ALTAIR NANOTECHNOLOGIES INC
Form 10-Q
November 15, 2004

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

FORM 10-Q

[X] QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 2004

[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM __________________ TO __________________

ALTAIR NANOTECHNOLOGIES INC.
(Exact name of registrant as specified in its charter)

| Canada | 1-12497 | 33-1084375 |
|---|---|---|
| (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

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES [X] NO [ ]

Indicate by check mark whether the registrant is an accelerated filer (as defined in Rule 12b-2 of the Act). YES [ ] NO [X]

As of November 10, 2004 the registrant had 49,855,201 Common Shares outstanding.

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES

(A Development Stage Company)
CONSOLIDATED BALANCE SHEETS
(Expressed in United States Dollars)
(Unaudited)

| | September 30, 2004 | December 31, 2003 |
|---|---|---|
| **ASSETS** | | |
| Current Assets | | |
| Cash and cash equivalents | $ 8,868,422 | $ 3,869,669 |
| Accounts receivable, net | 213,684 | 13,324 |
| Other current assets | 118,886 | 79,187 |
| Total current assets | 9,200,992 | 3,962,180 |
| Property, Plant and Equipment, net | 6,322,783 | 6,618,805 |
| Patents, net | 996,299 | 1,060,569 |
| Other Assets | 18,200 | 18,200 |
| Total Assets | $ 16,538,274 | $ 11,659,754 |
| **LIABILITIES AND SHAREHOLDERS' EQUITY** | | |
| Current Liabilities | | |
| Trade accounts payable | $ 224,574 | $ 85,255 |
| Accrued liabilities | 696,073 | 311,886 |
| Total current liabilities | 920,647 | 397,141 |
| Note Payable, Long-Term Portion | 2,830,488 | 2,686,130 |
| Commitments and Contingencies (Note 4) | | |
| Shareholders' Equity | | |
| Common stock, no par value, unlimited shares authorized; 49,288,703 and 43,188,362 shares issued and outstanding at September 30, 2004 and December 31, 2003 | 64,305,664 | 54,789,896 |
| Deficit accumulated during the development stage | (51,518,525) | (46,213,413) |
| Total Shareholders' Equity | 12,787,139 | 8,576,483 |
| Total Liabilities and Shareholders' Equity | $ 16,538,274 | $ 11,659,754 |

See notes to the consolidated financial statements.



ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES

(A Development Stage Company)
CONSOLIDATED STATEMENTS OF OPERATIONS
(Expressed in United States Dollars)
(Unaudited)

| | Three Months Ended September 30, | | Nine Months E[nded] September | |
|---|---|---|---|---|
| | 2004 | 2003 | 2004 | |
| Sales | $ 346,907 | $ 17,318 | $ 640,889 | $ |
| Cost of Sales | 293,685 | 16,706 | 604,517 | |
| Gross Margin | 53,222 | 612 | 36,372 | |
| Operating Expenses | | | | |
| Mineral exploration and development | 6,250 | 25,522 | 88,982 | |
| Research and development | 221,054 | 246,585 | 815,881 | |
| Professional services | 386,331 | 111,753 | 1,117,667 | |
| General and administrative expenses | 632,819 | 584,937 | 2,577,614 | |
| Depreciation and amortization | 226,823 | 220,259 | 668,333 | |
| Asset impairment | -- | -- | -- | |
| Total operating expenses | 1,473,277 | 1,189,056 | 5,268,477 | |
| Loss from Operations | 1,420,055 | 1,188,444 | 5,232,105 | |
| Other (Income) Expense: | | | | |
| Interest expense | 50,336 | 141,658 | 145,732 | |
| Interest income | (29,706) | (631) | (73,080) | |
| Loss (gain) on foreign exchange | (361) | -- | 356 | |
| Loss on extinguishment of debt | -- | -- | -- | |
| Gain on forgiveness of debt | -- | -- | -- | |
| Loss on redemption of convertible debentures | -- | -- | -- | |
| Total other expense, net | 20,269 | 141,027 | 73,008 | |
| Net Loss | 1,440,324 | 1,329,471 | 5,305,113 | |
| Preferential Warrant Dividend | -- | 416,014 | -- | |
| Net Loss Applicable to Shareholders | $ 1,440,324 | $ 1,745,485 | $ 5,305,113 | $ |
| Loss per Common Share - Basic and Diluted | $ 0.03 | $ 0.05 | $ 0.11 | $ |
| Weighted Average Shares - Basic and Diluted | 49,121,984 | 38,129,702 | 48,401,132 | 3 |

See notes to the consolidated financial statements.

ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES
(A Development Stage Company)
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Expressed in United States Dollars)
(Unaudited)

| | Nine Months Ended September 30, 2004 | Nine Months Ended September 30, 2003 | Perio April 9, (date inceptio Septembe 2004 |
|---|---|---|---|
| Cash flows from development activities: | | | |
| Net loss | $ (5,305,113) | $ (3,981,056) | $(50,8 |
| Adjustments to reconcile net loss to net cash used in development activities: | | | |
| Depreciation and amortization | 668,333 | 657,243 | 7,0 |
| Shares issued for services | 178,000 | 89,298 | 5 |
| Shares issued for interest | -- | 133,315 | 1,2 |
| Issuance of common stock options to non-employees | 262,045 | 30,256 | 3,3 |
| Issuance of common stock options to employees | 39,001 | 33,600 | 1 |
| Variable accounting on stock options | (406,848) | -- | 4 |
| Issuance of common stock warrants | -- | 37,065 | 1,0 |
| Amortization of discount on note payable | 144,358 | 134,626 | 1,1 |
| Amortization of debt issuance costs | -- | -- | 5 |
| Asset impairment | -- | -- | 2,7 |
| Loss on extinguishment of debt | -- | -- | 9 |
| Loss on redemption of convertible debentures | -- | -- | 1 |
| Gain on forgiveness of debt | -- | -- | (7 |
| Loss on disposal of fixed assets | 33,393 | -- | |
| Gain on foreign currency translation | -- | -- | (5 |
| Deferred financing costs written off | -- | -- | 5 |
| Changes in assets and liabilities (net of effects of acquisition): | | | |
| Accounts receivable | (200,360) | 115,803 | (2 |
| Other current assets | (39,699) | (42,757) | 1,6 |
| Other assets | -- | -- | (1 |
| Trade accounts payable | 139,319 | (120,242) | 2 |
| Accrued liabilities | 384,187 | (24,674) | 4 |
| Net cash used in development activities | (4,103,384) | (2,937,523) | (30,3 |
| Cash flows from investing activities: | | | |
| Asset acquisition | -- | -- | (9,6 |
| Purchase of property and equipment | (341,433) | (68,476) | (4,0 |
| Proceeds received from sale of property and equipment | -- | -- | |
| Purchase of patents | -- | -- | (1,8 |
| Net cash used in investing activities | (341,433) | (68,476) | (15,5 |

