

ALTAIR NANOTECHNOLOGIES INC
Form 424B5
June 09, 2010
Filed pursuant to Rule 424(b)(5)
Registration Statement No. 333-162009

PROSPECTUS SUPPLEMENT
(To Prospectus dated October 26, 2009)

\$15,000,000
Common Shares

We have entered into an At Market Issuance Sales Agreement with Thomas Weisel Partners LLC related to our common shares, without par value, offered by this prospectus supplement and the accompanying prospectus. Each common share includes an attached right arising under an Amended and Restated Shareholder Rights Plan Agreement dated October 15, 1999, as amended. In accordance with the terms of the At Market Issuance Sales Agreement, we may offer and sell our common shares having a maximum aggregate offering price of up to \$15.0 million from time to time through Thomas Weisel Partners LLC acting as agent.

Sales of our common shares, if any, under this prospectus supplement and the accompanying prospectus may be made in sales deemed to be "at-the-market" equity offerings, as defined in Rule 415 promulgated under the Securities Act of 1933, including sales made directly on or through the NASDAQ Capital Market, the existing trading market for our common shares, sales made to or through a market maker other than on an exchange or otherwise, in negotiated transactions at market prices prevailing at the time of sale or at prices related to such prevailing market prices, and/or any other method permitted by law. Thomas Weisel Partners LLC will act as sales agent on a commercially reasonable efforts basis. There is no arrangement for funds to be received in any escrow, trust or similar arrangement.

Thomas Weisel Partners LLC will be entitled to compensation at a fixed commission of 5% of the gross sales price for any common shares sold under the At Market Issuance Sales Agreement. In connection with the sale of the common shares on our behalf, Thomas Weisel Partners LLC may be deemed to be an "underwriter" within the meaning of the Securities Act of 1933, and the compensation of Thomas Weisel Partners LLC may be deemed to be underwriting commissions or discounts.

Our common shares are listed on the NASDAQ Capital Market under the symbol "ALTI". On June 8, 2010, the last reported sale price of our common shares on the NASDAQ Capital Market was \$0.45 per share.

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 and set forth in documents we file with the SEC that are incorporated herein by reference.

These securities have not been approved or disapproved by the 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.

Thomas Weisel Partners LLC

Prospectus Supplement dated June 9, 2010

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-15	Use of Proceeds	10
Use of Proceeds	S-15	The Securities We May Offer	10
Price Range of Our Common Shares, Outstanding		Plan of Distribution	15
Shares and Dividends	S-16	Incorporation of Certain Information by Reference	18
Dilution	S-16	Where You Can Find More Information	18
Certain Registration and Other Rights	S-17	Legal Matters	18
Plan of Distribution	S-19	Experts	19
Incorporation of Certain Information by Reference	S-20	Disclosure of Commission Position on	
Where You Can Find More Information	S-20	Indemnification for Securities Act Liabilities	19
Legal Matters	S-20		
Experts	S-21		

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 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 such 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. 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 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. Amounts set forth herein are in United States Dollars, unless otherwise noted.

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 this offer and sale of securities 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 being offered, the plan of distribution, the risks of investing in our common shares and warrants and the placement arrangements.

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.

In 2008, we determined that the specific strategic efforts we should focus on going forward are: the provision of frequency regulation and renewables integration in the electric grid, the electrification of the mass-transit portion of the automotive market, and similar opportunities in the military market where we can leverage the specific application to support our overall technology development efforts. We believe that these are significant 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 differentiated product attributes, the overall strength of our management team, and the recognition we are starting to receive in the marketplace, that we have a reasonable chance of becoming one of the successful suppliers. Our proprietary technology platform gives our products a number of attributes that differentiate our products from their alternatives. Included in these attributes are long cycle and calendar lives, a rapid recharge time, the ability to provide instantaneous high power, a wide operating temperature range and increased operational safety.

2009 and early 2010 have been transition periods as we have discontinued the pursuit of grants and contracts in the life sciences and performance materials markets to focus on the power and energy systems market. We expect that the first half of 2010 will continue in this transition mode until we start to gain traction in the sale of our various battery products. Although we had excellent research and a number of prototype battery products in early 2009, there is still considerable work required on our part to turn these promising prototypes into commercially available products. That work continued in earnest throughout 2009, and we are now in a position to actively sell our products. Future revenues will depend on the success of these efforts and the results of our other ongoing research and development work.

We also provide 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 65%, 87%, and 55%, respectively, in 2009, 2008 and 2007, we expect this percentage to diminish as our battery sales expand.

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.

THE OFFERING

Common shares offered by us	Shares having a maximum aggregate offering price of up to \$15.0 million
Manner of Offering	“At-the-market” offering that may be made from time to time through our agent, Thomas Weisel Partners LLC. See “Plan of Distribution” on page S-19
Use of proceeds	Proceeds from the offering will be added to our general corporate funds and will be used for working capital and general corporate purposes. See "Use of Proceeds" on page S-15.
Risk Factors	See “Risk Factors” beginning on page S-4 of this prospectus supplement and set forth in other documents we file with the SEC that are incorporated herein by reference.
NASDAQ Capital Market symbol	ALTI

RISK FACTORS

An investment in our common shares 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.

