ALTAIR NANOTECHNOLOGIES INC
Form S-2/A
February 07, 2003

As filed with the Securities and Exchange Commission on February 7, 2003

Registration No. 333-102592

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

AMENDMENT NO. 1 TO FORM S-2
REGISTRATION STATEMENT
Under the Securities Act of 1933

Altair Nanotechnologies Inc.
(Exact name of registrant as specified in its charter)

Canada	None
(State or other jurisdiction of incorporation or organization)	(I.R.S. employer identification number)

William P. Long Chief Executive Officer Altair Nanotechnologies Inc. 1725 Sheridan Avenue, Suite 140 Cody, Wyoming 82414 (307) 587-8245 (Address, including zip code, and telephone number, including area code, of registrant's principal office; name, address, including zip code, and telephone number, including area code, of agent for service)	Copies to: Bryan T. Allen, Esq. Brian G. Lloyd, Esq. STOEL RIVES LLP 201 South Main Street, Suite 11 Salt Lake City, Utah 84111 Phone: (801) 328-3131 Fax: (801) 578-6999

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement as determined by market conditions.

If any of the securities being registered on this form are to be offered on a delayed or continuing basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. [X}

If the registrant elects to deliver its latest annual report to security holders, or a complete and legible facsimile thereof, pursuant to Item 11(a)(1) of this form, check the following box. [X}

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act

registration statement number of the earlier effective registration statement for the same offering. [ ]

If delivery of the prospectus is expected to be made pursuant to Rule 434, check the following box. [ ]

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the SEC, acting pursuant to said Section 8(a), may determine.

The registration statement of which this prospectus is a part is being qualified under the securities laws of selected states. This prospectus shall not consistitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities, in any state in which such offer, sale or solicitation would be unlawful prior to or absent qualification under the securities laws of such state.

ALTAIR
NANOTECHNOLOGIES INC.

2,250,000 Common Shares
750,000 Warrants

This prospectus relates to the offering and sale of 1,500,000 common shares, no par value, of Altair Nanotechnologies Inc., together with 750,000 Series 2003A Warrants and the 750,000 common shares issuable upon the exercise of such warrants. Each Series 2003A Warrant entitles the holder thereof to purchase one common share of Altair at any time prior to the fifth anniversary of the issue date at the price equal to the greater of (i) $1.00 per share, and (ii) 125% of the average of the closing price of our common shares, as reported on the Nasdaq SmallCap Market, during the calendar week preceding the calendar week in which we receive and accept subscription proceeds for the particular investment. In addition, pursuant to Rule 416 of the Securities Act of 1933, as amended, this prospectus, and the registration statement of which it is a part, covers a presently indeterminate number of shares of common stock issuable upon the occurrence of a stock split, stock dividend, or other similar transaction.

We are offering the common shares, together with the Series 2003A Warrants, pursuant to this prospectus on "no-minimum" basis through specified officers and employees. We do no intend to engage any underwriters, placement agents, or finders in connection with this offering. The common shares and Series 2003A Warrants are being offered in units consisting of one common share and one-half Series 2003A Warrant for a purchase price per unit equal to 90% of the average of the closing price of the common shares, as reported on the Nasdaq SmallCap Market, during the calendar week preceding the calendar week in which we receive and accept subscription proceeds.

In the United States, our common shares are listed for trading under the symbol ALTI on the Nasdaq SmallCap Market. On January 31, 2003, the closing sale price of our common shares, as reported by the Nasdaq SmallCap Market, was $0.42 per share.

Unless otherwise expressly indicated, all monetary amounts set forth in this prospectus are expressed in United States Dollars. As of January 31, 2003, we had 30,378,091 common shares issued and outstanding.

Consider carefully the risk factors beginning on page 4 in this prospectus before investing in the offered securities being sold with this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed on the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

Dated February 1, 2003

Table of Contents

SUMMARY

This summary highlights some of the information in this prospectus. Because it is a summary, it does not contain all of the information you need to make an investment decision. To understand this offering fully, you should read this entire prospectus.

Altair Nanotechnologies Inc.

We are a development-stage Canadian company whose primary business is developing and commercializing ceramic oxide nanoparticle products. In the second quarter of 2002, we initiated research and development efforts directed toward the utilization of nanomaterials in the pharmaceuticals industry. In July 2002, we announced the development of a new active pharmaceutical ingredient for the treatment of hyperphosphatemia (elevated serum phosphate levels) in patients undergoing kidney dialysis, as well as a new drug delivery system using inorganic ceramic nanoparticles. In August 2002, we filed a patent application covering these developments. We are currently seeking business relationships with pharmaceutical companies that can conduct additional testing and development, seek necessary FDA approvals and take the other steps necessary to bring the new pharmaceutical ingredient and drug delivery system to market.

In addition to pharmaceuticals, we are developing nanomaterials with potential applications in alternative energy--primarily fuel cells and batteries--as well as thermal spray coatings, catalysts, cosmetics and paints.

We have also developed prototypes of the Altair Centrifugal Jig and have conducted a feasibility study on a mining property that we lease in Tennessee. However, we are not further developing the jig or the Tennessee mineral property at this time.

Our principal office is located at 1725 Sheridan Avenue, Suite 140, Cody, Wyoming 82414 U.S.A., and our telephone number is (307) 587-8245.

The Offering

Offered Securities	1,500,000 common shares and 750 Warrants (including the common sha exercise of such warrants) in un common share and one-half Series 200

Offering price	For each unit, consisting of one com one-half Series 2003A Warrant, an am of the average of the closing price shares, as reported on the Nasdaq Sm during the calendar week preceding t which we receive and accept subscrip the particular investment.

Subscription agreement; limitations on transfer	Purchasers will be required to sign agreement in the form attached to th as Exhibit II pursuant to which they not to knowingly sell or otherwise t common shares or the 2003A Warrants pursuant to this prospectus in Canad of six months after the date of issu
Common shares outstanding before this offering	30,378,091(1)
Common shares outstanding after this offering, if all offered securities are sold and the Series 2003A Warrants are exercised	31,878,091(1)
Use of proceeds	We are offering the offered securiti We intend to use the cash proceeds f offered securities for working capit general corporate purposes. If mana capital from other sources is suffic operations, we may use up to $280,00 proceeds to prepay indebtedness aris $1,400,000 Second Amended and Restat Note. In addition, in order to con capital, we may issue the offered se non-cash transactions in exchange fo of indebtedness and accounts payable for services, including services ren with capital-raising activities.
Risk factors	Investing in the offered securities substantial risks You should read th beginning on page 3 in this prospec before making an investment decision

(1) As of January 31, 2003. Excludes 4,061,700 common shares authorized for issuance upon exercise of outstanding options that have been granted pursuant to

our stock option plans, 9,170,171 common shares subject to outstanding warrants to purchase common shares and an indeterminable number of common shares subject to our $1,400,000 Second Amended and Restated Secured Term Note.

RISK FACTORS

Before you invest in the offered securities described in this prospectus, you should be aware that such investment involves the assumption of various risks. You should consider carefully the risk factors described below together with all of the other information included in this prospectus before you decide to purchase the offered securities.

We have not generated any substantial operating revenues and may not ever generate substantial revenues.

To date, we have not generated substantial revenues from operations. We have not generated revenues from the jig and have scaled back development efforts for the foreseeable future. We have generated only $141,576 of sales revenues in our nanoparticle business as of September 30, 2002 and have not completed exploration of the Tennessee mineral property. We can provide no assurance that we will ever generate revenues from the jig or the Tennessee mineral property or that we will generate substantial revenues from the titanium processing technology.

We may continue to experience significant losses from operations.

We have experienced a loss from operations in every fiscal year since our inception. Our losses from operations in 2000 were $6,647,367 and our losses from operations in 2001 were $6,021,532. We will continue to experience a net operating loss until, and if, the titanium processing technology, the jig and/or the Tennessee mineral property begin generating significant revenues. Even if any or all such products or projects begin generating significant revenues, the revenues may not exceed our costs of production and operating expenses. We may not ever realize a profit from operations.

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

As of September 30, 2002, we had $306,061 in cash and a working capital deficit of $2,181,380. Although we have raised additional capital since September 30, 2002, we do not expect that this capital, when combined with projected revenues from nanoparticle sales, will be sufficient to fund our ongoing operations. Accordingly, we will need to raise significant amounts of additional capital in the future in order to sustain our ongoing operations and continue the testing and additional development work necessary to place the titanium processing technology into continuous operation. In addition, we will need additional capital for testing and development of the jig or exploration of the Tennessee mineral property. If we determine to construct and operate a mine on the Tennessee mineral property, we will need to obtain a significant amount of additional capital to complete construction of the mine and commence operations.

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;
- our financial results;
- the amount of our capital needs;
- the market's perception of nanotechnology and/or minerals stocks;
- the economics of projects being pursued;
- industry perception of our ability to recover or produce minerals with the jig or titanium processing technology or from the Tennessee mineral property; and
- the price, volatility and trading volume of our common shares.

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, and may be forced to discontinue operations.

We have a substantial number of warrants, options and other convertible securities outstanding and may issue a significant number of additional shares upon exercise or conversion thereof.

As of December 31, 2002, there were outstanding warrants to purchase up to 10,653,506 common shares at a weighted average exercise price of $1.79 per share and options to purchase up to 3,911,700 common shares at a weighted average exercise price of $3.98 per share. The existence of such warrants and options may hinder future equity offerings, and the exercise of such warrants and options may further dilute the interests of all shareholders. Future resale of the common shares issuable on the exercise of such warrants and options may have an adverse effect on the prevailing market price of the common shares.

In addition, we have issued a Second Amended and Restated Secured Term Note. Under the Second Amended and Restated Secured Term Note, a conversion right with respect to $280,000 of principal accrues on each of March 1, 2003, June 1, 2003, September 1, 2003, December 1, 2003 and March 1, 2004. If the amount that would be subject to a conversion right is prepaid prior to the date of accrual, such conversion right does not accrue. Once a conversion right has accrued, the principal amount subject to that conversion right cannot be prepaid unless all principal amounts not subject to a conversion right have been prepaid in full. Each conversion right gives the holder the right to convert the subject principal amount into common shares at a conversion price equal to the lesser of (a) $1.00 per share and (b) 70% of the average of the closing price of our common shares for the five trading days ending on the trading day immediately preceding the date on which that conversion right accrued.

In order to illustrate the relationship between the market price of our common shares and the issuance of common shares upon the exercise of conversion rights that may accrue under the Second Amended and Restated Secured Term Note, the following table sets forth how many additional common shares would be issued upon the exercise of all such conversion rights if all such conversion rights accrue and the average of the closing price of our common stock for the five trading days ending on the day before each conversion right accrues is (a) $1.43 or greater, (b) $0.50 per share, (c) $0.25 per share, or (d) $0.10 per share.

Such prices are selected for illustration purposes only and do not reflect our actual estimate of the average of the closing price of our common shares for any particular period.

	$1.43 or Greater	$0.50	$0.25	$0.10
Shares Issuable(1)	1,400,000	4,000,000	8,000,000	20,000,000
Percentage of Outstanding(2) Common Shares	4.4%	11.7%	20.9%	39.8%

(1) Assumes that shareholder approval is obtained for the transaction in which we issued the Second Amended and Restated Secured Term Note and all related transactions, that no principal is prepaid, that all conversion rights accrue and are exercised at the same time and that no default occurs and that no penalties or premiums are required to be paid.