(continued)



ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES
(A Development Stage Company)
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Expressed in United States Dollars)
(Unaudited)

| | Nine Months Ended September 30, 2004 | Nine Months Ended September 30, 2003 | Period April 9, 1973 (date of inception) to September 30, 2004 |
|---|---|---|---|
| Cash flows from financing activities: | | | |
| Issuance of common shares for cash, net of issuance costs | $ -- | $ 4,324,898 | $ 26,394,979 |
| Issuance of shares under Employee Stock Purchase Plan | -- | 442,230 | 698,858 |
| Issuance of convertible debenture | -- | -- | 5,000,000 |
| Proceeds from exercise of common stock options | 737,709 | 98,000 | 3,935,036 |
| Proceeds from exercise of common stock warrants | 8,705,861 | 631,882 | 17,040,775 |
| Issuance of related party notes | -- | -- | 174,243 |
| Issuance of notes payable | -- | -- | 19,130,540 |
| Payment of notes payable | -- | (1,120,000) | (14,663,579) |
| Payment of related party notes | -- | -- | (174,243) |
| Payment on capital lease | -- | -- | (27,075) |
| Purchase of call options | -- | -- | (449,442) |
| Redemption of convertible debentures | -- | -- | (2,250,938) |
| Net cash provided by financing activities | 9,443,570 | 4,377,010 | 54,809,154 |
| Net increase in cash and cash equivalents | 4,998,753 | 1,371,011 | 8,868,422 |
| Cash and cash equivalents, beginning of period | 3,869,669 | 244,681 | -- |
| Cash and cash equivalents, end of period | $ 8,868,422 | $ 1,615,692 | $ 8,868,422 |
| Supplemental disclosures: | | | |
| Cash paid for interest | $ -- | $ 84,009 | |

(continued)

ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES
(A Development Stage Company)
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Expressed in United States Dollars)
(Unaudited)

Supplemental schedule of non-cash investing and financing activities:

For the nine months ended September 30, 2004:

- None

For the nine months ended September 30, 2003:

- We issued 695,052 common shares to Doral 18, LLC in payment of $280,000 of principal on our note payable. The conversion of the note resulted in additional interest expense of $133,315.
- On or about June 2, 2003, we repriced warrants, held by a shareholder, for 796,331 common shares. The repriced warrants have an incremental fair value of $176,472 and have been accounted for as a preferential warrant dividend.
- In September 2003, we entered an agreement with a shareholder wherein the shareholder agreed to exercise 631,882 warrants that had an exercise price of $1.00 each. In return, we issued the shareholder 631,882 new warrants having an exercise price of $1.75 each. The new warrants have a fair value of $416,014 and have been accounted for as a preferential warrant dividend.

(concluded)

See notes to the consolidated financial statements.



ALTAIR NANOTECHNOLOGIES INC. AND SUBSIDIARIES
(A Development Stage Company)
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(UNAUDITED)

Note 1. Basis of Preparation of Financial Statements

These unaudited interim financial statements of Altair Nanotechnologies Inc. and its subsidiaries (collectively, "Altair", "we" or the "Company") have been prepared in accordance with the rules and regulations of the United States Securities and Exchange Commission (the "Commission"). Such rules and regulations allow the omission of certain information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States, so long as the statements are not misleading. In the opinion of Company management, these financial statements and accompanying notes contain all adjustments (consisting of only normal recurring adjustments) necessary to present fairly the financial position and results of operations for the periods shown. These interim financial statements should be read in conjunction with the audited financial statements and notes thereto contained in our Annual Report on Form 10-K for the year ended December 31, 2003, as filed with the Commission on March 26, 2004.

The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should we be unable to continue as a going concern. Our continuation as a going concern is dependent upon our ability to generate sufficient cash flow to meet our obligations on a timely basis, to obtain additional financing or refinancing as may be required, to develop commercially viable products and processes, and ultimately to establish successful operations. We are in the process of developing and commercializing our nanomaterials and titanium dioxide pigment technology. We have financed operations primarily through the issuance of equity securities (common stock, convertible debentures, stock options and warrants), and by the issuance of debt (term notes). Additional funds will be required to complete development activities. We believe that current working capital, cash receipts from anticipated sales, and funding through sales of common stock will be sufficient to enable us to continue as a going concern through 2005.

The results of operations for the three- and nine-month periods ended September 30, 2004 are not necessarily indicative of the results to be expected for the full year.

Note 2. Summary of Significant Accounting Policies

Net Loss Per Common Share - Basic net loss per common share is calculated by dividing net loss by the weighted average number of common shares outstanding during the period. The existence of stock options, warrants, and convertible securities affects the calculation of loss per share on a fully diluted basis. When a net loss is reported, the number of shares used for basic and diluted net loss per share is the same since the effect of including the additional common stock equivalents would be antidilutive.

Long-Lived Assets - We evaluate the carrying value of long-term assets, including intangibles, when events or circumstance indicate the existence of a possible impairment, based on projected undiscounted cash flows, and recognize impairment when such cash flows will be less than the carrying values. Measurement of the amounts of impairments, if any, is based upon the difference between carrying value and fair value. Events or circumstances that could indicate the existence of a possible impairment include obsolescence of the technology, an absence of market demand for the product, and/or continuing technology rights protection. Management believes the net carrying amount of long-lived assets will be recovered by future cash flows generated by commercialization of the titanium processing technology.

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Deferred Income Taxes - We use the asset and liability approach for financial accounting and reporting for income taxes. Deferred income taxes are provided for temporary differences in the bases of assets and liabilities as reported for financial statement purposes and income tax purposes. We have recorded a valuation allowance against all net deferred tax assets. The valuation allowance reduces deferred tax assets to an amount that represents management's best estimate of the amount of such deferred tax assets that more likely than not will be realized.

