Rights Agreement or any right, except rights to receive cash or other property that have already accrued, shall terminate at the expiration time, which is the date of a discretionary redemption or a deemed redemption described in this paragraph.

Exercise of the Rights.

The rights shall not be exercisable prior to the commencement date. Until the commencement date, each right shall be evidenced by the certificate for the associated common share and will be transferable only together with, and will be transferred by the transfer of, its associated common share. New common share certificates issued after the effective date of the Rights Agreement will contain a legend incorporating the Rights Agreement by reference. Certificates issued and outstanding at the effective date of the Rights Agreement shall evidence one right for each common share evidenced thereby, notwithstanding the absence of a legend incorporating the Rights Agreement, until the earlier of the commencement date or the expiration time. Each common share issued for new value after the effective date of the Rights Agreement, but prior to the expiration time, shall automatically have one new right associated with it and shall bear the appropriate legend.

From and after the commencement date, the rights may be exercised, and the registration and transfer of the rights shall be separate from and independent of the common shares. Following the commencement date, we shall mail to each holder of common shares as of the commencement date, or such holder's nominee, a rights certificate representing the number of rights held by such holder at the commencement date and a disclosure statement describing the rights.

Rights may be exercised in whole or in part on any business day after the commencement date and prior to the expiration time by submitting to the rights certificate, an election to exercise, and payment of the sum equal to \$.0000001 per share (as adjusted) multiplied by the number of rights being exercised. Upon receipt of such materials, the Rights Agent will promptly deliver certificates representing the appropriate number of common shares to the

registered holder of the relevant rights certificate and, if not all rights were exercised, issue a new rights certificate evidencing the remaining unexercised rights.

The foregoing descriptions do not purport to be complete and are qualified by reference to the definitive Rights Agreement.

Description of Warrants

We may issue warrants to purchase common shares. We may issue warrants independently or together with the common shares offered, and the warrants may be attached to or separate from these securities. We may issue warrants in such amounts or in as many distinct series as we wish. The warrants will be issued under warrant agreements to be entered into between us and a warrant agent as detailed in the prospectus supplement relating to the warrants being offered.

Specific Terms of the Warrants

The applicable prospectus supplement will describe the following terms, where applicable, of the warrants in respect of which this prospectus is being delivered:

- the title of the warrants;
- the aggregate number of the warrants;
- the price or prices at which the warrants will be issued;
- the designation, amount, and terms of the common shares purchasable upon exercise of the warrants;
- if applicable, the date on and after which the warrants and the common shares purchasable upon exercise of the warrants will be separately transferable;
- the price or prices at which the common shares purchasable upon exercise of the warrants may be purchased;
- the date on which the right to exercise the warrants shall commence and the date on which the right shall expire;
 - the minimum or maximum amount of the warrants which may be exercised at any one time;
 - information with respect to book-entry procedures, if any;
- in the case of warrants to purchase our common shares, any provisions for adjustment of the number or amount of shares of our common shares receivable upon exercise of the warrants or the exercise price of the warrants; and
- any other material terms of the warrants, including terms, procedures, and limitations relating to the exchange and exercise of the warrants.

Exercise of Warrants

Each warrant will entitle the holder of the warrant to purchase the common shares at the exercise price as shall be set forth in or be determinable as set forth in, the prospectus supplement relating to the warrants. Warrants may be exercised at any time up to the close of business on the expiration date set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Upon receipt of payment and the warrant certificate properly completed and duly executed at the office indicated in the prospectus supplement, we will, as soon as practicable, forward the securities purchased upon such exercise. If less than all of the warrants represented by a warrant certificate are exercised, a new warrant certificate will be issued for the remaining warrants.

Prior to the exercise of any warrants, holders of the warrants will not have any of the rights of holders of the securities purchasable upon exercise, including the right to vote or to receive any payments of dividends on the preferred or common shares purchasable upon exercise.

Certificates for warrants to purchase securities will be exchangeable for new warrant certificates of different denominations.

Description of Units

The following description, together with the additional information we may include in any applicable prospectus supplement, summarizes the material terms and provisions of the units that we may offer under this prospectus. While the terms we have summarized below will apply generally to any units that we may offer under this prospectus, we will describe the particular terms of any series of units in more detail in the applicable prospectus supplement. The terms of any units offered under a prospectus supplement may differ from the terms described below.

We will file as exhibits to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, the form of unit agreement that describes the terms of the series of units we are offering, and any supplemental agreements, before the issuance of the related series of units. The following summaries of material terms and provisions of the units are subject to, and qualified in their entirety by reference to, all the provisions of the unit agreement and any supplemental agreements applicable to a particular series of units. We urge you to read the applicable prospectus supplements related to the particular series of units that we sell under this prospectus, as well as the complete unit agreement and any supplemental agreements that contain the terms of the units.