(2) Represents percentage of outstanding common shares following exchange assuming the 20,378,091common shares outstanding on January 31, 2003 are outstanding on the date of conversion.

The potential accrual of such conversion rights may hinder future equity offerings, and the exercise of any conversion rights that accrue may further dilute the interests of all shareholders. The sale in the open market of common shares issuable upon the exercise of conversion rights may place downward pressure on the market price of our common shares. Speculative traders may anticipate the exercise of conversion rights and, in anticipation of a decline in the market price of our common shares, engage in short sales of our common shares. Such short sales could further negatively affect the market price of our common shares.

Our competitors may be able to raise money and exploit opportunities more rapidly, easily and thoroughly than we can.

We have limited financial 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. Because of their size, resources, reputation, history and other factors, certain of our competitors may have better access to capital and other significant resources than we do and, as a result, may be able to exploit acquisition and development opportunities more rapidly, easily or thoroughly than we can.

We have pledged substantial assets to secure the Second Amended and Restated Secured Term Note.

We have pledged all of the intellectual property, fixed assets and common stock of Altair Nanomaterials, Inc., our second-tier wholly-owned subsidiary, to secure repayment of a Second Amended and Restated Secured Term Note with a face value of $1,400,000 and a due date of March 31, 2004. Altair Nanomaterials, Inc. owns and operates the titanium processing technology we acquired from BHP Minerals International Inc. in 1999. The Second Amended and

Restated Secured Term Note is also secured by a pledge of the common stock and

leasehold assets of Mineral Recovery Systems, Inc., which owns and operates our leasehold interests in the Camden, Tennessee area. If we default on the Second Amended and Restated Secured Term Note, severe remedies will be available to the holder of the Second Amended and Restated Secured Term Note, including immediate seizure and disposition of all pledged assets.

We have issued a $3,000,000 note to secure the purchase of the land and the building where our titanium processing assets are located.

In August 2002, we entered into a purchase and sale agreement with BHP Minerals International Inc. to purchase the land, building and fixtures in Reno, Nevada where our titanium processing assets are located. In connection with this transaction, BHP also agreed to terminate our obligation to pay royalties associated with the sale or use of the titanium processing technology. In return, we issued to BHP a note in the amount of $3,000,000, at an interest rate of 7%, secured by the property we acquired. The first payment of $600,000 of principal plus accrued interest is due February 8, 2006. Additional payments of $600,000 plus accrued interest are due annually on February 8, 2007 through 2010. If we fail to make the required payments on the note, BHP has the right to foreclose and take the property. If this should occur, we would be required to relocate our titanium processing assets and offices, causing a significant disruption in our business.

Operations using the titanium processing technology, the jig or the Tennessee mineral property may lead to substantial environmental liability.

Virtually any proposed use of the titanium processing technology, the jig or the Tennessee mineral property would be 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. We might use hazardous substances and, if we do, we will be subject to substantial risks that environmental remediation will be required.

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

We are a Canadian corporation, and a majority of our directors and our Canadian legal counsel are residents of Canada. 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 United States securities laws. It is uncertain whether Canadian courts would (i) enforce judgments of United States courts obtained against us or such directors, officers or experts predicated upon the civil liability provisions of United States securities laws or (ii) impose liability in original actions against Altair or its directors, officers or experts predicated upon United States securities laws.

We are dependent on key personnel.

Our continued success will depend to a significant extent on the services of Dr. William P. Long, our Chief Executive Officer, Dr. Rudi Moerck, our President, and Mr. C. Patrick Costin, our Vice President and President of

Fine Gold Recovery Systems, Inc. and Mineral Recovery Systems, Inc., our

wholly-owned subsidiaries. The loss or unavailability of Dr. Long, Dr. Moerck or Mr. Costin could have a material adverse effect on us. We do not carry key man insurance on the lives of Dr. Long, Dr. Moerck or Mr. Costin.

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

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

The market price of our common shares is extremely volatile.

Our common shares are listed on the Nasdaq SmallCap Market. Trading in our common shares has been characterized by a high degree of volatility. Trading in our common shares may continue to be characterized by extreme volatility for numerous reasons, including the following:

- Uncertainty regarding the viability of the titanium processing technology, the jig or the Tennessee mineral property;
- Dominance of trading in our common shares by a small number of firms;
- Positive or negative announcements by us or our competitors;
- Uncertainty regarding our ability to maintain our listing on the Nasdaq SmallCap Market or continue as a going concern;
- Industry trends, general economic conditions in the United States or elsewhere, or the general markets for equity securities, minerals, or commodities; and
- Speculation by short sellers of our common shares or other persons who stand to profit from a rapid increase or decrease in the price of our common shares.

We may be delisted from the Nasdaq SmallCap Market.

Our listing on the Nasdaq SmallCap Market is conditioned upon our compliance with the continued listing requirements for such market by June 2, 2003, including the $1.00 per share minimum bid requirement. If the market price for our common shares has not increased to $1.00 per share for at least 10 consecutive days by June 2, 2003, we expect to be delisted from the Nasdaq SmallCap Market. Delisting from the Nasdaq SmallCap Market may have a significant negative impact on the trading price, volume and marketability of our common shares.

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.

If you purchase shares in this offering, you will face immediate and substantial dilution.

This offering involves immediate substantial dilution to prospective investors. The book value per common share immediately following this offering will be substantially less than the price per common shares.

Because we are not required to sell a minimum number of securities in this offering, there is a greater risk that you could lose your investment.

This offering is not subject to a requirement for the sale of a minimum number of shares. We cannot assure you that we will be able to sell all or any portion of the offered shares and Series 2003A Warrants or that proceeds from sales actually made will be sufficient to fund operations. Because the number of offered securities that we will actually sell in this offering is unknown, the risks to initial purchasers of the offered securities are substantially increased.

We may be unable to exploit the potential pharmaceutical application of our titanium processing technology.

We do not have the technical or financial resources to complete development of, and take to market, any pharmaceutical application of our titanium processing technology. In order for us to receive any significant, long-term benefit from any potential pharmaceutical application of our technologies, the following must occur:

- we must enter into an evaluation license or similar agreement with an existing pharmaceutical company under which such company would pay a fee for the right to evaluate a pharmaceutical use of our technology for a specific period of time and for an option to purchase or receive a license for such use of our technology;
- tests conducted by such pharmaceutical company would have to indicate that the pharmaceutical use of our technology is safe, technically viable and financially viable;
- such pharmaceutical company would have to apply for and obtain FDA approval of the pharmaceutical use of our technology, or any related products, which would involve extensive additional testing; and
- such pharmaceutical company would have to successfully market the product incorporating our technology.

Although we could receive some revenues in various stages of the testing and evaluation of the pharmaceutical application of our technology, we may not receive significant revenue unless and until an end product incorporating the technology goes to market.

We may not be able to license our technology for titanium dioxide pigment production.

Because of our relatively small size and limited resources, we do not plan to use our titanium processing technology for large-scale production of titanium dioxide pigments; we have, however, entered into discussions with various minerals and materials companies about licensing our technology to such

entities for large-scale production of titanium dioxide pigments. We have not

entered into any long-term licensing agreements with respect to the use of our titanium processing technology for large-scale production of titanium dioxide pigments and can provide no assurance that we will be able to enter into any such agreement. Even if we enter into such agreement, we would not receive significant revenues from such license until feasibility testing is complete and, if the results of feasibility testing were negative, we would not receive significant revenues at any time.

We may not be able to sell nanoparticles produced using the titanium processing technology.

We plan to use the titanium processing technology to produce ceramic oxide nanoparticles. Nanoparticles and other products we intend to initially produce with the titanium processing technology generally must be customized for a specific application working in cooperation with the end user. We are still testing and customizing our nanoparticle products for various applications and have no long-term agreements with end users to purchase any of our nanoparticle products. We may be unable to recoup our investment in the titanium processing technology and titanium processing equipment for various reasons, including the following:

- we may be unable to customize our nanoparticle products to meet the distinct needs of potential customers;
- potential customers may purchase from competitors because of perceived or actual quality or compatibility differences;
- our marketing and branding efforts may be insufficient to attract a sufficient number of customers; and
- because of our limited funding, we may be unable to continue our development efforts until a strong market for nanoparticles develops.

In addition, the uses for such nanoparticles are limited, and the market for such nanoparticles is small. In light of the small size of the market, the addition of a single manufacturer may cause the price to drop to a point at which we cannot produce the nanoparticles at a profit.

Our costs of production may be too high to permit profitability.

We have not produced products using our titanium processing technology and equipment on a commercial basis. Our actual costs of production may exceed those of competitors and, even if our costs of production are lower, competitors may be able to sell titanium dioxide and other products at a lower price than is economical for Altair.

In addition, even if our initial costs are as anticipated, the titanium processing equipment may break down, prove unreliable or prove inefficient in a commercial setting. If so, related costs, delays and related problems may cause production of titanium dioxide nanoparticles and related products to be unprofitable.

We have not completed testing and development of the jig and are presently focusing our resources on other projects.

We have not completed testing of, or developed a production model of, any series of the jig. We do not expect to complete testing and development of the jig during 2003 and have determined to focus most of our limited resources on the titanium processing technology. We may never develop a production model of the jig.

Even if we complete development of the jig, the jig may prove unmarketable and may not perform as anticipated in a commercial operation.

The designed capacity of the Series 12 jig is too small for coal washing, heavy minerals extraction, and most other intended applications of the jig, except use in small placer gold mines or similar operations. Even if the Series 12 jig is completed and performs to design specifications in subsequent tests or at a commercial facility, we believe that, because of its small capacity, the potential market for the Series 12 jig is limited.

If we complete development of and begin marketing a production model of the Series 30 jig, it may not prove attractive to potential end users, may be rendered obsolete by competing technologies or may not recover end product at a commercially viable rate. Even if technology included in the jig initially proves attractive to potential end users, performance problems and maintenance issues may limit the market for the jig.

The jig faces competition from other jig-like products and from alternative technologies.

Various jig-like products and alternative mineral processing technologies perform many functions similar or identical to those for which the jig is designed. Results from further tests or actual operations may reveal that these alternative products and technologies are better adapted to any or all of the uses for which the jig is intended. Moreover, regardless of test results, consumers may view any or all of such alternative products and technologies as technically superior to, or more cost effective than, the jig.

Certain patents for the jig have expired, and those that have not expired may be difficult to enforce.

All of the initial patents issued on the jig have expired, and we are unable to prevent competitors from copying the technology once protected by such patents. Additional patents related to the process through which water is pulsed through the cylindrical screen on the jig expire beginning in 2010, and patents for an efficiency-enhancing aspect of the cylindrical screen expire during 2018. The cost of enforcing patents is often significant, especially outside of North America. Accordingly, we may be unable to enforce even our patents that have not yet expired.

We have suspended examining the feasibility of mining the Tennessee mineral property and may not have working capital sufficient to again continue testing efforts.

Due to a shortage of working capital, we have suspended feasibility testing of the Tennessee mineral property. We do not expect to obtain an amount of working capital sufficient to again start feasibility testing of the Tennessee mineral property in the foreseeable future.

