ALTAIR NANOTECHNOLOGIES INC
Form 8-K
February 03, 2004

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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report
(Date of earliest event reported): February 2, 2004 (January 15, 2004)

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

| Province of Ontario, Canada | 1-12497 | None |
|---|---|---|
| (State or other jurisdiction of incorporation) | (Commission File No.) | (IRS Employer Identification No.) |

204 Edison Way
Reno, Nevada 89502
(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (775) 858-3750

(Former Name, if Changed Since Last Report)

Item 5. Other Events

Altair Nanotechnologies Inc. (the "Company" or "we") is filing this Current Report on Form 8-K in order ensure that information regarding certain business developments is incorporated by reference into the Company's various registration statements that incorporate subsequent annual, quarterly and current reports by reference. This information is as follows:

Titanium Metals Corporation. In July 2003, we entered into the memorandum of understanding with Titanium Metals Corporation to provide custom oxide electrode feedstocks for a novel, four-year, titanium metal research program funded by the Department of Defense, Defense Advanced Research Projects Agency. The program's goal is to lower the cost of titanium metal and titanium metal alloys to enable a broader market use. The Department of Defense is

specifically interested in lowering the cost of titanium metal and titanium metal alloys to provide for a broader use in military apoplications such as aerospace and weapons systems. On January 15, 2004, we entered into a Technology Investment Agreement with Titanium Metals Corporation under which we are entitled to receive $150,000 during an initial six month period, with the possibility of receiving additional revenue in follow up phases, in exchange for engineering, optimizing and producing customized electrodes for the titanium production project. Once we have optimized the design, we will provide significant quantities (10 large-scale runs of 50 lbs. of titanium metal each) of customized electrodes to TIMET.

Our Hydrochloride/Titanium Pigment Production Process. We recently entered into a license agreement with Western Oil Sands, Inc. with respect to its possible use of the Altair Hydrochloric Pigment Process (AHPP) for the production of titanium dioxide pigment and pigment-related products at the Athabasca Oil Sands Project in Alberta, Canada, and elsewhere. Upon execution of the agreement, we granted Western Oil Sands an exclusive, conditional license to use the AHPP on heavy minerals derived from oil sands in Alberta, Canada. The agreement also contemplates a three-phase, five-year program pursuant to which the parties will work together to further evaluate, develop and commercialize the AHPP. In the first phase of the program, Western Oil Sands is expected to spend $650,000 ($500,000 of which is scheduled to be paid to Altair for work performed) to evaluate the AHPP and confirm that the AHPP will produce pigment from oil sands. Assuming phase one is successful, Western Oil Sands may elect to commence phase two, the construction of a demonstration titanium pigment production facility using the AHPP. If phase two is successful, Western Oil Sands may elect to commence phase three, the construction and operation of a full-scale commercial titanium pigment production facility using the AHPP.

The scope of the license granted to Western Oil Sands under the agreement will vary with Western Oil Sand's commitment to the project. The initial license, related to use of the AHPP on heavy minerals derived from oil sands in Alberta, Canada, will terminate if Western Oil Sands fails to complete phase one and will convert to a non-exclusive license if Western Oil Sands commences phase two but fails to complete, or spend at least $25 million in an effort to complete, phase two.

If Western Oil Sands completes phase one and commences phase two, Western Oil Sand's license will be expanded to include the right to use the AHPP for the production of titanium dioxide pigment and pigment-related products from oil sands resources, primary ore resources and titanium deposits in Canada and Minnesota and for the production of titanium dioxide pigment and pigment-related products from oil sands resources world wide. This expanded license will continue on an exclusive basis if Western Oil Sands completes phase two and completes, or spends at least $50 million in an effort to complete, phase three. This expanded licenses will continue, but on a non-exclusive basis, if Western Oil Sands completes phase two but, after spending more than $5 million but less than $50 million on phase three, does not complete phase three. If Western Oils Sands does not commence, or spends less than $5 million with respect to, phase three, the expanded license terminates.