Stock-Based Compensation - Our stock option plans are subject to the provisions of Statement of Financial Accounting Standards ("SFAS") No. 123, Accounting for Stock-Based Compensation. As allowed by the provisions of SFAS 123, employee and director stock-based compensation expense is measured using the intrinsic-value method as prescribed by Accounting Principles Board ("APB") Opinion No. 25, Accounting for Stock Issued to Employees, or the fair value method described in SFAS 123. We have elected to follow the accounting provisions of APB 25 for our employee and director stock-based awards and to furnish the pro forma disclosures required under SFAS 123.

We account for stock options and warrants issued to non-employees in accordance with SFAS 123. To estimate compensation expense that would be recognized under SFAS 123 for all stock-based awards, we have used the modified Black-Scholes option pricing model. If we had accounted for our stock options issued to employees and directors using the accounting method prescribed by SFAS 123, our net loss and loss per share would be as follows:

| | Three Months Ended September 30, | | Nine Months Ended September 30, | |
|---|---|---|---|---|
| | 2004 | 2003 | 2004 | 2003 |
| Net loss applicable to shareholders: | | | | |
| As reported | $1,440,324 | $1,745,485 | $5,305,113 | $4,573,5 |
| Add : stock-based employee compensation income calculated under APB Opinion No. 25 included in reported net loss | 328,770 | 33,600 | 367,847 | 33,6 |
| Add: stock-based employee compensation expense determined under value based method for all awards | 208,030 | 184,951 | 1,172,439 | 262,9 |
| Pro forma | $1,977,124 | $1,964,036 | $6,845,399 | $4,870,0 |
| Loss per common share (both basic and diluted): | | | | |
| As reported | $ 0.03 | $ 0.05 | $ 0.11 | $ 0. |
| Pro forma | $ 0.04 | $ 0.05 | $ 0.14 | $ 0. |

We estimated the fair value of options and rights granted under our employee stock-based compensation arrangements at the date of grant using the Black-Scholes model with the following weighted-average assumptions:

| | Nine Months Ended September 30, | |
|---|---|---|
| | 2004 | 2003 |
| Dividend yield | None | None |
| Expected volatility | 73% | 65% |
| Risk-free interest rate | 4.23% | 2.92% |
| Expected life (years) | 6.4 | 5.0 |
| Weighted average fair value of grants | $ 1.15 | $ 0.48 |



In August 2004, we issued 300,000 stock options to an employee that vest ratably based on the market value of our common shares. As of September 30, 2004, management did not believe it was probable that the stock price would reach the stated market price and therefore did not include the fair value of the stock options in the disclosure above. Management will reevaluate the probability of this contingency at each reporting period and include the fair value of these stock options when they believe it is probable they will achieve the stated market price.

Revenue Recognition - Revenue is generated from product sales and services performed under contract. Revenue is recognized for product sales at the time the purchaser has accepted delivery of the product and for services when the service has been performed and is billable in accordance with contract terms. Based on the specific terms and conditions of each contract/grant, revenues may be recognized on a time and materials basis as costs are incurred, a percentage of completion basis as stipulated milestones are achieved, or after final project reports are submitted. For the three months ended September 30, 2004, we recognized $4,018 from product sales and $342,889 from contract services. For the nine months ended September 30, 2004, we recognized $6,861 from product sales and $634,028 from contract services.

Overhead Allocation - Facilities overhead, which is comprised primarily of occupancy and related expenses, is initially recorded in general and administrative expenses and then allocated to research and development and cost of sales based on labor costs.

Recent Accounting Pronouncements - In March 2004, the FASB reached a consensus on Emerging Issues Task Force (EITF) Issue No.03-1, "The Meaning of Other-Than-Temporary Impairment and Its Application to Certain Investments." This pronouncement provides guidance to determine the meaning of other-than-temporary impairment and its application to investments classified as either available-for-sale or held-to-maturity (including individual securities and investments in mutual funds), and investments accounted for under the cost method or the equity method. The guidance for evaluating whether an investment is other-than-temporarily impaired is to be applied in other-than-temporary impairment evaluations made in reporting periods beginning after June 15, 2004. The adoption of Issue No. 03-1 did not have a material impact on our financial statements.

Note 3. Common Stock

Common stock transactions during the nine months ended September 30, 2004 were as follows:

| | Common Stock | |
|---|---|---|
| | Shares | Amount |
| Balance, December 31, 2003 | 43,188,362 | $ 54,789,896 |
| Exercise of common stock warrants | 5,576,441 | 8,705,861 |
| Exercise of common stock options | 423,900 | 737,709 |
| Common stock issued for services | 100,000 | 178,000 |
| Variable accounting on common stock options | -- | (406,848) |
| Common stock options issued to employees | -- | 39,001 |
| Common stock options issued to non-employees | -- | 262,045 |
| Balance, September 30, 2004 | 49,288,703 | $ 64,305,664 |

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Note 4. Notes Payable

Notes payable consisted of the following at September 30, 2004 and December 31, 2003:

| | September 30, 2004 | December 31, 2003 |
|---|---|---|
| Note payable to BHP Minerals International, Inc. | $2,830,488 | $2,686,130 |
| Less current portion | -- | -- |
| Long-term portion of notes payable | $2,830,488 | $2,686,130 |

The note payable to BHP Minerals International, Inc. is in the face amount of $3,000,000. Interest on the note does not begin to accrue until August 8, 2005. As a result, we imputed the interest and reduced the face amount of the note payable by $566,763 at the date of issuance, an amount that is being amortized to interest expense over the life of the note. 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.

Note 5. Intangible Assets

Our intangible assets consist of patents and related expenditures associated with the nanomaterials and titanium dioxide pigment technology. In accordance with SFAS No. 142, we are amortizing these assets over their useful lives. The amortized intangible asset balance as of September 30, 2004 was:

| | Gross Carrying Amount | Accumulated Amortization | Net Carrying Amount |
|---|---|---|---|
| Patents and related expenditures | $ 1,517,736 | $ (521,437) | $ 996,299 |

The weighted average amortization period for patents and related expenditures is approximately 16.5 years. Amortization expense was $64,270 for the nine months ended September 30, 2004, which represented the amortization relating to the identified intangible assets still required to be amortized under SFAS No. 142. For each of the next five years, amortization expense relating to intangibles will be $85,680 per year. Management believes the net carrying amount of intangible assets will be recovered by future cash flows generated by commercialization of the titanium processing technology.