Even if we again commence feasibility testing on the Tennessee mineral property, we are unable to provide any assurance that mining of the Tennessee

11

mineral property is feasible or to identify all processes that we would need to complete before we could commence a mining operation on the Tennessee mineral property. To the extent early feasibility testing yields positive results, we expect feasibility testing to involve, among other things, the following:

- operating a pilot mining facility to determine mineral recovery efficiencies and the quality of end products;
- additional drilling and sampling in order to more accurately determine the quantity, quality and continuity of minerals on the Tennessee mineral property;
- examining production costs and the market for products produced at the pilot facility;
- designing any proposed mining facility;
- identifying and applying for the permits necessary for any proposed full-scale mining facility; and
- attempting to secure financing for any proposed full-scale mining facility.

Our test production at the pilot plant, economic analysis and additional exploration activities may indicate any of the following:

- that the Tennessee mineral property does not contain heavy minerals of a sufficient quantity, quality or continuity to permit any mining;
- that production costs exceed anticipated revenues;
- that end products do not meet market requirements or customer expectations;
- that there is an insufficient market for products minable from the Tennessee mineral property; or
- that mining the Tennessee mineral property is otherwise not economically or technically feasible.

Even if we conclude that mining is economically and technically feasible on the Tennessee mineral property, we may be unable to obtain the capital, resources and permits necessary to mine the Tennessee mineral property. Market factors, such as a decline in the price of, or demand for, minerals recoverable at the Tennessee mineral property, may adversely affect the development of mining operations on such property. In addition, as we move through the testing process, we may identify additional items that need to be researched and resolved before any proposed mining operation could commence.

12

We cannot forecast the life of any potential mining operation located on the Tennessee mineral property.

We have not explored and tested the Tennessee mineral property enough

to establish the existence of a commercially minable deposit (i.e. a reserve) on such property. Until such time as a reserve is established (of which there can be no assurance), we cannot provide an estimate as to how long the Tennessee mineral property could sustain any proposed mining operation.

We may be unable to obtain necessary environmental permits and may expend significant resources in order to comply with environmental laws.

In order to begin construction and commercial mining on the Tennessee mineral property, we must obtain additional federal, state and local permits. We will also be required to conform our operations to the requirements of numerous federal, state and local environmental laws. Because we have not yet commenced design of a commercial mining facility on the Tennessee mineral property, we are not in a position to definitively ascertain which federal, state and local mining and environmental laws or regulations would apply to a mine on the Tennessee mineral property. Nevertheless, we anticipate having to comply with and/or obtain permits under the Clean Air Act, Clean Water Act and Resource Conservation and Recovery Act, in addition to numerous state laws and regulations before commencing construction or operation of a mine on the Tennessee mineral property. We can provide no assurance that we will be able to comply with such laws and regulations or obtain any such permits. In addition, obtaining such permits and complying with such environmental laws and regulations may be cost prohibitive.

The market for commodities produced using the jig or at the Tennessee mineral property may significantly decline.

If the jig is successfully developed and manufactured on a commercial basis, we intend to use the jig, or lease the jig for use, to separate and recover valuable, heavy mineral particles. Active international markets exist for gold, titanium, zircon and many other minerals potentially recoverable with the jig. Prices of such minerals fluctuate widely and are beyond our control. A significant decline in the price of minerals capable of being extracted by the jig could have significant negative effect on the value of the jig. Similarly, a significant decline in the price of minerals expected to be produced on the Tennessee mineral property could have a significant negative effect on the viability of a mine or processing facility on such property.

FORWARD-LOOKING STATEMENTS

This prospectus contains various forward-looking statements. Such statements can be identified by the use of the forward-looking words "anticipate," "estimate," "project," "likely," "believe," "intend," "expect," or similar words. These statements discuss future expectations, contain projections regarding future developments, operations, or financial conditions, or state other forward-looking information. When considering such forward-looking statements, you should keep in mind the risk factors noted in the previous section and other cautionary statements throughout this prospectus and our periodic filings with the SEC that are incorporated herein by reference. You should also keep in mind that all forward-looking statements are based on

management's existing beliefs about present and future events outside of management's control and on assumptions that may prove to be incorrect. If one or more risks identified in this prospectus or any applicable filings materializes, or any other underlying assumptions prove incorrect, our actual results may vary materially from those anticipated, estimated, projected, or intended.

Among the key factors that may have a direct bearing on our operating results are risks and uncertainties described under "Risk Factors," including those attributable to the absence of significant operating revenues or profits, uncertainties regarding the development and commercialization of the titanium processing technology and the jig, development risks associated with the Tennessee mineral property and uncertainties regarding our ability to obtain capital sufficient to continue our operations and pursue our proposed business strategy.

USE OF PROCEEDS

We will receive all of the proceeds from the offer and sale of the offered securities. We intend to use the net cash proceeds, following the payment of any legal costs and other offering expenses, to provide working capital to be used for general corporate purposes. If management determines that capital from other sources is sufficient to fund our ongoing operations, we may use up to $280,000 of the net cash proceeds to prepay indebtedness arising under our $1,400,000 Second Amended and Restated Secured Term Note. The interest rate of this note is 11% per year. Under such note, a conversion right with respect to $280,000 of principal accrues on each of March 1, 2003, June 1, 2003, September 1, 2003, December 1, 2003 and March 1, 2004. If the amount that would be subject to a conversion right is prepaid prior to the date of accrual, such conversion right does not accrue. In order to avoid the dilution associated with the accrual of such a conversion right, management may determine to use up to $280,000 of the net cash proceeds in order to prevent the accrual of a conversion right on March 1, 2003.

In addition, in order to conserve working capital, we may issue some or all of the offered securities in non-cash transactions in exchange for the cancellation of indebtedness and accounts payable and in exchange for services, including services rendered in connection with capital raising activities.

There is no requirement that we sell a minimum number of shares in this offering. Therefore, we may receive no proceeds from this offering, or insufficient proceeds for our planned use of proceeds set forth above.

DILUTION

Our net tangible book value (deficit) at September 30, 2002 was $3,038,825 or approximately $0.12 per common share. Net tangible book value of a company is the value of all of its tangible assets, less the value of all liabilities. Net tangible book value per common share is the net tangible book value of the company divided by the number of common shares issued and outstanding.

If all of the 1,500,000 common shares and 750,000 Series 2003A Warrants to which this prospectus relates are sold at an assumed sale price of $0.40 per share, and all Series 2003A Warrants are exercised at an assumed exercise price of $1.00 per share, our net tangible book value would be $4,388,825 or $0.15 per common share at September 30, 2002, resulting in an immediate increase in net tangible book value of $1,350,000 or approximately $0.03 per common share to existing shareholders and an immediate dilution of approximately $0.45 per common share to purchasers.

The following table illustrates dilution on a per common share and per offering basis:

	Per Unit
Offering price (1)	$0.40
Net tangible book value (deficit) at September 30, 2002	$0.12
Increase attributable to purchase by new investors(2)	$0.03
Pro forma net tangible book value (deficit) after the offering (2)	$0.15
Pro forma net tangible book value dilution to new investors (3)	$0.45

(1) Reflects the sale of 1,500,000 common shares and 750,000 Series 2003A Warrants at an estimated purchase price per units of one common share and one-half Series 2003A Warrant of $0.40. The actual purchase price will vary, and may differ materially, from the estimated price.

(2) Assumes that the number of common shares outstanding as of September 30, 2002 was 26,203,902 and that the 1,500,000 common shares and 750,000 Series 2003A Warrants to which this prospectus relates are sold at a price of $0.40 per share and that all Series 2003A Warrants are exercised for the purchase of an additional 750,000 common shares at an exercise price of $1.00 per share. Does not reflect the possible issuance of up to 4,061,700 common shares upon the exercise of outstanding stock options or the possible issuance of up to 9,170,177 common shares upon the exercise of outstanding warrants.

(3) Dilution represents the difference between the amount paid by investors (average price of $0.60 per share) and the pro forma net tangible book value after the offering contemplated by this prospectus.

PLAN OF DISTRIBUTION

We are offering and selling the 1,500,000 common shares and 750,000 Series 2003A Warrants to which this prospectus relates directly to purchasers. We have not retained any underwriter, broker or dealer to facilitate the offer or sale of the offered securities, and we will pay no underwriting commissions or discounts in connection with the offer or sale of the offered securities. The offered securities will be offered directly to prospective investors by our President, Rudi E. Moerck, and by the President of our wholly-owned subsidiary Altair Nanomaterials, Inc, Kenneth E. Lyon. In addition, some of our other officers and employees may prepare and deliver written communications regarding the offered securities and respond to inquiries initiated by potential purchasers. No commissions, discounts, or other compensation of any kind will be paid to our officers or employees that participate in the offering.

DESCRIPTION OF OFFERED SECURITIES

Our Common Shares

Our articles of continuance authorize the issuance of an unlimited number of common shares, which do not have par value. As of December 31, 2002, there were 30,244,348 common shares issued and outstanding, held by approximately 500 registered holders. Holders of common shares are entitled to one vote per share on all matters to be voted on by 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 our liquidation, dissolution or winding up, 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.

As of December 31, 2002, we had issued and outstanding options to acquire 4,061,700 common shares issued pursuant to its options plans and had issued and outstanding warrants to purchase 9,170,171 common shares issued in various series.

Neither our articles nor our bylaws contain any provision that would delay, defer or prevent a change in control. We have, however, adopted an Amended and Restated Shareholder Rights Plan Agreement dated October 15, 1999, which allows our shareholders to acquire additional common shares at a price that would create a strong disincentive to a tender offer or similar change of control transaction, if a person acquires, or announces an intent to acquire, 15% or more of the outstanding common shares, and if certain other conditions are met. A copy of this agreement is attached as Exhibit 10.1 to our Current Report on Form 8-K filed with the SEC on November 18, 1999. A copy of this agreement is also available upon written request to us. You should review the entire agreement before making any investment decision.

Series 2003A Warrants

Each Series 2003A Warrant entitles the holder thereof to purchase one common share at any time prior to the fifth anniversary of the issue date at the price equal to the greater of (i) $1.00 per share, and (ii) 125% of the average of the closing price of the common shares, as reported on our principal trading market, during the calendar week preceding the calendar week in which we receive and accept subscription proceeds for the particular investment. The holder of a Series 2003A Warrant may exercise such Warrant by delivering to the Company at its principal office the Series 2003A Warrant certificate, the Subscription Form attached thereto, and cash or certified check in an amount equal to the exercise price multiplied by the number of Series 2003A Warrants being exercised. The Series 2003A Warrants may only be exercised in increments equal to the lesser of (a) 25,000 common shares and (b) the number of shares subject to the Series 2003A Warrant. Each Series 2003A Warrant is freely assignable, subject to the restrictions of applicable federal, Canadian, state, and provincial securities laws. The Series 2003A Warrants provide for the adjustment of the number of common shares subject thereto and the exercise price in the event of a stock split, stock dividend, merger, consolidation, or similar event.

Canadian Transfer Restrictions

Neither the common shares nor the 2003A Warrants offered pursuant to this prospectus may be knowingly resold or otherwise transferred in Canada for a period of six months after the date of issuance. Investors will be required to sign a subscription agreement pursuant to which they will agree to comply with this restriction.