If commercialization occurs, Western Oil Sands is required to pay Altair royalties of two percent of net sales revenue from any production facility.

In addition to our work with Western Oil Sands, we have submitted proposals to five international minerals and energy resources companies to develop and license our titanium pigment production process. We have completed initial testing for a company located in the Pacific Rim and submitted a

phase-two proposal for the economic evaluation of a demonstration titanium dioxide pigment plant that could be expanded to a full-scale plant with production capabilities of between 10,000 and 20,000 metric tons of titanium dioxide pigment per year. We have been informed that this proposal is under consideration and subject to due diligence evaluation. If the phase-two proposal is accepted in some form, we would expect to generate limited revenues in exchange for the testing and development work associated with the evaluation of a demonstration titanium dioxide plant. A licensing agreement associated with a full-scale plant may generate significant revenues in the long-term, but significant up-front revenues from such an agreement are unlikely.

We submitted phased development proposals for the testing and economic evaluation of our titanium pigment production process technology to the other four minerals and energy resources companies during the first three quarters of 2003. We recently entered into a testing and development license with one of these companies, called Avireco and located in Vietnam, and anticipate that we may enter into additional testing agreements during 2004. If the results of testing by one or more such companies is positive, we hope to enter into a long-term license agreement for regional exclusive use of the pigment technology. If one or more of such minerals and energy resources companies obtains such a license and subsequently constructs a full-scale production plant, we would expect to receive development fees and royalties over the long-term, but no significant up-front payments. We can provide no assurance that the results of any testing will be positive, that we will enter into a long-term license or that the licensee will construct a full-scale production plan in order to use our technology.

RenaZorb(TM). RenaZorb(TM) is a potential drug using our technology that may be useful in phosphate control in kidney dialysis patients. Pre-clinical trials, in-vitro testing and animal testing done to date indicate RenaZorb(TM) may be effective for use with kidney dialysis patients with end-stage renal disease. We have not, however, conducted human trials using RenaZorb(TM) or submitted an application to the FDA seeking approval to market RenaZorb(TM). During April 2003, we hired a consultant to contact pharmaceutical companies that may be interested in doing further tests and negotiating a license agreement for rights to test and produce RenaZorb(TM). To date, several such companies have expressed an interest in RenaZorb(TM), which is a lanthanum-based compound. An alternative lanthanum-based drug candidate, Fosrenol(TM), produced by Shire Pharmaceuticals Group plc, is currently under review for approval by the FDA. We do not expect to be able to enter into a license agreement unless and until Fosrenol(TM) obtains FDA approval, and we cannot predict when or if FDA approval for Fosrenol(TM) will be granted. Even if FDA approval is granted for Fosrenol(TM), we can provide no assurance that we will subsequently be able to enter into a license agreement for our lanthanum-based product, RenaZorb(TM). If we are able to enter into a license agreement, we are uncertain what the terms of the license would be.

Battery Technology. We have developed a proprietary process to manufacture nano-sized lithium titanate spinel for use in lithium ion batteries requiring fast charge and discharge rates and high energy, such as car batteries. Battery prototypes utilizing our nano-sized lithium titanate spinel have been developed by Rutgers Energy Storage Research Group (formerly known as



Telcordia Technologies) and, according to Rutgers Energy, exhibit battery characteristics that significantly exceed Department of Energy standards. The Department of Energy standards, as reported by Rutgers Energy, were established through a cooperative research and development program between the federal government and the United States Council for Automotive Research. To date, we have supplied only sample quantities of lithium titanate spinel to Rutgers

Energy and other battery research groups, and we have no contracts for delivery of additional materials. New battery technology and the incorporation of new materials such as lithium titanate spinel may require long lead times for development prior to commercial production. There is no certainty as to when sales of our lithium titanate spinel will reach commercial levels, if ever.