Note 6. Related Party Transactions

In July 2004, we incurred a liability of $6,000 payable to Advanced Technology Group LLC ("ATG") in connection with a consulting agreement. David King, a member of our board of directors, is the managing partner of ATG. Under the terms of the agreement, ATG provides consulting services in reviewing federal grant opportunities and provides proposal development assistance on selected programs. These services are paid at the rate of 6% of the first $1,000,000 and 3.5% of amounts over $1,000,000 in grant monies secured from federal grants obtained through assistance by ATG.



Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion summarizes the material changes in our financial condition between December 31, 2003 and September 30, 2004 and the material changes in our results of operations and financial condition between the three-and nine-month periods ended September 30, 2003 and September 30, 2004. This discussion should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations included in the Company's Annual Report on Form 10-K for the year ended December 31, 2003.

Overview

We are a development-stage Canadian company, with principal assets and operations in the United States, whose primary business is developing and commercializing nanomaterial and titanium dioxide pigment technologies. We have recently organized into two divisions, Life Sciences and Performance Materials, in anticipation of generating a substantial amount of business activity and revenues from life sciences products, specifically pharmaceuticals and drug delivery products. At present, these revenues are not significant. Our research, development, production and marketing efforts are currently directed toward six market applications that utilize our proprietary technologies:

The Performance Materials Division

- Advanced Materials for Paints, Coatings and Sensors;
  - The production of titanium dioxide pigments;
  - The production of nano-structured powders for thermal spray applications;
  - The production of nano-structured powders for nano-sensor applications.
- Advanced Materials for Improving Process Technologies
  - The development of titanium dioxide electrode structures in connection with a research program aimed at developing a lower-cost process for producing titanium metals and related alloys;
  - The development and production of NanoCheck TM phosphate binding materials for prevention of algae growth.
- Advanced Materials for Alternative Energy
  - The development of materials for high performance batteries, fuel cells and photovoltaics.

The Life Sciences Division

- Pharmaceutical Products
  - RenaZorb(TM), a new active pharmaceutical ingredient, which is designed to be useful in the treatment of elevated serum phosphate levels in patients undergoing kidney dialysis.
- Drug Delivery Products
  - TiNano SpheresTM and No-DefeatTM are rigid, hollow, porous high surface area ceramic micro structures that are derived from Altair's proprietary process technology.
- Dental Materials
  - The development of nanomaterials for use in various products for dental fillings.

We also provide contract research services on select projects where we can utilize our resources to develop intellectual property and/or new products and technology.

During the remainder of 2004, we expect sales revenues to come from contracts in place to (1) provide research involving a technology used in the detection of chemical, biological and radiological agents, (2) provide custom oxide feedstocks for a titanium metal research program funded by the Department of Defense, (3) license and evaluate our pigment production process for the



production of $TiO_2$ pigment and pigment-related products from titanium-bearing oil sands and (4) produce lithium titanate battery materials under a development program funded by a National Science Foundation Small Business Innovative Research grant. See Three Months Ended September 30, 2004 Compared to Three Months Ended September 30, 2003 below for additional information regarding customer contracts and revenue expectations for the fourth quarter of 2004.

## Recent Business Developments

On August 16, 2004, we announced the appointment of Alan J. Gotcher, Ph.D., as Chief Executive Officer and director of the Company. Dr. Gotcher filled the position created by the May 1, 2004 retirement of Dr. William P. Long. Dr. Gotcher had been working with Altair as a management consultant since

May 2004. Before joining Altair, Dr. Gotcher was chairman and CEO of Nevada-based InDelible Technologies, Inc., a development stage company that provides secure logistics through covert bar code marking systems and invisible bar code reading technologies. Prior to founding InDelible, Dr. Gotcher spent fourteen years with Avery Dennison where he served as senior vice president, Manufacturing & Technology, and chief technology officer. Prior to that, he was laboratory director, U.S. Corporate Research and Development, Raychem Corporation.

Performance Materials Division

Nanosensors Program

In September 2003, we entered into an agreement with Western Michigan University ("WMU") to provide research services and materials to support research involving a technology used in the detection of chemical, biological and radiological agents. The teaming/research agreement with WMU, funded by the Department of Energy ("DOE"), provided for total payments to Altair of $356,500 over a two-year period. Total revenues generated by Altair under this agreement through September 30, 2004 were $246,353. On September 30, 2004, we announced that the DOE awarded a stage 2 contract for the project under which we will continue joint development work for the design, synthesis and characterization of nanosensors for chemical, biological and radiological agents. Altair will receive an additional $672,000 over the two-year term of the stage 2 contract.

Nanocheck(TM) Products

Nanocheck(TM) is a lanthanum-based compound that can be used to treat water for the removal of a wide range of deleterious impurities. It has no reported human health hazards and works effectively in existing filtration units without the need for purchasing additional equipment. Nanocheck(TM) limits algae growth by removing the phosphate nutrients that algae require in order to reproduce. We have conducted in-house tests of Nanocheck(TM) for phosphate removal in swimming pool simulations, and a pool and spa chemical company has performed materials testing that shows effective phosphate removal and high kinetics. Larger scale swimming pool tests being performed by a pool chemical company began in mid-August 2004 and are continuing. These were delayed first due to internal issues within the pool chemical company and then due to the effects of hurricanes in the locale where tests were to be conducted. As a result, tests are now scheduled through the summer of 2005. Negotiations with major pool chemical companies are underway and if testing is successful and sales agreements are entered into, significant sales of products incorporating Nanocheck(TM), if any, may begin in 2006.

During the second quarter of 2004, we performed a study using Nanocheck(TM) to remove arsenic from drinking water. The results of the study indicate that Nanocheck's performance is not significantly superior to other less costly products that are commercially available. As a result, we have elected not to pursue this application of Nanocheck(TM) at this time.

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Battery Applications

In August 2004, we began work under a $100,000 Small Business Innovative Research grant awarded by the National Science Foundation to fund joint development work on next generation lithium ion power sources with Hosokawa Micron's Nanoparticle Technology Center and Rutgers University's Energy

Storage Research Group. The grant was effective July 1, 2004 with the work to be done over a six-month period. We expect to supply nano-sized anode and cathode materials for design and development of high capacity lithium ion battery and super capacitor applications. Nanomaterials are expected to improve the performance of these systems and enable their use in applications where immediate high power delivery is necessary.