A form of the Series 2003A Warrant Certificate is attached to this prospectus as Exhibit I.

LEGAL MATTERS

The validity of the shares being offered hereby is being passed upon for us by Goodman and Carr LLP, Ontario, Canada.

EXPERTS

The consolidated financial statements incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2001 have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report (which report expresses an unqualified opinion and includes an explanatory paragraph referring to the uncertainty that the Company will be able to continue as a going concern), which is incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

INFORMATION ABOUT OUR COMPANY

This prospectus is accompanied by copies of our Annual Report on Form 10-K for the year ended December 31, 2001 and our Quarterly Report on Form 10-Q for the quarter ended September 30, 2002. These documents contain information about us as of their respective dates. We recommend that you carefully review these documents as part of your review of this prospectus.

RECENT DEVELOPMENTS

Amendment of Secured Term Note.

Effective November 21, 2002, the principal amount of the secured term note that we issued to Doral 18, LLC was reduced from $2,000,000 to $1,400,000 in exchange for our issuance of 1,500,000 common shares to Doral, and the maturity date of the note was extended from March 31, 2003 to March 31, 2004. Interest accrues on the outstanding principal balance of the Second Amended and Restated Secured Term Note at the rate of 11% per annum. Under the Second Amended and Restated Secured Term Note, a conversion right with respect to $280,000 of principal accrues on each of March 1, 2003, June 1, 2003, September 1, 2003, December 1, 2003 and March 1, 2004. If the amount that would be subject to a conversion right is prepaid prior to the date of accrual, such conversion right does not accrue. Once a conversion right has accrued, the principal amount subject to that conversion right cannot be prepaid unless all principal amounts not subject to a conversion right have been prepaid in full. Each conversion right gives the holder the right to convert the subject principal amount into common shares at a conversion price equal to the lesser of (a) $1.00 per share and (b) 70% of the average of the closing price of our common shares for the five trading days ending on the trading day immediately preceding the date on which that conversion right accrued.

Change of Name and Jurisdiction of Incorporation.

Effective July 2, 2002, we changed our name from Altair International

Inc. to Altair Nanotechnologies Inc. and moved our jurisdiction of incorporation from the Ontario Business Corporations Act to the Canada Business Corporations Act. The purpose of the name change was to reflect our strategy of focusing our business on the supply of nanomaterials and to reflect our position in the nanotechnology sector. We changed jurisdiction of incorporation because our business is increasingly being conducted on an international basis, and operating as a Canadian federal company will be more consistent with our international focus. Moreover, a minimum of 25% of the directors of a company incorporated under the Canada Business Corporations Act must be resident Canadians whereas 50% of the directors of a company incorporated under the Ontario Business Corporations Act must be resident Canadians. Thus, the Canada Business Corporations Act's residency requirements will increase the number of qualified nominees for the board from which the Company may draw.

Recently Developed Applications of Our Technology

In the second quarter of 2002, we initiated research and development efforts directed toward the utilization of nanomaterials in the pharmaceuticals industry. In July 2002, we announced the development of a new active pharmaceutical ingredient for the treatment of elevated serum phosphate levels, or hyperphosphatemia, in patients undergoing kidney dialysis, as well as a new drug delivery system using inorganic ceramic nanoparticles. In August 2002, we filed a provisional patent application covering our new active pharmaceutical ingredient. Our new drug delivery system is based upon nanoparticles that Altair already manufactures for which we already possess composition of matter patents. Altair has also already received patents for the manufacture of titanium dioxide nanoparticles, which are the basis of its drug delivery platform

Our New Pharmaceutical Ingredient. We have given our active pharmaceutical ingredient the name RenaZorb(TM). RenaZorb(TM) is a highly active, lanthanum based nanomaterial with low intestinal solubility and excellent in vitro phosphate binding. Animal testing on RenaZorb(TM) has begun in dogs and rats, but no human tests have yet been conducted. Nonetheless, based upon our initial laboratory testing and research in simulated human stomach fluid we believe that RenaZorb(TM) will offer the following advantages over competing products:

- Lower dosage requirements because of better phosphate binding per gram of drug compared with existing or proposed drugs;
- Fewer and less severe side effects because of less gassing and lower dosage; and
- Better patient compliance because of fewer tablets: and
- Lower cost than existing or proposed prescription drugs in this therapeutic category

In most kidney dialysis patients with end stage renal disease, serum phosphate levels must be kept in check. This is done by ingesting a phosphate binder after meals. Phosphate binders absorb the phosphate in the food that the patient consumes, preventing absorption of phosphate in the patient's gastrointestinal tract.

Existing phosphate binders include Tums(TM) antacid, which contains calcium carbonate, and also aluminum hydroxide based products such as Gaviscon(TM) manufactured by Glaxo Smith Kline, both of which are available over the counter, as well as Renagel(TM) (chemical name sevelmer) manufactured by Genzyme, which is available only by prescription. In addition, Fosrenol(TM), lanthanum carbonate tetra hydrate, or LCTH, developed by Shire Pharmaceuticals of the UK, is awaiting United States FDA and foreign regulatory approvals, which are expected in early 2003.

According to information published by AnorMED, the worldwide market for phosphate binders for chronic renal failure patients is approximately $400 million to $600 million annually. The growth of this market is limited by high prescription drug costs, high dosage requirements, undesirable side effects and poor patient compliance. We believe this market could grow to over $1.0 billion if these issues can be successfully addressed and that RenaZorb(TM) has the potential to successfully address these issues.

While over the counter phosphate binders are relatively inexpensive, they have several disadvantages. Calcium carbonate containing phosphate binders, such as Tums(TM), in high doses, may cause increased blood pressure and increased risk of cardiovascular disease and is generally not recommended for long term use by dialysis patients. With prolonged use, Aluminum hydroxide based phosphate binders, such as Gaviscon(TM), may cause toxic neurological effects and are generally avoided by physicians. Aluminum dementia has been widely reported in kidney dialysis patients using these products.

The prescription phosphate binder Renagel(TM) is relatively expensive--approximately $1,300 per patient per year--has a high dosage requirement-- 2 x 800 mg or 4 x 400 mg capsule/tablets three times per day--and water intake is required. The most common side effects related to the use of Renagel(TM) include nausea (7% of patients), constipation (2% of patients), diarrhea (4% of patients), gas or bloating (4% of patients) and heartburn or indigestion (5% patients). Renagel is the only prescription non-calcium phosphate binder currently approved by the United States FDA.

Fosrenol(TM) (LCTH), for which US FDA approval is pending, is expected to be marketed as a chewable tablet with a proposed dosage of 1.5 to 3.0 grams active drug per day. As with all medicines, Fosrenol(TM) will probably display some side effects but these are expected to be minor. It has been reported that the use of Fosrenol does increase serum lanthanum levels compared with levels in patients taking a placebo. RenaZorb(TM), which is nanotechnology based, is expected to be developed in a tablet or capsule dosage form with a projected dosage of 0.6 to 2.0 grams per day. Although we have done no human testing on RenaZorb(TM), we believe RenaZorb(TM) has the potential for fewer side effects, lower cost and better patient compliance. We base these possible advantages upon in vitro (laboratory) testing conducted by Altair in which RenaZorb was compared to LCTH, the active chemical in Fosrenol. Our testing showed that RenaZorb binds at least 30% more phosphate per gram of drug than LCTH, therefore requiring a lower dose. Lower dose often correlates well with a reduction of observed side effects in chemically related homologous compounds.

Both RenaZorb(TM) and Fosrenol(TM) involve the binding of phosphate by lanthanum compounds. In fact, the end product of the binding mechanism is identical; lanthanum orthophosphate is formed. Based on laboratory tests comparing RenaZorb(TM) with LCTH, the active ingredient in Fosrenol(TM), RenaZorb(TM) required 30% less drug to bind the same amount of phosphate and shows less lanthanum going into solution in simulated stomach fluid at pH values of 3.0 and 4.5. In addition, in Altair's testing, using methods published by AnorMED, RenaZorb(TM) reacts with phosphate more rapidly, possibly because of its high nanoparticle-derived surface area. In 20 minute simulated stomach acid tests conducted by Altair, RenaZorb(TM) absorbs approximately 140 mg of phosphate, Renagel(TM) absorbed less than 100 mg of phosphate and LCTH absorbed approximately 60 mg of phosphate.

We have entered into eight confidentiality agreements relating to the development/licensing of RenaZorb(TM), and we have recently received two new inquiries. Animal testing of RenaZorb(TM) began in December 2002 and is

currently being conducted by two pharmaceutical companies, one of which is testing in dogs and both of which are testing in rats. Altair has written testing agreements with both these companies. We expect the results of these tests in early March. Assuming such results are positive, RenaZorb(TM) will have to undergo human testing and receive FDA approval before it could be approved for marketing. Human testing typically takes 1 to 2 years and, if merited by the results of animal testing, is expected to begin in 2003. FDA approval typically occurs between 3 and 5 years following the completion of animal testing, although we believe that FDA approval of Fosrenol(TM), a chemically related drug, could accelerate the approval process for RenaZorb(TM).

We are currently actively discussing licensing agreements with four pharmaceutical companies. We do not intend to manufacture RenaZorb(TM) ourselves. Rather, we expect to enter into licensing agreements with one or more pharmaceutical companies that can conduct additional testing and development, seek necessary FDA approvals and take the other steps necessary to bring RenaZorb(TM) to market.

Our New Drug Delivery System. Our new drug delivery system involves depositing drugs on or inside hollow "wiffle ball" spheres made of titanium dioxide and other metal oxide nanoparticles.

To date, our research on drug delivery systems involving the use of nanoparticles has been limited to coating known drugs on the surface of titanium dioxide nanoparticles. We have not done any animal or human testing with our new drug delivery systems and do not have the expertise, resources or capacity to complete such testing. We are currently seeking business relationships with pharmaceutical companies that can conduct additional testing and development

using their pharmaceutical active ingredients to coat the Altair nanomaterials and then seek necessary FDA approvals and take the other steps necessary to bring the combined drug delivery system to market. Because of the early stage of development of these drug delivery systems, we are unable to state with any certainty how (or if) such drug delivery systems would be used and, if used, what the uses for such systems would be and what the comparative advantages, sides effects and other aspects of such drug delivery systems would be. Nevertheless, based upon our early testing, we believe that the following uses of a nanoparticle-based drug delivery system are feasible:

- New delivery forms for existing drugs;
- Delivery methods for new drugs;
- Delivery of hard to dissolve drugs;
- Delivery of sustained release drugs; and
- Delivery of dual action drugs.

New Delivery Forms and New Drugs. Our drug delivery system may be useful in connection with drugs whose patents are expiring. On average, patented drugs generate $200 to $400 million in sales, with average sales margins of 90% to 95%. The margin for generic drugs drops, however, to 20% to 30% or less. New dosage forms are patentable and, if patented, may extend the drug's patent protection for 20 years. In addition, new dosage forms may reduce the cost of producing various drugs, increasing margins if exclusive or generic, and may reduce undesirable side effects.