Dental Applications. We have developed a nano-sized zirconium oxide material that may have applications in dental products such as fillings and prosthetic devices. We have recently placed our first samples of this material with developers of non-toxic UV-cured dental materials. Zirconium oxide is currently being tested in this application by others but it is not currently used commercially in dental devices, and there is no assurance that future dental applications will prove feasible or economic. Zirconia does possess certain characteristics such as hardness and opaqueness to x-rays that suggest use in dental filling applications in a polymer matrix, but this application would have to be proven through testing. Testing is being conducted by the Southwest Research Institute, San Antonio, Texas under a National Institute of Health grant.

Government Sponsored Research. In September 2003, we entered into an agreement with Western Michigan University to provide research services involving a technology used in the detection of chemical, biological and radiological agents. The teaming/research agreement with Western Michigan University, funded by the Department of Energy, provides for total payments to Altair of $356,500 over a two-year period. H.R. 2673, the conference committee report for the omnibus spending bill passed in December 2003, earmarks an additional $2 million to be used by the Department of Energy to continue the research. We are also actively pursuing other government grants through joint teaming agreements and government Small Business Innovative Research proposals.

Altair Centrifugal Jig and Tennessee Mineral Property. In October 2003, we entered into a technology license agreement with Bateman Luxembourg S.A. for the manufacture, installation and operation of our centrifugal jig. Under the terms of the agreement, Bateman will have exclusive use of our centrifugal jig for specifically identified applications in selected territories throughout the world. We will be compensated by Bateman through a licensing fee for each project managed by Bateman that utilizes our centrifugal jig. Compensation is determined by an agreed upon formula and will vary based on the size and scope of the individual projects. We retain the right to use our centrifugal jig for our own projects and may terminate the agreement if Bateman does not meet certain production thresholds. There is no assurance that Bateman will ever utilize our centrifugal jig in its projects or pay fees to Altair. Bateman is not required to pay any fees under the agreement unless and until Bateman begins generating revenue using our centrifugal jig.

Notwithstanding this positive development with respect to our centrifugal jig, we are taking steps to more narrowly focus our limited resources on the development and exploitation of our titanium and nanoparticle processing technology. Accordingly, we have determined to limit our expenditures on our centrifugal jig and our Tennessee mineral property to the minimum amount necessary to preserve their basic value for the short term. We are reviewing the viability and desirability of various strategic alternatives for our centrifugal jig and our Tennessee mineral property, including their possible sale, use in a joint venture, spin-off to shareholders or abandonment. We can not, however, provide any assurance that we will be successful in using or disposing of such assets in a manner that provides value to shareholders.



This report contains various forward-looking statements. These 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 these forward-looking statements, you should keep in mind the risk factors noted in the Company's periodic filings with the SEC. 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 report or any applicable filings materialize, or any other underlying assumptions prove incorrect, the Company's actual results may vary materially from those anticipated, estimated, projected, or intended.

Item 7. Financial Statements and Exhibits

(c) Exhibits.

| Exhibit No. | Exhibit | Incorporated by Referenc |
|---|---|---|
| 10.1 | Technology Investment Agreement dated January 8, 2004, between Titanium Metals Corporation and Altair Nanomaterials, Inc.* | Filed herewith. |
| 10.2 | License Agreement for Altair TiO2 Pigment Technology between Altair Nanotechnologies, Inc. and Western Oil Sands, Inc.* | Filed herewith. |

*Certain confidential portions of this exhibit were omitted. This exhibit, with the omitted information, has been filed separately with the Secretary of the SEC pursuant to an Application for Confidential Treatment under Rule 24b-2 under the Securities Exchange Act of 1934.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this Current Report on Form 8-K to be signed on its behalf by the undersigned thereunto duly authorized.

Altair Nanotechnologies Inc.

February 2, 2004
Date

By: /s/ Edward Dickinson
Edward Dickinson
Chief Financial Officer