During October, 2004 we were awarded a European patent for our "Process For Making Lithium Titanate", a product used in the development of lithium ion batteries and super capacitors.

Other
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Our development agreement with Titanium Metals Corporation provides us with the opportunity to supply enough titanium dioxide micro porous electrodes to produce 50 pounds of titanium metal per day. We have met the contract and project goals and the project continues to move forward successfully.

A contract to supply testing quantities of customized nano-sized coating materials was awarded, the third such contract we have entered with this customer.

We have now completed approximately 50% of the Phase 1 workscope for the Western Oil Sands Project.

Life Science Division

RenaZorb(TM) Products
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In 2005, we plan to generate revenues through the licensing of RenaZorb(TM), a potential drug we developed that may be useful in phosphate control in kidney dialysis patients. In September 2004, we announced the results of a pre-clinical animal study of RenaZorb(TM) which was conducted to determine its phosphate binding efficiency. The results indicated that RenaZorb(TM) bound more phosphate than Renagel, a drug currently on the market, and Fosrenol, a drug of similar compounds produced by Shire Pharmaceuticals Group plc ("Shire"). Fosrenol was approved by the FDA on October 26, 2004. As a result, we hope to be able to begin negotiating a license agreement for RenaZorb(TM) with one or more pharmaceutical companies. We have concentrated our efforts on making contacts with interested pharmaceutical companies, producing an information package for use in marketing RenaZorb(TM), and continuing with product development and testing work in our laboratories. We have sent the RenaZorb(TM) information package to over 40 pharmacuetical and biotechnology companies and preliminary discussions are underway which may lead to a licensing agreement for RenaZorb(TM). We can provide no assurance that we will enter into such a license agreement or that such license agreement would generate significant revenue in the short term.

Other
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Two patent applications were filed for the TiNano Sphere drug delivery technology platform.



We continue to work with a research consortium sponsored by the National Institutes of Health to strengthen polymer-based dental fillings utilizing our nano-zirconia.

With respect to the Tennessee mineral property, we are continuing our efforts to terminate leases and draft a remediation plan. Remediation work, which involves, among other things, the removal of the pilot plant and related facilities and restoration of the property, will begin after the remediation plan is approved by the applicable regulatory authorities. Costs of remediation are uncertain until such plan approval is obtained and the scope of the work is determined. We expect this process to continue through the first quarter of 2005.

A major minerals processing firm is currently testing the Centrifugal Jig. The carrying costs associated with it are minimal, and we plan to retain the Centrifugal Jig at least until the minerals processing firm has completed its testing and development work. We may be able to generate limited revenue (through licensing fees or in sale transaction) from the Centrifugal Jig in the foreseeable future.

## Liquidity and Capital Resources

We generated $640,889 of sales revenues in the first nine months of 2004 but incurred a net loss of $5,305,113, resulting in an accumulated deficit of $51,518,525 at September 30, 2004.

Our cash and short-term investments increased from $3,869,669 at December 31, 2003 to $8,868,422 at September 30, 2004 due primarily to the receipt of $737,709 from the exercise of common stock options and receipt of $8,705,861 from the exercise of warrants. These increases in cash and short-term investments were partially offset by normal cash operating expenditures.

Current and Expected Liquidity. At September 30, 2004, we had cash and cash equivalents of $8,868,422, an amount that would be sufficient to fund our basic operations through December 31, 2005 at current working capital expenditure levels. We will, however, increase expenditure levels during the remainder of 2004 and in 2005 as we execute on existing and expected contracts. Accordingly, if we are unable to increase our revenues proportionately, we will require additional financing to provide working capital to fund our day-to-day operations. As described above, we expect that revenues from our contract work will continue to expand incrementally in 2004.

We do not, however, expect to receive significant licensing or product sales revenue unless, and until, we are able to enter into licensing agreements related to Renazorb(TM), Nanocheck(TM), or our drug delivery systems. We do not expect to sign any such licensing agreements until early 2005, if at all, and expect that, when such licensing agreements are in place, we will generate a revenue stream consisting of an up-front licensing fee, milestone payments as development progresses and royalties when the products are brought to market.

Although we currently have capital sufficient to fund our operations at current levels, we expect our capital needs to increase during the remainder of 2004 and 2005. We have hired, and expect to continue to hire, additional personnel to satisfy our contractual obligations under existing and anticipated services agreements, and to provide administrative support. In addition, our management is focused on facilitating the commercialization of one or more of its products in the foreseeable future. Substantially all of our products are at a conceptual or development stage and, if we are to commercialize one or more products ourselves (as opposed to licensing it for commercialization by the licensee), we will likely be required to hire additional employees, purchase additional equipment, and engage the research, marketing and other services of third parties. This may require significant additional capital.

Accordingly, we may raise additional capital during the remainder of 2004 or 2005. We would most likely generate such financing through the issuance of equity securities in one or more private placements of common shares (probably with accompanying re-sale registration rights and warrants to purchase common shares) or public offerings of our common shares. We do not expect to, but may also issue debt securities or enter into loan or capital leasing arrangements, with one or more financial institutional investors. Any financing, especially an issuance of equity securities in a public offering or large private placement, may dilute existing shareholders and have an adverse effect on the market price of our common shares. We can provide no assurance that, if we determine to seek additional financing, we will be able to obtain additional financing at a reasonable cost, or at all.

At November 10, 2004, we had 49,455,894 common shares issued and outstanding. As of that same date, there were outstanding warrants to purchase up to 4,855,201 shares of common stock and options to purchase up to 3,556,700 shares of common stock.

Capital Commitments. The following table discloses aggregate information about our contractual obligations including notes payable, mineral lease payments and contractual service agreements, and the periods in which payments are due as of September 30, 2004:

| Contractual Obligations | Total | Less Than 1 Year | 1 - 3 Years | 4 - 5 Years |
|---|---|---|---|---|
| Notes Payable | $ 3,000,000* | $ -- | $ 1,200,000 | $ 1,200,000 |
| Mineral Leases** | 1,018,652 | 371,958 | 326,974 | 239,691 |
| Contractual Service Agreements | 427,648 | 352,648 | 75,000 | -- |
| Total Contractual Obligations | $ 4,446,300 | $ 724,606 | $ 1,601,974 | $ 1,439,691 |

* Before discount of $169,512
** Although we expect to terminate substantially all mineral leases by mid-2005, the obligations are included here because they are not yet terminated.