Hard to Dissolve Drugs. Our drug delivery system may also be used to deliver drugs that work in the gastrointestinal tract without being absorbed. These types drugs remove unwanted materials from the digestive systems. Possible uses for these types of drugs include lowering cholesterol. Another use for our

drug delivery system would be for highly insoluble drugs that need greater absorption to enter the blood stream. The significant increase in surface area of our titanium dioxide micro-spheres usually allows greater drug absorption. This greater absorption may also be used to redevelop previously failed candidate drug compounds that were unsuccessful because of inadequate absorption rates or amounts.

Sustained Release Drugs and Dual Action Drugs. We also believe our system may useful in connection with the sustained release of fungicides, including the following applications:

- Anti-fungal drugs;
- Topical anti-fungal drugs with sustained release;
- Tile cleaning products (mold, mildew) with residual action;
- Cosmetics (preservatives);
- Mildew prevention in paints and coatings;
- Fabric mildew protection;
- Exterior cleaning systems for removal and prevention of mold, mildew and green algae;
- Wood protection and preservation; and
- UV protection of wood.

Altair's hollow sphere "wiffle ball" like structures can deliver active chemicals or drugs in a sustained release fashion because the active component can be "mounted" on both the outside surface and inside the hollow ball structure. The dissolution and availability of the surface-mounted active component will be different than the active component inside the hollow spheres. Material inside the hollow structure will be released slowly compared to surface-mounted material. An additional feature of Altair's nanoparticle based hollow "wiffle ball" structures is that two different active substances could be mounted, one inside the hollow spheres and another on the surface. This allows the possibility for dual action pharmaceuticals to be developed using this technology.

Because of the potential for sustained delivery of active pharmaceutical components use Altair's "wiffle ball" structure, we also believe that our system may provide enhanced drug delivery for topical applications, such as the following:

- Wound healing;
- Antibiotic incorporation;
- Antibiotic sustained release
- Pain and itch preparations with sustained release action
- After-sun care; and
- Sunscreens.

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The SEC allows us to incorporate by reference the information we file with them. This means that we can disclose information to you by referring you to those documents. The documents that have been incorporated by reference are an important part of this prospectus, and you should review that information in order to understand the nature of any investment by you in our common shares. Information contained in this prospectus automatically updates and supersedes previously filed information. We are incorporating by reference the documents listed below.

- Our Annual Report on Form 10-K for the year ended December 31, 2001, filed with the SEC on April 1, 2002.
- Our Current Report on Form 8-K filed with the SEC on May 10, 2002.
- Our Quarterly Report on Form 10-Q for the quarter ended March 31, 2002 filed with the SEC on May 15, 2002.
- Our Current Report on Form 8-K filed with the SEC on July 17, 2002.
- Our Quarterly Report on Form 10-Q for the quarter ended June 30, 2002 filed with the SEC on August 14, 2002, as amended by the Amendment 1 to Quarterly Report on Form 10-Q/A filed with the SEC on October 15, 2002, as amended by the Amendment No. 2 on Form 10-Q/A filed with the SEC on October 21, 2002.
- Our Quarterly Report on Form 10-Q for the quarter ended September 30, 2002 filed with the SEC on November 14, 2002.
- Our Current Report on Form 8-K filed with the SEC on November 27, 2002, as amended by Amendment No. 1 to Current Report on Form 8-K/A filed with the SEC on December 4, 2002.

We will provide, without charge, to each person to whom this prospectus is delivered, upon written or oral request of any such person, a copy of any or all of the foregoing documents (other than exhibits to such documents which are not specifically incorporated by reference in such documents). Please direct written requests for such copies to the Company c/o Mineral Recovery Systems at 204 Edison Way, Reno, Nevada 89502, U.S.A., Attention: Ed Dickinson, Chief Financial Officer. Telephone requests may be directed to the office of the Director of Finance at (800) 897-8245.

You should only rely upon the information included in or incorporated by reference into this prospectus or in any prospectus supplement that is delivered to you. We have not authorized anyone to provide you with additional or different information. You should not assume that the information included in or incorporated by reference into this prospectus or any prospectus supplement is accurate as of any date later than the date on the front of the prospectus or prospectus supplement.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly, and current reports, proxy 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 Room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at

1-800-SEC-0330 for further information on the Public Reference Room. The SEC also maintains an Internet site (http://www.sec.gov) that contains reports, proxy statements, and other information regarding issuers, including us, that file electronically with the SEC.

Our common shares are quoted on the Nasdaq SmallCap Market. You can inspect and copy reports, proxy statements and other information concerning us at the Public Reference Room of the National Association of Securities Dealers, 1735 K Street, N.W., Washington, D.C. 20006.

This prospectus is a part of the registration statement that we filed on Form S-2 with the SEC. The registration statement contains more information about us and our common shares than this prospectus, including exhibits and schedules. You should refer to the registration statement for additional information about us and the common shares being offered in this prospectus. Statements that we make in this prospectus relating to any documents filed as an exhibit to the registration statement or any document incorporated by reference into the registration statement may not be complete, and you should review the referenced document itself for a complete understanding of its terms.

SUBSCRIPTION PROCEDURES

Purchasers of common shares and Series 2003A Warrants in this offering will be required to sign a subscription agreement in the form attached to this prospectus as Exhibit II. By signing the subscription agreement, purchasers will, among other things:

- Agree not to knowingly sell or otherwise transfer the common shares or Series 2003A Warrants in Canada for a period of six months after the issue date;
- Indicate and make a representation as to the location of their principal business address or residence, whichever is applicable, in order to assure compliance with state securities laws; and
- Confirm the number of common shares and Series 2003A Warrants being purchased and the purchase price applicable to the purchase.

Payment of the purchase price is due at the time of subscription and may be paid by check or wire transfer. We may accept or reject any subscription in our sole and absolute discretion. We will promptly return the purchase price for any subscription that we do not accept.

Exhibits

The following documents related to our offering of common shares and Series 2003A Warrants are attached to this prospectus:

- Exhibit I - Form of Series 2003A Warrant
- Exhibit II - Form of Subscription Agreement

Exhibit I

Form of Series 2003A Warrant

[see attached]

0

THESE SECURITIES, AND ANY SECURITIES ISSUABLE UPON THE EXERCISE HEREOF, HAVE NOT BEEN QUALIFIED UNDER CANADIAN OR PROVINCIAL SECURITIES LAWS AND MAY NOT BE RESOLD OR OTHERWISE TRANSFERRED IN CANADA FOR A PERIOD OF SIX MONTHS AFTER THE ISSUE DATE OF THE WARRANT.

ALTAIR NANOTECHNOLOGIES INC.

COMMON SHARE PURCHASE WARRANT

_____ Series 2003A Warrants Warrant Certificate No. 2003A-_

Void after 5:00 p.m., Mountain Standard Time
on _____, 2007

ALTAIR NANOTECHNOLOGIES INC.
(Incorporated under the laws of Canada)

This Series 2003A Warrant Certificate ("Warrant Certificate") is to certify that, for value received, _____or registered assigns (the "Holder") shall have the right to purchase from Altair Nanotechnologies Inc. (hereinafter called the "Corporation") one fully paid and non-assessable Common Share of the Corporation (a "Common Share") for each Series 2003A Warrant (individually, a "Warrant") represented by this Warrant Certificate during the time period commencing on the date this Warrant is executed by the Company and continuing until 5:00 p.m. (Mountain Standard time) on _____ [five-years from issue date] (the "Expiry Time"). As specified in the Corporation's Registration Statement on Form S-2, File No. 333-102592, covering the issuance of the Warrants, the exercise price for the purchase of each such Common Share is the greater of (i) $1.00 per share, and (ii) 125% of the average of the closing price of the Common Shares, as reported on the Nasdaq SmallCap Market, during the calendar week preceding the calendar week in which the Corporation received and accepted subscription proceeds for the Warrants. During such week, 125% of the average of the closing price of the Common Shares, as reported on the Nasdaq SmallCap Market, was $_____. Accordingly, the exercise price for the purchase of each such Common Share shall be U.S. $_____ per share (the "Exercise Price"). The number of Common Shares to be received upon the exercise of each Warrant and the Exercise Price may be adjusted from time to time as hereinafter set forth.

The Warrants shall be subject to the following terms and conditions:

1. For the purposes of this Warrant, the term "Common Shares" means common shares without nominal or par value in the capital of the Corporation as constituted on the date hereof; provided that in the event of a

change, subdivision, redivision, reduction, combination or consolidation thereof or any other adjustment under clause 10 hereof, or successive such changes, subdivisions, redivisions, reductions, combinations, consolidations or other adjustments, then subject to the adjustments, if any, having been made in accordance with the provisions of this Warrant Certificate, "Common Shares" shall thereafter mean the shares, other securities or other property resulting from such change, subdivision, redivision, reduction, combination or consolidation or other adjustment.

2. This Warrant Certificate shall be signed by an officer of the Corporation holding office at the time of signing, or any successor or replacement person and notwithstanding any change in any of the persons

holding said offices between the time of actual signing and the delivery of the Warrant Certificate and notwithstanding that such officer signing may not have held office at the date of the delivery of the Warrant Certificate, the Warrant Certificate so signed shall be valid and binding upon the Corporation.

3. All rights under any of the Warrants in respect of which the right of subscription and purchase therein provided for shall not theretofore have been exercised shall wholly cease and determine and such Warrants shall be wholly void and of no valid or binding effect after the Expiry Time.

4. The right to purchase Common Shares pursuant to the Warrants may only be exercised by the Holder at or before the Expiry Time by:

(a) duly completing and executing a Subscription Form in the form attached hereto, in the manner therein indicated; and

(b) surrendering this Warrant Certificate and the duly completed and executed Subscription Form to the Corporation at the address specified in clause 22 below together with payment of the purchase price for the Common Shares subscribed for in the form of cash or a certified cheque payable to the Corporation in an amount equal to the then applicable Exercise Price multiplied by the number of Common Shares subscribed for.

5. Upon receipt of the Subscription Form, this Warrant Certificate, and payment as aforesaid, the Corporation shall cause to be issued to the Holder the number of Common Shares to be issued and the Holder shall become a shareholder of the Corporation in respect of such Common Shares, effective as of the date of receipt by the Corporation of such Subscription Form, Warrant Certificate, and payment and shall be entitled to delivery of a certificate or certificates evidencing such shares. The Corporation shall cause such certificate or certificates to be mailed to the Holder at the address or addresses specified in such Subscription Form within ten (10) business days of such receipt and payment as herein provided or, if so instructed by the Holder, held for pick-up by the Holder at the principal office of the registrar and transfer agent of the Common Shares, Equity Transfer Services Inc. (the "Transfer Agent").

6. No fractional shares or stock representing fractional shares shall be issued upon the exercise of any Warrant. In lieu of any fractional

shares which would otherwise be issuable, the Corporation shall either pay cash equal to the product of such fraction multiplied by the fair market value of one share of Common Stock on the date of exercise, as determined in good faith by the Corporation's Board of Directors, or issue the next largest whole number of Common Shares at the Corporation's option.