General

We may issue units comprised of one or more common shares and warrants in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

We will describe in the applicable prospectus supplement the terms of the series of units, including:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
 - any provisions of the governing unit agreement that differ from those described below; and
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Common Shares” and “Description of Warrants” will apply to each unit and to any common shares or warrants included in each unit, respectively.

Issuance in Series

We may issue units in such amounts and in such numerous distinct series as we determine.

Enforceability of Rights by Holders of Units

Each unit agent will act solely as our agent under the applicable unit agreement and will not assume any obligation or relationship of agency or trust with any holder of any unit. A single bank or trust company may act as unit agent for more than one series of units. A unit agent will have no duty or responsibility in case of any default by us under the applicable unit agreement or unit, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a unit may, without the consent of the related unit agent or the holder

of any other unit, enforce by appropriate legal action its rights as holder under any security included in the unit.

Title

We, the unit agent and any of their agents may treat the registered holder of any unit certificate as an absolute owner of the units evidenced by that certificate for any purpose and as the person entitled to exercise the rights attaching to the units so requested, despite any notice to the contrary.

15

PLAN OF DISTRIBUTION

We may sell the securities offered under this prospectus:

- through underwriters;
- through dealers;
- through agents; or
- directly to purchasers.

Each prospectus supplement relating to an offering of securities will state the terms of the offering, including:

- the names of any underwriters, dealers, or agents;
- the public offering or purchase price of the offered securities and the net proceeds that we will receive from the sale;
- any underwriting discounts and commissions or other items constituting underwriters' compensation;
 - any discounts, commissions, or fees allowed or paid to dealers or agents; and
 - any securities exchange or market on which the offered securities may be listed.

With respect to any offering under this prospectus, the aggregate of all underwriting discounts, commissions and other compensation and any discounts, commissions or fees allowed or paid to dealers or agent shall not exceed 15% of the gross proceeds of such offering.

Distribution Through Underwriters

We may offer and sell securities from time to time to one or more underwriters who would purchase the securities as principal for resale to the public, either on a firm commitment or best efforts basis. If we sell securities to underwriters, we will execute an underwriting agreement with the underwriters at the time of the sale and will name them in the applicable prospectus supplement. In connection with these sales, the underwriters may be deemed to have received compensation from us in the form of underwriting discounts and commissions. The underwriters also may receive commissions from purchasers of securities for whom they may act as agent. Unless we specify otherwise in the applicable prospectus supplement, the underwriters will not be obligated to purchase the securities unless the conditions set forth in the underwriting agreement are satisfied, and if the underwriters purchase any of the securities, they will be required to purchase all of the offered securities. The underwriters may acquire the securities for their own account and may resell the securities from time to time in one or more transactions, including negotiated transactions, at a fixed public offering price or varying prices determined at the time of sale. The underwriters may sell the offered securities to or through dealers, and those dealers may receive discounts, concessions, or commissions from the underwriters as well as from the purchasers for whom they may act as agent. Any initial public offering price and any discounts or concessions allowed or reallocated or paid to dealers may be changed from time to time.

Distribution Through Dealers

We may offer and sell securities from time to time to one or more dealers who would purchase the securities as principal. The dealers then may resell the offered securities to the public at fixed or varying prices to be determined by those dealers at the time of resale. We will set forth the names of the dealers and the terms of the transaction in the

applicable prospectus supplement.

Distribution Through Agents

We may offer and sell securities on a continuous basis through agents that become parties to an underwriting or distribution agreement. We will name any agent involved in the offer and sale and describe any commissions payable by us in the applicable prospectus supplement. Unless we specify otherwise in the applicable prospectus supplement, the agent will be acting on a best efforts basis during the appointment period.

Direct Sales

We may sell directly to, and solicit offers from, institutional investors or others who may be deemed to be underwriters, as defined in the Securities Act of 1933 for any resale of the securities. We will describe the terms of any sales of this kind in the applicable prospectus supplement.

General Information

Underwriters, dealers, or agents participating in an offering of securities may be deemed to be underwriters, and any discounts and commissions received by them and any profit realized by them on resale of the offered securities for whom they act as agent, may be deemed to be underwriting discounts and commissions under the Securities Act of 1933.

We may sell securities at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices relating to the prevailing market prices or at negotiated prices. The distribution of the securities may be effected from time to time in one or more transactions, by means of one or more of the following transactions, which may include:

- block trades;
- at-the-market offerings;
- negotiated transactions;
- put or call option transactions relating to the securities;
- under delayed delivery contracts or other contractual commitments;
- a combination of such methods of sale; and
- any other method permitted pursuant to applicable law.

Only underwriters named in the prospectus supplement are underwriters of the securities offered by the prospectus supplement.