The offering may harm the market price of, and market for, our common shares.

The sales, if any, of shares made under the At Market Issuance Sales Agreement in this offering will be made on the NASDAQ Capital Market by means of ordinary brokers' transactions at market prices, made to or through a market maker other than on an exchange or otherwise, in negotiated transactions at market prices prevailing at the time of sale or at prices related to such prevailing market prices, and/or any other method permitted by law and agreed by Thomas Weisel and us. It is expected that a substantial portion of the sales will be made directly into the NASDAQ Capital Market. This additional selling activity may create downward pressure on the market price of our common shares. In addition, market participants may elect not to purchase our shares because of the actual or anticipated downward pressure placed on the market price for our common shares by the offering, which may reduce trading volume and result in market price declines.

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

As of March 31, 2010, we had approximately \$12.3 million in cash and cash equivalents. We need additional capital in order to sustain our ongoing operations, continue testing and additional development work and acquire inventory and/or expand and operate facilities for the production of potential product orders. This offering is part of our effort to raise additional capital; however, we may be unable to raise capital in this offering or, as a result of low volume or low market prices for our common shares, may be able to raise only small amounts of capital. Even under the best circumstances, we expect to raise only a limited amount of capital per month pursuant to this offering and anticipate raising additional capital in the future in a separate offering.

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:

- 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 product sales;

- the amount of our capital needs;

- the market's perception of companies in our line 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 in a position 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 for an extended period of time, or enter into a business combination transaction with a company with additional capital or complementary strengths, we may be forced to curtail or 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 \$22.9 million in 2009 and \$6.1 million for the three months ended March 31, 2010. 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.

S-4

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. 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 quarterly operating results include the following:

fluctuations in the size, quantity 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 us or our key customers;

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; and

general political, social, geopolitical and economic trends and events.

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, 2009, 2008 and 2007, contract service revenues comprised 65%, 87% and 55% 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.

We need to secure orders in the stationary power market in order to establish the viability of our large-scale stationary battery.

To date, substantially all of our orders have been made as part of testing and development arrangements with key customers. In order to establish the market viability of our stationary power battery products, we need to procure additional orders of market scale stationary power batteries in the near future and demonstrate the viability of such batteries. If we are unable to generate one or more significant orders for stationary batteries in the near future, our ability to establish a foothold in this emerging market could be compromised. Any failure to grow our stationary power battery business will significantly harm our ability to increase revenues and become profitable.

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 these jointly developed battery systems through July 20, 2012. We believe that the battery systems we are marketing are outside the scope of the royalty provisions for various reasons, primarily because they are of different design and configuration than the jointly developed product. Nevertheless, we may not prevail in our position, and as we begin generating revenue from the sale of large scale stationary batteries for use in connection with electrical transmission and regulation, we may 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 third-party suppliers.

We rely on certain suppliers as the sole-source of certain services, raw materials and other components of our products, including our battery cells. We do not have long-term supply or service agreements with most of these 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.

The most critical sole-source relationship we currently have is for the manufacture of our battery cells. We currently have one supplier that produces all of our battery cells. These cells include our proprietary nano lithium titanate material produced in Reno, Nevada. Our contract manufacturer uses this material and other components that they acquire elsewhere to manufacture our cells and then delivers those cells to our Anderson, Indiana manufacturing facility. We then manufacture battery modules or packs used in electric buses and also manufacture complete multi-megawatt energy storage solutions for the electric grid and renewables integration markets. This battery cell supplier is critical to our manufacturing process. We are currently in the process of qualifying a second contract manufacturer and expect to have this capability in place by the end of this year. However, unless and until an agreement with a second supplier is reached, we will remain dependent upon this single supplier.

We have experienced a quality issue with our existing battery cell supplier which has impacted our near-term ability to supply product to our customers. We are currently conducting validation testing and audits of the manufacturer's processes to confirm resolution of the quality issue and have authorized a conditional resumption of production. The delay in this problem rectification, if it continues for an extended period, may have an adverse impact on the delivery of our products during 2010.

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

The financial markets and general economic conditions are still very weak. Our products are targeted primarily at large power producers worldwide, the U.S. and British military, military contractors and bus manufacturers. Due to declining revenues and concerns about liquidity, companies and branches of the military in 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 key customers is hindering our development and production efforts and will continue to do so until development spending increases from current depressed levels.

Our patent applications, 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 patent applications 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 or 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;

S-6

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, 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 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.

S-7

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.

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 battery packs for power suppliers requires input from utilities and connection to a power network, commercialization of such battery packs can only be done in conjunction with a power or utility company. The commercialization of military, transportation and other applications of our technology is 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