7. Neither the Warrants nor any Common Shares issuable upon exercise of the Warrants may be offered or sold into Canada for a period of six months after the issue date of the Warrants. If the Warrants are exercised prior to the expiration of such six-month period, the certificates evidencing the Common Shares issuable upon their exercise shall bear the legend set forth below:

THESE SECURITIES HAVE NOT BEEN QUALIFIED UNDER CANADIAN OR PROVINCIAL SECURITIES LAWS AND MAY NOT BE RESOLD OR OTHERWISE TRANSFERRED IN CANADA PRIOR TO [THE DATE SIX MONTH FROM THE ISSUE DATE OF THE WARRANTS].

8. The holding of a Warrant shall not constitute the Holder a shareholder of the Corporation nor entitle him to any right or interest in respect thereof except as herein expressly provided.

9. The Corporation covenants and agrees that until the Expiry Time, while any of the Warrants shall be outstanding, it shall reserve and there shall remain unissued out of its authorized capital a sufficient number of Common Shares to satisfy the right of purchase herein provided, as such right of purchase may be adjusted pursuant to clauses 10 and 11 hereof. All Common Shares which shall be issued upon the exercise of the right to purchase herein provided for, upon payment therefor of the amount at which such Common Shares may at the time be purchased pursuant to the provisions hereof, shall be issued as fully paid and non-assessable shares and the holders thereof shall not be liable to the Corporation or its creditors in respect thereof.

10. (a) If and whenever at any time after the date hereof and prior to the Expiry Time the Corporation shall (i) subdivide, redivide or change its then outstanding Common Shares into a greater number of Common Shares, (ii) reduce, combine or consolidate its then outstanding Common Shares into a lesser number of Common Shares or (iii) issue Common Shares (or securities exchangeable for or convertible into Common Shares) to the holders of all or substantially all of its then outstanding Common Shares by way of a stock dividend or other distribution (any of such events herein called a "Common Share Reorganization"), then the Exercise Price shall be adjusted effective immediately after the effective date of any such event in (i) or (ii) above or the record date at which the holders of Common Shares are determined for the purpose of any such dividend or distribution in (iii) above, as the case may be, by multiplying the Exercise Price in effect on such effective date or record date, as the case may be, by a fraction, the numerator of which shall be the number of Common Shares outstanding on such effective date or record date, as the case may be, before giving effect to such Common Share Reorganization and the denominator of which shall be the number of Common Shares outstanding immediately after giving

effect to such Common Share Reorganization including, in the case where securities exchangeable for or convertible into Common Shares are distributed, the number of Common Shares that would be outstanding if such securities were exchanged for or converted into Common Shares.

(b) If and whenever at any time after the date hereof and prior to the Expiry Time, the Corporation shall distribute any class of shares or rights, options or warrants or other securities (other than those referred to in clause 10(a) above), evidences of indebtedness or property (excluding cash dividends paid in the ordinary course) to holders of all or substantially all of its then outstanding Common Shares, the number of Common Shares to be issued by the Corporation under this Warrant shall, at the time of exercise of the right of subscription and purchase under this Warrant Certificate, be appropriately adjusted and the Holder shall receive, in lieu of the number of the Common Shares in respect of which the right to purchase is then being exercised, the aggregate number of Common Shares or other securities or property that the Holder would have been entitled to receive as a result of such event, if, on the record date thereof, the Holder had been the registered holder of the number of Common Shares to which the Holder was theretofore entitled upon the exercise of the rights of the Holder hereunder.

(c) If and whenever at any time after the date hereof and prior to the Expiry Time there is a capital reorganization of the Corporation or a reclassification or other change in the Common Shares (other than a Common Share Reorganization) or a consolidation or merger or amalgamation of the Corporation with or into any other corporation or other entity (other than a consolidation, merger or amalgamation which does not result in any reclassification of the outstanding Common Shares or a change of the Common Shares into other securities), or a

transfer of all or substantially all of the Corporation's assets to another corporation or other entity in which the holders of Common Shares are entitled to receive shares, other securities or other property (any of such events being called a "Capital Reorganization"), the Holder, where he has not exercised the right of subscription and purchase under this Warrant Certificate prior to the effective date of such Capital Reorganization, shall be entitled to receive and shall accept, upon the exercise of such right, on such date or any time thereafter, for the same aggregate consideration in lieu of the number of Common shares to which he was theretofore entitled to subscribe for and purchase, the aggregate number of shares or other securities or property which the Holder would have been entitled to receive as a result of such Capital Reorganization if, on the effective date thereof, he had been the registered holder of the number of Common Shares to which he was theretofore entitled to subscribe for and purchase.

(d) If and whenever at any time after the date hereof and prior to the Expiry Time, any of the events set out in clause 10(a), (b) or (c) shall occur and the occurrence of such event

results in an adjustment of the Exercise Price pursuant to the provisions of this clause 10, then the number of Common Shares purchaseable pursuant to this Warrant shall be adjusted contemporaneously with the adjustment of the Exercise Price by multiplying the number of Common Shares then otherwise purchaseable on the exercise thereof by a fraction, the numerator of which shall be the Exercise Price in effect immediately prior to the adjustment and the denominator of which shall be the Exercise Price resulting from such adjustment.

(e) If the Corporation takes any action affecting its Common Shares to which the foregoing provisions of this clause 10, in the opinion of the board of directors of the Corporation, acting in good faith, are not strictly applicable, or if strictly applicable would not fairly adjust the rights of the Holder against dilution in accordance with the intent and purposes hereof, or would otherwise materially affect the rights of the Holder hereunder, then the Corporation may execute and deliver to the Holder an amendment hereto providing for an adjustment in the application of such provisions so as to adjust such rights as aforesaid in such manner as the board of directors of the Corporation may determine to be equitable in the circumstances, acting in good faith. The failure of the taking of action by the board of directors of the Corporation to so provide for any adjustment on or prior to the effective date of any action or occurrence giving rise to such state of facts will be conclusive evidence that the board of directors has determined that it is equitable to make no adjustment in the circumstances.

11. The following rules and procedures shall be applicable to the adjustments made pursuant to clause 10:

(a) any Common Shares owned or held by or for the account of the Corporation shall be deemed not be to outstanding except that, for the purposes of clause 10, any Common Shares owned by a pension plan or profit sharing plan for employees of the Corporation or any of its subsidiaries shall not be considered to be owned or held by or for the account of the Corporation;

(b) no adjustment in the Exercise Price shall be required unless a change of at least 1% of the prevailing Exercise Price would result, provided, however, that any adjustment which, except for the provisions of this clause 11(b), would otherwise have been required to be made, shall be carried forward and taken into account in any subsequent adjustment;

(c) the adjustments provided for in clause 10 are cumulative and shall apply to successive subdivisions, consolidations, dividends, distributions and other events resulting in any adjustment under the provisions of such clause;

(d) in the absence of a resolution of the board of directors of the Corporation fixing a record date for any dividend or distribution referred to in clause 10(a)(iii) above, the Corporation shall be deemed to have fixed as the record date therefor the date on which such dividend or distribution is effected;

(e) if the Corporation sets a record date to take any action and thereafter and before the taking of such action abandons its plan to take such action, then no adjustment to the Exercise Price will be required by reason of the setting of such record date;

(f) forthwith after any adjustment to the Exercise Price or the number of Common Shares purchaseable pursuant to the Warrants, the Corporation shall provide to the Holder a certificate of an officer of the Corporation certifying as to the amount of such adjustment and, in reasonable detail, describing the event requiring and the manner of computing or determining such adjustment; and

(g) any question that at any time or from time to time arises with respect to the amount of any adjustment to the Exercise Price or other adjustment pursuant to clause 10 shall be conclusively determined by a firm of independent chartered accountants (who may be the Corporation's auditors) selected by the board of directors of the Corporation and shall be binding upon the Corporation and the Holder.

12. With 30 days after the effective date or record date, as applicable, of any event referred to in clause 10, the Corporation shall notify the Holder of the particulars of such event and the estimated amount of any adjustment required as a result thereof.

13. On the happening of each and every such event set out in clause 10, the applicable provisions of this Warrant, including the Exercise Price, shall, ipso facto, be deemed to be amended accordingly and the Corporation shall take all necessary action so as to comply with such provisions as so amended.

14. The Corporation shall not be required to deliver certificates for Common Shares while the share transfer books of the Corporation are properly closed, having regard to the provisions of clauses 10 and 11 hereof, prior to any meeting of shareholders or for the payment of dividends or for any other purpose and in the event of the surrender of any Warrant in accordance with the provisions hereof and the making of any subscription and payment for the Common Shares called for thereby during any such period delivery of certificates for Common Shares may be postponed for not more than five (5) days after the date of the re-opening of said share transfer books. Provided, however, that any such postponement of delivery of certificates shall be without prejudice to the right of the Holder so surrendering the same and making payment during such period to receive after the share transfer books shall have been re-opened such certificates for the Common Shares called for, as the same may be adjusted pursuant to clauses 10 and 11 hereof as a result of the completion of the event in respect of which the transfer books were closed.

15. Subject as hereinafter provided, all or any of the rights conferred upon the Holder by the terms hereof may be enforced by the Holder by appropriate legal proceedings. No recourse under or upon any obligation, covenant or agreement contained herein shall be had against any shareholder or officer of the Corporation either directly or through the Corporation, it being expressly agreed and declared that the obligations under the Warrants are solely corporate obligations and that no personal liability

whatever shall attach to or be incurred by the shareholders or officers of the Corporation or any of them in respect thereof, any and all rights and claims against every such shareholder, officer or director being hereby expressly waived as a condition of and as a consideration for the issue of the Warrants.

16. (a) The Warrants and the Common Shares issuable upon exercise thereof may not be assigned or transferred in Canada for a period of six months after the issue date of the Warrant. Any purported transfer or assignment made other than in accordance with this Section 16 shall be null and void and of no force and effect.

(b) Any assignment permitted hereunder shall be made by surrender of this Warrant Certificate to the Corporation at its principal office with the Assignment Form annexed hereto duly executed and funds sufficient to pay any transfer tax. In such event, the Corporation shall, without charge, execute and deliver a new Warrant Certificate in the name of the assignee named in such Assignment Form, and the Warrants represented by this Warrant Certificate shall promptly be cancelled. This Warrant Certificate may be divided or combined with other Warrants which carry the same rights upon presentation thereof at the principal office of the Corporation together with a written notice signed by the Holder thereof, specifying the names and denominations in which new Warrants are to be issued. The terms "Warrant" and "Warrants" as used herein include any Warrants in substitution for or replacement of this Warrant, or into which the Warrant represented by this Warrant Certificate may be divided or exchanged.

17. The Holder may subscribe for and purchase any lesser number of Common Shares than the number of shares expressed in this Warrant Certificate subject to a minimum purchaser per exercise equal to the lesser of (a) 25,000 Common Shares, or (b) the total number of Common Shares subject to the Warrant Certificate. In the case of any subscription for a lesser number of Common Shares than expressed in this or any successor Warrant Certificate or a transfer of any of the Warrants pursuant to clause 16, the Holder shall be entitled to receive at no cost to the Holder a new Warrant Certificate in respect of the balance of Warrants not then exercised or transferred. Any new Warrant Certificate(s) shall be mailed to the Holder or assignee by the Corporation or, at its direction, the Transfer Agent, within five (5) business days of receipt by the Corporation of all materials required by clauses 5 or 16, as applicable.