In connection with an underwritten offering of securities, the underwriters may engage in over-allotment, stabilizing transactions, and syndicate covering transactions in accordance with Regulation M under the Exchange Act. Over-allotment involves sales in excess of the offering size, which creates a short position for the underwriters. The underwriters may enter bids for, and purchase, securities in the open market in order to stabilize the price of the securities. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover short positions. In addition, the underwriting syndicate may reclaim selling concessions allowed to an underwriter or a dealer for distributing the securities in the offering if the syndicate repurchases previously distributed securities in transactions to cover syndicate short positions, in stabilization

transactions, or otherwise. These activities may cause the price of the securities to be higher than it would otherwise be. Those activities, if commenced, may be discontinued at any time.

Ordinarily, each issue of securities will be a new issue, and there will be no established trading market for any security other than our common shares prior to its original issue date. We may not list any particular series of securities on a securities exchange or quotation system. Any underwriters to whom or agents through whom the offered securities are sold for offering and sale may make a market in the offered securities. However, any underwriters or agents that make a market will not be obligated to do so and may stop doing so at any time without notice. We cannot assure you that there will be a liquid trading market for the offered securities.

Under agreements entered into with us, underwriters and agents may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution for payments the underwriters or agents may be required to make.

Although we expect that delivery of securities generally will be made against payment on or about the third business day following the date of any contract for sale, we may specify a longer settlement cycle in the applicable prospectus supplement. Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in three business days, unless the parties to a trade expressly agree otherwise. Accordingly, if we have specified a longer settlement cycle in the applicable prospectus supplement for an offering of securities, purchasers who wish to trade those securities on the date of the contract for sale, or on one or more of the next succeeding business days as we will specify in the applicable prospectus supplement, will be required, by virtue of the fact that those securities will settle in more than T+3, to specify an alternative settlement cycle at the time of the trade to prevent a failed settlement and should consult their own advisors in connection with that election.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

As permitted by SEC rules, this prospectus does not contain all of the information that prospective investors can find in the registration statement of which it is a part or the exhibits to the registration statement. The SEC permits us to incorporate by reference, into this prospectus, information filed separately with the SEC.

This prospectus incorporates by reference the documents set forth below that we previously have filed with the SEC pursuant to the Securities Exchange Act of 1934 (File no. 001-12497). These documents contain important information about us and our financial condition.

- Our Annual Report on Form 10-K for the year ended December 31, 2008, filed with the SEC on March 16, 2009;
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2009, filed with the SEC on May 8, 2009, and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2009, filed with the SEC on August 7, 2009;
- Our Current Reports on Form 8-K filed with the SEC on March 4, 2009, April 1, 2009, May 22, 2009, May 29, 2009, June 10, 2009, September 4, 2009, September 10, 2009 and October 13, 2009;
- The description of our common shares contained in our Registration Statement on Form 10-SB, SEC File No. 1-12497 filed with the SEC pursuant to the Securities Exchange Act of 1934, including any amendment or report filed under the Securities Exchange Act of 1934 for the purpose of updating such description.

All documents filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act after the date of this registration statement, and prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which de-registers all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of filing of such documents. Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

Upon written or oral request, we will provide without charge to each person to whom a copy of this prospectus is delivered, including any beneficial owner, a copy of the information that has been or may be incorporated by reference in this prospectus. Direct any request for copies to John Fallini, Chief Financial Officer, at our corporate headquarters, located at 204 Edison Way, Reno, NV 89502, telephone number (775) 858-3750.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, information statements and other information with the SEC. You may read and copy any reports, statements or other information that we file at the SEC's public reference rooms at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of this information by mail from the Public Reference Section of the SEC, 100 F Street, N.E., Washington, DC 20549 at prescribed rates. Please call the SEC at 1 (800) SEC-0330 for further information on the public reference rooms. The SEC also maintains a web site at <http://www.sec.gov>, at which reports, proxy and information statements and other information regarding our company are available.

LEGAL MATTERS

Unless otherwise indicated in the applicable prospectus supplement, the validity of the securities offered by us will be passed upon for us by Cassels Brock & Blackwell, LLP, of Toronto, Ontario, Canada, and additional legal matters are being passed upon for us by Parr Brown Gee & Loveless, PC, of Salt Lake City, Utah. Additional legal matters may be passed on for us, or any underwriters, dealers or agents, by counsel that we will name in the applicable prospectus supplement.

EXPERTS

The consolidated financial statements as of December 31, 2008 and 2007 and for the years ended December 31, 2008, 2007 and 2006 incorporated in this prospectus by reference from our Annual Report on Form 10-K for the year ended December 31, 2008 have been audited by Perry-Smith LLP, independent registered public accounting firm, as set forth in its report thereon, included therein, and incorporated herein by reference. Perry-Smith LLP also issued an attestation report on management's assessment of internal control over financial reporting contained in our Annual Report on Form 10-K for the year ended December 31, 2008. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling the registrant, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act of 1933 and is therefore unenforceable.

Common Shares

Series A Warrants

Prospectus Supplement

JMP Securities

March 28, 2011