## Critical Accounting Policies and Estimates

Management based the following discussion and analysis of our financial condition and results of operations on our consolidated financial statements. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our critical accounting policies and estimates, including those related to long-lived assets and stock-based compensation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect the more significant judgments and estimates used in the preparation of our consolidated financial statements. These judgments and estimates affect the reported amounts of assets and liabilities and the reported amounts of revenues and expenses during the reporting periods. Changes to these judgments and estimates could adversely affect the Company's future results of operations and cash flows.



- Long-Lived assets. Our long-lived assets consist principally of the nanomaterials and titanium dioxide pigment assets, the intellectual property (patents and patent applications) associated with them, and a building. At September 30, 2004, the carrying value of these assets was $7,296,659, or 44% of total assets. We evaluate the carrying value of long-lived assets when events or circumstances indicate that an impairment may exist. In our evaluation, we estimate the net undiscounted cash flows expected to be generated by the assets, and recognize impairment when such cash flows will be less than the carrying values. Events or circumstances that could indicate the existence of a possible impairment include obsolescence of the technology, an absence of market demand for the product, and/or the partial or complete lapse of technology rights protection.

- Stock-Based Compensation. We have two stock option plans which provide for the issuance of common stock options to employees and service providers. Although Statement of Financial Accounting Standards ("SFAS") No. 123, Accounting for Stock Based Compensation, encourages entities to adopt a fair-value-based method of accounting for stock options and similar equity instruments, it also allows an entity to continue measuring compensation cost for stock-based compensation for employees and directors using the intrinsic-value method of accounting prescribed by Accounting Principles Board ("APB") Opinion No. 25, Accounting for Stock Issued to Employees. We have elected to follow the accounting provisions of APB 25 and to furnish the pro forma disclosures required under SFAS 123 for employees and directors, but we also issue warrants and options to non-employees that are recognized as expense when issued in accordance with the provisions of SFAS 123. We calculate compensation expense under SFAS 123 using a modified Black-Scholes option pricing model. In so doing, we estimate certain key variables used in the model. We believe the estimates we use are appropriate and reasonable.

- Revenue Recognition. Revenue is generated from product sales and services performed under contract. Revenue is recognized for product sales at the time the purchaser has accepted delivery of the product and for services when the service has been performed and is billable in accordance with contract terms. Based on the specific terms and conditions of each contract/grant, revenues may be recognized on a time and materials basis as costs are incurred, a percentage of completion basis, as stipulated milestones are achieved, or after final project reports are submitted.

- Overhead Allocation. Facilities overhead, which is comprised primarily of occupancy and related expenses, is initially recorded in general and administrative expenses and then allocated monthly to research and development and cost of sales based on labor costs.

## Results of Operations

Three Months Ended September 30, 2004 Compared to Three Months Ended September 30, 2003

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The net loss applicable to shareholders for the quarter ended September 30, 2004, which was the third quarter of our 2004 fiscal year, totaled $1,440,324 ($.03 per share) compared to a net loss of $1,745,485 ($.05 per share) in the third quarter of 2003. The principal factors contributing to the losses during these periods were the lack of substantial revenue combined with the incurrence of operating expenses.

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Sales revenues in the third quarter of 2004 were as follows:

| | Sales Revenues Three Months Ended September 30,2004 |
|---|---|
| Contract research: | |
| Western Oil Sands | $ 101,003 |
| Western Michigan University | 153,576 |
| TIMET | 39,310 |
| National Science Foundation | 49,000 |
| Subtotal | 342,889 |
| Nanoparticle products | 4,018 |
| Total | $ 346,907 |

The revenues from contract research work include $153,576 earned under an agreement with Western Michigan University ("WMU") for research services involving a technology used in the detection of chemical, biological and radiological agents. The agreement provides for total payments to Altair of $356,500 over a two-year period through August 2005. In September 2004, we were awarded a stage 2 contract for the project under which we will receive $672,000 over a two-year period. We expect to generate approximately $198,000 of revenues in connection with this contract during the fourth quarter of 2004.

Contracted services revenues also includes $101,003 received from Western Oil Sands, Inc. in connection with an agreement to license our Altair Hydrochloride Pigment Process (the "AHPP") for its possible use 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. We expect to generate approximately $90,000 of revenues in the fourth quarter of 2004 in connection with this contract.

During the quarter ended September 30, 2004, we also generated $39,310 of revenues from TIMET in connection with an agreement to design and develop a titanium oxide electrode structure and provide TIMET optimized titanium oxide feedstock to produce 50 pounds of titanium metal per day in batch production demonstrations. We expect to generate approximately $116,000 of revenues in the fourth quarter of 2004 in connection with this contract.

We also generated $49,000 of revenues under a grant awarded by the National Science Foundation to fund joint development work on next generation lithium ion power sources. We expect to generate approximately $51,000 of revenues in the fourth quarter of 2004 in connection with this contract.

In the third quarter of 2003, we generated sales revenues of $17,318, which consisted of $16,507 billed under the WMU contract and $811 from sales of nanoparticle products.

Gross margin in the third quarter of 2004 was $53,222 on sales of $346,907, an improvement over the second quarter 2004 gross margin of negative $46,207 on sales of $154,233. This change in margin is the result of 1) the addition of new contracts, 2) changes in the mix of billable contracts and 3)

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redefining billable work under the WMU contract to increase the hourly billable rates and purchase capital assets necessary to complete the work. Our margins are generally adversely affected during 2004 as compared to earlier years by a change in the method of recording facilities overhead costs. In prior years, overhead costs were recorded as general and administrative ("G&A") expenses and remained in G&A. In 2004, these overhead costs, which totaled $127,000 for the third quarter of 2004, are allocated between G&A, research and development ("R&D") and cost of sales. This allocation methodology was adopted in response to a material increase in contract services revenues in 2004 and the need to obtain cost reimbursement for these overhead costs in future contracts. Our existing customer contracts, which are principally contract R&D work, were negotiated with the goal of providing cost reimbursement and little or no margin, but significant potential for the development of valuable intellectual property. As a result of this and the change in accounting for overhead costs, we expect that margins will be slightly positive or negative until we enter into substantial product sales and/or agreements to license our technologies and/or additional contract R&D work which provides better margins.