18. Each Holder of this Warrant, the Warrant Shares or any other security issued or issuable upon exercise of this Warrant shall indemnify and hold harmless the Corporation, its directors and officers, and each person, if any, who controls the Corporation, against any losses, claims, damages or liabilities, joint or several, to which the Corporation or any such director, officer or any such person may become subject under any applicable law, insofar as such losses, claims, damages or liabilities, or actions in respect thereof, arise out of or are based upon the disposition by such Holder of the Warrants or the Common Shares issuable upon the exercise of the Warrants in violation of the terms of this Warrant Certificate.

19. If any Warrant Certificate becomes stolen, lost, mutilated or

destroyed, the Corporation shall, on such terms as it may in its discretion acting reasonably impose, issue and sign a new Warrant Certificate of like denomination, tenor and date as the Warrant Certificate so stolen, lost, mutilated or destroyed for delivery to the Holder.

20. The Corporation and the Transfer Agent may deem and treat the registered holder of any Warrant Certificate as the absolute owner of the Warrants represented thereby for all purposes, and the

Corporation and neither the Corporation nor the Transfer Agent shall be affected by any notice or knowledge to the contrary except where the Corporation or the Transfer Agent is required to take notice by statute or by order of a court of competent jurisdiction. A Holder shall be entitled to the rights evidenced by such Warrant Certificate free from all equities or rights of set-off or counterclaim between the Corporation and the original or any intermediate holder thereof and all persons may act accordingly and the receipt by any such Holder of the Common Shares purchaseable pursuant to such Warrant shall be a good discharge to the Corporation and the Transfer Agent for the same and neither the Corporation nor the Transfer Agent shall be bound to inquire into the title of any such Holder except where the Corporation or the Transfer Agent is required to take notice by statute or by order of a court of competent jurisdiction.

21. Provisions of this Warrant Certificate may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the Holder of this Warrant Certificate.

22. All notices to be sent hereunder shall be deemed to be validly given to the Holders of the Warrants on the date of receipt if personally delivered, sent by telecopier or overnight courier, charges prepaid, or five days after deposit in the United States mail, by registered or certified mail, postage prepaid, addressed to such holders at their post office addresses appearing in the register of Warrant holders caused to be maintained by the Corporation. All notices to be sent hereunder shall be deemed to be validly given to the Corporation on the date of receipt if personally delivered, sent by telecopier or overnight courier, charges prepaid, or five days after deposit in the United States mail, by registered or certified mail, postage prepaid, addressed to the Corporation at 1725 Sheridan Avenue, Suite 140, Cody, Wyoming 82414 or such other address as the Corporation shall have designated by written notice to such registered owner.

23. This Warrant shall be governed by the laws of the State of Nevada and the federal laws of the United States applicable therein (without reference to the conflict of laws provisions thereof).

IN WITNESS WHEREOF the Corporation has caused this Warrant Certificate to be signed by its duly authorized officer.

DATED as of the ___ day of _____, 2003.

ALTAIR NANOTECHNOLOGIES INC.

By: _____
Its: _____

SUBSCRIPTION FORM
(Series 2003A Warrant)

TO BE COMPLETED IF WARRANTS ARE TO BE EXERCISED:

The undersigned hereby subscribes for _____ common shares of Altair Nanotechnologies Inc. according to the terms and conditions set forth in the annexed warrant certificate (or such number of other securities or property to which such warrant entitles the undersigned to acquire under the terms and conditions set forth in the annexed warrant certificate). The subscriber acknowledges and agrees that any legend required by applicable law may be placed on any certificates representing common shares delivered to the undersigned.

Address for Delivery of Shares: _____

_____

_____

_____

Attention: _____

Tendered (U.S. $_____ per share) Exercise Price $_____

Dated at _____, this _____ day of _____, _____

Witness:) _____
) Holder's Name
)
)
) _____
) Authorized Signature
)
)
) _____
) Title (if applicable)

Signature guaranteed:

ASSIGNMENT FORM
(Series 2003A Warrant)

TO BE COMPLETED IF WARRANTS ARE TO BE ASSIGNED:

TO: ALTAIR NANOTECHNOLOGIES INC.
1725 Sheridan Avenue
Suite 140
Cody, Wyoming 82414

By signing below, the undersigned represents, warrants and certifies to Altair Nanotechnologies Inc. as follows:

(a) the undersigned is the record and beneficial owner of the Warrant(s) represented by the Warrant Certificate attached hereto; and

(b) if the Warrant(s) are to be transferred in Canada, a period of six months has elapsed since the issue date of the Warrant(s).

By signing below, the undersigned hereby transfers, assigns and conveys all right, title and interest in and to _____ of the Warrants represented by this Warrant Certificate to _____ _____ residing at _____ for good and valuable consideration. You are hereby instructed to take the necessary steps to effect this transfer.

Dated at _____, this _____ day of _____, _____.

Witness:) _____
) Holder's Name
)
)
) _____
) Authorized Signature
)
)
) _____
) Title (if applicable)

Signature guaranteed:

Exhibit II

Form of Subscription Agreement

[see attached]

ALTAIR NANOTECHNOLOGIES INC.

SUBSCRIPTION AGREEMENT

This Subscription Agreement (this "Agreement") is entered into by and between Altair Nanotechnologies Inc., a Canadian corporation (the "Corporation") and the undersigned Subscriber, effective as of the date this Agreement is accepted by the Corporation, with respect to certain Units (as defined below) of the Corporation described in the Prospectus dated February 1, 2003, as amended or supplement to date (the "Prospectus"), relating to the offering of the Units by the Corporation, which Prospectus is a part of the Corporation's Registration Statement on Form S-2, File No. 333-102592.

In consideration of the mutual covenants set forth herein, and other good and valuable consideration, the undersigned and the Corporation hereby agree and acknowledge as follows:

1. Purchase of Units. Each "Unit" consists of one common share, no par value, of the Corporation (collectively, "Shares") and one-half Series 2003A Warrant of the Corporation (collectively, "Warrants"). The purchase price per Unit is equal to 90% of the average of the closing price of the Shares, as reported on the Nasdaq SmallCap Market, during the calendar week preceding the calendar week in which the Corporation receives and accepts subscription proceeds. The undersigned hereby subscribes for and agrees to purchase the number of Units specified on the signature page of this Agreement in accordance with the terms hereof.

2. Canadian Transfer Restrictions. Neither the Shares nor the Warrants purchased pursuant to this Agreement, nor the Shares issuable upon the exercise of the Warrants (the "Warrant Shares"), may be knowingly offered or sold into Canada for a period of six months after the issue date of the Units.

3. Signature Page; Review of Prospectus. The information set forth on the signature page of this Agreement, including the information as to the undersigned's residence, is complete and accurate. The undersigned has received and reviewed a copy of the Prospectus.

4. Acceptance by the Corporation. This Agreement may be accepted or rejected by the Corporation in its sole and absolute discretion, and the undersigned shall have no right or interest in any Units unless and until this Agreement is accepted by the Corporation.

5. Governing Law; Counterparts. This Agreement will be governed by the laws of the State of Nevada and the federal laws of the United States applicable therein (without reference to the conflict of laws provisions thereof). This Agreement may be signed in counterparts, all of which taken together shall be one and the same Agreement. A facsimile copy of this Agreement or any counterpart thereto is valid as an original

6. Tender of Signature Page and Subscription Proceeds. Payment of the purchase price for any Units subscribed for is due at the time of subscription (and will be promptly returned to the subscriber if the subscription is not accepted). The purchase price shall be paid by check addressed to the Company and sent, together with an executed copy of this Agreement, to 204 Edison Way,

Reno, Nevada 89502, U.S.A., Attention: Edward Dickinson, Chief Financial Officer. The purchase price may also be paid by wire transfer. Please contact Edward Dickinson at (775) 858-3750 for wire transfer instructions or with other subscription and payment questions.

[intentionally left blank; signature page follows]

IN WITNESS WHEREOF, the undersigned has executed this Altair Nanotechnologies Inc. Subscription Agreement as of the _____ day of _____, 2003.

A. _____

(Signature of Subscriber) (Signature of Joint Subscriber, if applicable)

_____

(Name of Subscriber) (Name of Joint Subscriber, if applicable)
(Please Print or Type)

B. Number of Units subscribed for: _____

C. Calculation of Purchase Price.

(i) Average of the closing price of the Shares, as reported on the Nasdaq SmallCap Market, during the calendar week preceding the date of execution of this Agreement by subscriber: _____

(ii) 90% of the amount indicated in C(i): _____

(iii) Aggregate Purchase Price (number of Units multiplied by amount in C(ii)):
_____

(Feel free to contact Edward Dickinson, Chief Financial Officer, at (775) 858-3750, with any questions regarding calculation of the purchase price.)

D. Subscriber's Residence Address or, if Subscriber is not a natural person, principal business address (please indicate street address--post office address is not legally sufficient):
_____
_____
_____

E. Complete mailing address for delivery of certificates, notices and other shareholder communications (if different from residence/business address):
_____
_____
_____

F. Name in which Shares and Warrants are to be registered:

_____
(Please Print)

ACCEPTED AS OF _____, 2003

ALTAIR NANOTECHNOLOGIES Inc.

By: _____

Its: _____

==========

We have not authorized any dealer, salesperson or other person to give any information or represent anything not contained in this prospectus. This prospectus does not offer to sell or buy any securities in any jurisdiction where it is unlawful. The information in this prospectus is current as of February 1, 2003.

==========

2,250,000 Common Shar
750,000 Warrants

ALTAIR NANOTECHNOLOGIES

2,250,000 COMMON SHAR
750,000 WARRANTS

Prospectus

February 1, 2003

==========

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the various expenses of the offering, sale and distribution of the offered securities being registered pursuant to this registration statement (the "Registration Statement"). All of the expenses listed below will be borne by the Company. All of the amounts shown are estimates except the SEC registration fees.

Item	Amount
SEC Commission registration fees	$94
NASD registration fees	$15,000
Accounting fees and expenses	$5,000
Legal fees and expenses	$20,000
Blue Sky fees and expenses	$3,000
Printing Expenses	$1,000
Miscellaneous Expenses	$5,906
Total:	$50,000

Item 15. Indemnification of Directors and Officers

Our Bylaws

The Registrant's Bylaws provide that, to the maximum extent permitted by law, the Registrant shall indemnify a director or officer of the Registrant, a former director or officer of the Registrant, or another individual who acts or acted at the Registrant's request as a director or officer, or an individual acting in a similar capacity, of another entity, against all costs, charges and expenses, including any amount paid to settle an action or satisfy a judgment, reasonably incurred by the individual in respect of any civil, criminal, administrative, investigative or other proceeding in which the individual is involved because of that association with the Registrant or other entity.

The Canada Business Corporations Act

Section 124 of the Canada Business Corporations Act provides as follows with respect to the indemnification of directors and officers:

(1) A corporation may indemnify a director or officer of the corporation, a former director or officer of the corporation or another individual who acts or acted at the corporation's request as a director or officer, or an individual acting in a similar capacity, of another entity, against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by the individual in respect of any civil, criminal, administrative, investigative or other proceeding in

which the individual is involved because of that association with the corporation or other entity.

(2) A corporation may advance moneys to a director, officer or other individual for the costs, charges and expenses of a proceeding referred to in subsection (1). The individual shall repay the moneys if the individual does not fulfill the conditions of subsection (3).