We incur R&D expenses for development of new products and intellectual property and for contract research work that is billable to customers. Contract research expenses are recorded as costs of sale when the customer is billed for the work and revenue is recorded. Consequently, R&D expenses are reflected in both the "Research and development" and "Cost of sales" lines in our income statements. In the third quarter of 2004, total R&D expenditures were $514,126, with $221,054 being recorded in R&D and $293,072 being recorded in cost of sales. In the third quarter of 2003, total R&D expenditures were $263,092, with $246,585 being recorded in R&D and $16,507 being recorded in cost of sales. The increase in total R&D expenditures of $251,034 from the third quarter of 2003 to the third quarter of 2004 is due to an increase in staffing and the allocation of facilities overhead costs to R&D. The increase in R&D charged to cost of sales of $276,565 from the third quarter of 2003 to the third quarter of 2004 is the result of our entering into several new contract research agreements with customers. We expect our total R&D expenditures for the remainder of fiscal 2004 to remain at levels higher than those of fiscal 2003.

Professional services, which consist principally of legal, consulting and audit expenses, increased by $274,578, from $111,753 during the third quarter of 2003, to $386,331 in the third quarter of 2004. Consulting fees increased by $134,000, from $13,000 in the third quarter of 2003 to $147,000 in the third quarter of 2004, primarily as a result of consultants hired to assist with marketing and product development in both the performance materials and life sciences divisions. Legal expenses increased by $58,000, from $79,000 in the third quarter of 2003 to $137,000 in the same quarter of 2004 due to patent costs associated with performance materials and life sciences products, and a settlement agreement involving a shareholder. Audit expenses increased by $82,000, from $18,000 during the third quarter of 2003, to $100,000 in the third quarter of 2004, primarily as a result of compliance costs associated with the Sarbanes-Oxley Act.

General and administrative expenses increased by $47,882 from $584,937 in third quarter of 2003 to $632,819 in the third quarter of 2004. Salaries and related overhead costs increased by $109,000, from $314,000 in the third quarter of 2003 to $423,000 in the third quarter of 2004, due to salary increases and the addition of five new employees. Investor relations expenses increased by $227,000 from $20,000 in the third quarter of 2003 to $247,000 in the third quarter of 2004 as a result of programs designed to increase institutional investor ownership of Altair shares. This amount includes $178,000 which represents the value of Altair common shares issued to a financial advisor in connection with these programs. Technical operating expenses increased by $66,000 from $62,000 in 2003 to $128,000 in 2004 due primarily to increased product sample costs. General insurance expense increased by $47,000 from

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$51,000 in 2003 to $98,000 in 2004 due to increases in rates and coverages. General office expenses increased by $94,000 from $151,000 in the third quarter of 2003 to $245,000 in the third quarter of 2004 primarily as a result of additional purchases of office supplies, increased directors' fees and higher occupancy costs for utilities and facilities maintenance. These increases were partially offset by $127,000 of facilities overhead costs allocated to cost of sales and R&D as explained in the gross margin discussion above. In addition, stock option compensation expense decreased by $362,000 from the third quarter of 2003 to third quarter of 2004 as a result of a reduction in value of repriced stock options.

Interest expense decreased by $91,322, from $141,658 in the third quarter of 2003 to $50,336 in the third quarter of 2004. The decrease is due to the payoff of our note payable to Doral 18, LLC in September 2003.

Nine Months Ended September 30, 2004 Compared to Nine Months Ended September 30, 2003

For the nine months ended September 30, 2004, the net loss applicable to shareholders was $5,305,113 ($0.11 per share) compared to $4,573,542 ($0.13 per share) for the same period of 2003.

During the nine months ended September 30, 2004, we generated $634,028 of revenues from contract research work and $6,861 from sales of nanoparticle products as follows:

| | Sales Revenues Nine Months Ended September 30,2004 |
|---|---|
| Contract research: | |
| Western Oil Sands | $ 215,208 |
| Western Michigan University | 209,280 |
| TIMET | 114,310 |
| National Science Foundation | 49,000 |
| Other | 45,710 |
| Subtotal | 634,028 |
| Nanoparticle products | 6,861 |
| Total | $ 640,889 |

See "Three Months Ended September 30, 2004 Compared to Three Months Ended September 30, 2003" above for a discussion of contract research agreements, our revenue expectations for the fourth quarter of 2004 and factors affecting gross margins.

For the nine months ended September 30, 2004, total R&D expenditures were $1,419,248, with $815,881 being recorded in R&D and $603,367 being recorded in cost of sales. For the nine months ended September 30, 2003, total R&D expenditures were $679,749, with $661,766 being recorded in R&D and $17,983 being recorded in cost of sales. The increase in total R&D expenditures of $739,499 from the nine months ended September 30, 2003 to the nine months ended September 30, 2004 is due to an increase in staffing, the allocation of facilities overhead costs to R&D and animal testing costs for RenaZorb(TM). The increase in R&D charged to cost of sales of $585,384 from the nine months ended September 30, 2003 to the nine months ended September 30, 2004 is the result of our entering into several new contract research agreements with customers.

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Professional services increased by $664,348, from $453,319 during the nine months ended September 30, 2003 to $1,117,667 in the same period of 2004. Accounting fees increased by $116,000, from $96,000 in the nine months ended September 30, 2003 to $212,000 in the comparable period of 2004, as a result of compliance costs associated with the Sarbanes-Oxley Act. Legal expenses increased by $174,000, from $238,000 in the nine months ended September 30, 2003 to $412,000 in the comparable period of 2004, due primarily to legal expenses for work associated with contract research agreements, preparation of a shelf registration statement for our common shares, legal costs associated with a shareholder proposal and other issues involving a shareholder. Legal expenses also increased as a result of patent costs associated with performance materials and life sciences products. Consulting fees increased by $374,000 as a result of consultants hired to assist with marketing and product development in both the performance materials and life sciences divisions. Included in this amount is $168,000 of non-cash expense representing the value of options granted to the service providers.