(3) A corporation may not indemnify an individual under subsection (1) unless the individual

(a) acted honestly and in good faith with a view to the best interests of the corporation, or, as the case may be, to the best interests of the other entity for which the individual acted as director or officer or in a similar capacity at the corporation's request; and

(b) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, the individual had reasonable grounds for believing that the individual's conduct was lawful.

(4) A corporation may with the approval of a court, indemnify an individual referred to in subsection (1), or advance moneys under subsection (2), in respect of an action by or on behalf of the corporation or other entity to procure a judgment in its favor, to which the individual is made a party because of the individual's association with the corporation or other entity as described in subsection (1) against all costs, charges and expenses reasonably incurred by the individual in connection with such action, if the individual fulfills the conditions set out in subsection (3).

(5) Despite subsection (1), an individual referred to in that subsection is entitled to indemnity from the corporation in respect of all costs, charges and expenses reasonably incurred by the individual in connection with the defense of any civil, criminal, administrative, investigative or other proceeding to which the individual is subject because of the individual's association with the corporation or other entity as described in subsection (1), if the individual seeking indemnity

(a) was not judged by the court or other competent authority to have committed any fault or omitted to do anything that the individual ought to have done; and

(b) fulfills the conditions set out in subsection (3).

(6) A corporation may purchase and maintain insurance for the benefit of an individual referred to in subsection (1) against any liability incurred by the individual

(a) in the individual's capacity as a director or officer of the corporation; or

(b) in the individual's capacity as a director or officer, or similar capacity, of another entity, if the individual acts or acted in that capacity at the corporation's request.

(7) A corporation, an individual or an entity referred to in subsection (1) may apply to a court for an order approving an indemnity under this section and the court may so order and make any further order that it sees fit.

(8) An applicant under subsection (7) shall give the Director notice of the application and the Director is entitled to appear and be heard in person or by counsel.

(9) On an application under subsection (7) the court may order notice to be given to any interested person and the person is entitled to appear and be heard in person or by counsel.

Employment Agreements With Certain Officers

Pursuant to an employment agreement with William P. Long, the Chief Executive Officer and a director of the Registrant, the Registrant has agreed to assume all liability for and to indemnify, protect, save, and hold Dr. Long harmless from and against any and all losses, costs, expenses, attorneys' fees, claims, demands, liability, suits, and actions of every kind and character which may be imposed upon or incurred by Dr. Long on account of, arising directly or indirectly from, or in any way connected with or related to Dr. Long's activities as an officer and member of the board of directors of the Registrant, except as arise as a result of fraud, felonious conduct, gross negligence or

acts of moral turpitude on the part of Dr. Long. In addition, Mineral Recovery Systems, Inc. ("MRS"), a wholly-owned subsidiary of the Registrant, has agreed to assume all liability for and to indemnify, protect, save, and hold harmless Patrick Costin (Vice President of the Registrant and President of MRS) from and against any and all losses, costs, expenses, attorneys' fees, claims, demands, liabilities, suits and actions of every kind and character which may be imposed on or incurred by Mr. Costin on account of, arising directly or indirectly from, or in any way connected with Mr. Costin's activities as manager, officer, or director of MRS or the Registrant.

Other Indemnification Information

Indemnification may be granted pursuant to any other agreement, bylaw, or vote of shareholders or directors. In addition to the foregoing, the Registrant maintains insurance through a commercial carrier against certain liabilities which may be incurred by its directors and officers. The foregoing description is necessarily general and does not describe all details regarding the indemnification of officers, directors or controlling persons of the Registrant.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions or otherwise, the Registrant has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The rights of indemnification described above are not exclusive of any

other rights of indemnification to which the persons indemnified may be entitled under any bylaw, agreement, vote of stockholders or directors or otherwise.

Item 16. Exhibits.

The following exhibits required by Item 601 of Regulations S-K promulgated under the Securities Act have been included herewith or have been filed previously with the SEC as indicated below.

Exhibit No.	Description	Incorporated by Reference/ Filed Herewith (and Sequential Pa
4.1	Form of Common Stock Certificate	Incorporated by reference to Regi on Form 10-SB filed with the Comm 25, 1996, File No. 1-12497.
4.2	Amended and Restated Shareholder Rights Plan dated October 15, 1999, between the Company and Equity Transfer Services, Inc.	Incorporated by reference to the Report on Form 8-K filed with the November 19, 1999, File No. 1-124
	Form of Series 2003A Warrant	Included herein beginning on page
4.3	Opinion of Goodman and Carr LLP as to	Filed herewith.
5	legality of securities offered	
10.1	Employment Agreement between Altair International Inc. and William P. Long dated January 1, 1998	Incorporated by reference to the Report on Form 10-K filed with th March 31, 1998, as amended by Ame Annual Report on Form 10-K/A file

10.2	Employment Agreement between Fine Gold Recovery Systems Inc. and C. Patrick Costin dated August 15, 1994	Incorporated by reference to Regi on Form 10-SB filed with the Comm 25, 1996.
10.3	Altair International Inc. Stock Option Plan adopted by shareholders on May 10, 1996	Incorporated by reference to the Registration Statement on Form S- Commission on July 11, 1997.
10.4	1998 Altair International Inc. Stock Option Plan adopted by Shareholders on June 11, 1998	Incorporated by reference to the Proxy Statement on Form 14A filed on May 12, 1998.
10.5	Form of Mineral Lease	Incorporated by reference to the Report on Form 10-K filed with th March 31, 1998, as amended by Ame Annual Report on Form 10-K/A file
10.6	Purchase and Sale Agreement dated August 8, 2002 between the Company and BHP Minerals International Inc. (re Edison Way property)	Filed herewith
10.7	Note Amendment Agreement dated November 21, 2002	Incorporated by reference to the Report on Form 8-K filed with the

		November 27, 2002.
10.8	Installment Note dated August 8, 2002 (re Edison Way property)	Filed herewith.
10.9	Stock Pledge Agreement dated December 15, 2000 (Mineral Recovery Systems common stock).	Incorporated by reference to the Report on Form 8-K filed with the December 26, 2000.
10.10	Stock Pledge Agreement dated December 15, 2000 (Altair Technologies common stock).	Incorporated by reference to the Report on Form 8-K filed with the December 26, 2000.
10.11	First Amendment to Stock Pledge Agreement	Incorporated by reference to the Report on Form 8-K filed with the 2002.
10.12	Second Amended and Restated Secured Term Note dated November 21, 2002	Incorporated by reference to the No. 1 to Cu rrent Report on Form Commission on December 4, 2002, F
10.13	Trust Deed dated August 8, 2002 (re Edison Way property)	Filed herewith.
10.14	Form of Subscription Agreement	Included herein beginning on page
23.1	Consent of Deloitte & Touche LLP	Filed herewith.
23.2	Consent of Goodman and Carr LLP	Included in Exhibit No. 5 above.
24	Powers of Attorney	Incorporated by reference to the Registration Statement on Form S- Commission on January 17, 2003, F

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made of the securities registered hereby, a post-effective amendment to this Registration Statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement; notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee"

table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company, the Company has been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Company of expenses incurred or paid by a director, officer or controlling person of the Company in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Company will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-2 and has duly caused this Amendment No. 1 to Registration Statement on Form S-2 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cody, State of Wyoming, on February 5, 2003.

ALTAIR NANOTECHNOLOGIES INC.

By /s/ William P. Long

William P. Long
Chief Executive Officer

ADDITIONAL SIGNATURES

Signature	Title

/s/ William P. Long William P. Long	Chief Executive Officer and Director (Principal Executive Officer and authorized representative of the Company in the United States)
/s/ Edward H. Dickinson Edward H. Dickinson	Chief Financial Officer and Director (Principal Financial Officer and Principal Accounting Officer)
/s/ James I. Golla* James I. Golla	Director
/s/ George E. Hartman* George E. Hartman	Director
/s/ Robert Sheldon* Robert Sheldon	Director

* By /s/ William P. Long
William P. Long, Attorney-in-Fact

EXHIBIT INDEX

The following exhibits required by Item 601 of Regulations S-K promulgated under the Securities Act have been included herewith or have been filed previously with the SEC as indicated below.

Exhibit No.	Description	Incorporated by Reference/ Filed Herewith (and Sequential Pa
4.1	Form of Common Stock Certificate	Incorporated by reference to Regi on Form 10-SB filed with the Comm 25, 1996, File No. 1-12497.
4.2	Amended and Restated Shareholder	Incorporated by reference to the

	Rights Plan dated October 15, 1999, between the Company and Equity Transfer Services, Inc.	Report on Form 8-K filed with the November 19, 1999, File No. 1-124
	Form of Series 2003A Warrant	Included herein beginning on page
4.3 5	Opinion of Goodman and Carr LLP as to legality of securities offered	Filed herewith.
10.1	Employment Agreement between Altair International Inc. and William P. Long dated January 1, 1998	Incorporated by reference to the Report on Form 10-K filed with th March 31, 1998, as amended by Ame Annual Report on Form 10-K/A file
10.2	Employment Agreement between Fine Gold Recovery Systems Inc. and C. Patrick Costin dated August 15, 1994	Incorporated by reference to Regi on Form 10-SB filed with the Comm 25, 1996.
10.3	Altair International Inc. Stock Option Plan adopted by shareholders on May 10, 1996	Incorporated by reference to the Registration Statement on Form S- Commission on July 11, 1997.
10.4	1998 Altair International Inc. Stock Option Plan adopted by Shareholders on June 11, 1998	Incorporated by reference to the Proxy Statement on Form 14A filed on May 12, 1998.
10.5	Form of Mineral Lease	Incorporated by reference to the Report on Form 10-K filed with th March 31, 1998, as amended by Ame Annual Report on Form 10-K/A file
10.6	Purchase and Sale Agreement dated August 8, 2002 between the Company and BHP Minerals International Inc. (re Edison Way property)	Filed herewith
10.7	Note Amendment Agreement dated November 21, 2002	Incorporated by reference to the Report on Form 8-K filed with the November 27, 2002.
10.8	Installment Note dated August 8, 2002 (re Edison Way property)	Filed herewith.
10.9	Stock Pledge Agreement dated December 15, 2000 (Mineral Recovery Systems common stock).	Incorporated by reference to the Report on Form 8-K filed with the December 26, 2000.

10.10	Stock Pledge Agreement dated December 15, 2000 (Altair Technologies common stock).	Incorporated by reference to the Report on Form 8-K filed with the December 26, 2000.
10.11	First Amendment to Stock Pledge Agreement	Incorporated by reference to the Report on Form 8-K filed with the 2002.
10.12	Second Amended and Restated Secured Term Note dated November 21, 2002	Incorporated by reference to the No. 1 to Cu rrent Report on Form

		Commission on December 4, 2002, F
10.13	Trust Deed dated August 8, 2002 (re Edison Way property)	Filed herewith.
10.14	Form of Subscription Agreement	Included herein beginning on page
23.1	Consent of Deloitte & Touche LLP	Filed herewith.
23.2	Consent of Goodman and Carr LLP	Included in Exhibit No. 5 above.
24	Powers of Attorney	Incorporated by reference to the Registration Statement on Form S- Commission on January 17, 2003, F