General and administrative expenses increased by $835,789 from $1,741,825 in the nine months ended September 30, 2003 to $2,577,614 in the same period of 2004. Salaries and related overhead costs increased by $426,000 from $937,000 in the nine months ended September 30, 2003 to $1,363,000 in the nine months ended September 30, 2004 due to salary increases, bonuses and the addition of five new employees. Investor relations expenses increased by $643,000 from $144,000 in the nine months ended September 30, 2003 to $787,000 in the nine months ended September 30, 2004, primarily as a result of programs designed to increase institutional investor ownership of Altair shares. This amount includes a non-cash charge of $78,000 for the value of options granted to service providers and $178,000 for the value of common shares issued to a service provider. Investor relations expenses for the nine months ended September 30, 2004 also includes a non-cash charge of $235,000 for the value of common shares issued to a shareholder in connection with a settlement agreement involving certain issues raised by the shareholder. Shareholder information expenses increased by $45,000 from $65,000 in the nine months ended September 30, 2003 to $110,000 in the nine months ended September 30, 2004 due to annual report printing and mailing costs; the number of shareholders owning our stock increased substantially in 2004. General insurance expense increased by $68,000 from $112,000 in 2003 to $180,000 in 2004 due to increases in rates and coverages. General office expenses increased by $239,000 from $382,000 in the nine months ended September 30, 2003 to $621,000 in the nine months ended September 30, 2004 primarily as a result of additional purchases of office supplies and equipment, increased travel and increased directors' fees.

Technical operating expenses increased by $82,000 from $103,000 in 2003 to $185,000 in 2004 due primarily to increased product sample costs. These increases were partially offset by $297,000 of general and administrative overhead costs allocated to R&D as explained in the gross margin discussion above and a decrease in stock option compensation expense of $409,000 as a result of a reduction in value of repriced stock options.

Interest expense decreased by $262,218, from $407,950 in the nine months ended September 30, 2003 to $145,732 in the nine months ended September 30, 2004. The decrease is due to the payoff of our note payable to Doral 18, LLC in September 2003.

Forward-Looking Statements

This Quarterly Report on Form 10-Q (this "Report") contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. 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. Statements in this report regarding the ability of the Company to raise working capital necessary to fund our operations, development of the nanomaterials and titanium dioxide pigment processing technology and assets (including for pharmaceutical use), licensing of that technology for pharmaceutical or other uses, and other future activities are forward-looking statements. You should 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.

Among the key factors that may have a direct bearing on the Company's operating results are various risks and uncertainties including, but not limited to, the following:

- To date, we have not generated substantial revenues from operations. As of September 30, 2004, we have generated $981,781 of revenues from our nanomaterials and titanium dioxide pigment technology and $28,270 from the use of our Centrifugal Jig in consulting contracts. Although we currently have approximately $1,332,000 in unfulfilled contractual commitments, such commitments primarily relate to our provision of research and development services or to sales of products for experimental purposes. We have no sales or other commitments with respect to on-going revenues from our nanomaterials and titanium dioxide pigment technology and can provide no assurance that we will ever generate significant revenues.

- As of November 10, 2004, we had $8.3 million in cash, an amount sufficient to fund our ongoing operations until December 31, 2005 at current working capital expenditure levels. However, we may use our existing capital sooner than projected in connection with an unanticipated transaction, litigation or another unplanned event. We may also use more capital than projected as we expand our research, development and marketing efforts. Unless we experience a significant increase in revenue, we will need to raise significant amounts of additional capital in the future in order to sustain our ongoing operations, continue unfinished testing and additional development work and, if certain of our products have been commercialized, produce and market such products.

o The market price of our common stock, like that of the securities of other early stage companies, may be highly volatile. Our stock price may change dramatically as the result of announcements of our quarterly results, new products or innovations by us or our competitors, uncertainty regarding the viability of the nanomaterials and titanium dioxide pigment technology, significant customer contracts, significant litigation or other factors or events that could affect our business, financial condition, results of operations and future prospects. In addition, the market price for our common stock may be affected by various factors not directly related to our business or future prospects, including the following:

(1) Intentional manipulation of our stock price by existing or future shareholders;

(2) A single acquisition or disposition, or several related acquisitions or dispositions, of a large number of our shares;

(3) The interest of the market in our business sector, without regard to our financial condition, results of operations or business prospects;



(4) Positive or negative statements or projections about our company, or our industry, by analysts, stock gurus and other persons;

(5) The adoption of governmental regulations or government grant programs and similar developments in the United States or abroad that may enhance or detract from our ability to offer our products and services or affect our cost structure;

(6) Economic and other external market factors, such as a general decline in market prices due to poor economic indicators or investor distrust; and

(7) Speculation by short sellers of our common stock or other persons who stand to profit from a rapid increase or decrease in the price of our common stock.

o 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 an agreement, we would not receive significant revenues from such license until feasibility testing is complete and, if the results of feasibility testing were negative, would not receive significant revenues at any time.

- In the short run, we also plan to use the titanium processing technology to produce $TiO_2$ nanoparticles and/or to license the technology to others. $TiO_2$ nanoparticles and other products we intend to initially produce with the titanium processing technology, such as nano-sized lithium titanate for use in batteries or other nanoparticles for use in titanium metals, dental applications or detection of radiological agents, generally must be customized for a specific application working in cooperation with manufacturers of products utilizing the nanoparticles and end users. We are still testing and customizing our $TiO_2$ nanoparticle products for various applications and have no agreements with research partners, manufacturers, customers or others under which any such person has agreed to purchase, license or otherwise pay significant fees to Altair with respect to a nanoparticle application of our technology. We may never generate significant revenues producing, or licensing our technology for the production of, $TiO_2$ or other nanoparticles.

- We do not presently have the technical or financial resources to conduct clinical tests on, and take to market, any pharmaceutical application of our titanium and nanoparticle processing technology. In order for us to get any significant, long-term benefit from any potential pharmaceutical application of our technology, the following must occur:

  (1) We must enter into an evaluation license or similar agreement with a pharmaceutical company under which such company would pay a fixed or contingent 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;



  (2) Clinical tests conducted by such pharmaceutical company would have to indicate that the pharmaceutical use of our technology is safe, technically viable and financially viable;

  (3) 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

  (4) Such pharmaceutical company would have to successfully market the product incorporating our technology.

- The products we intend to initially produce or license with the titanium and nanoparticle processing technology generally must be customized for a specific application working in cooperation with the end user. We are still testing and customizing our prospective products, including Nanocheck(TM) and our drug delivery systems, 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 and nanoparticle processing technology and titanium and nanoparticle processing equipment for various reasons, including the following:

  (1) Products being developed by our potential customers that could use our nanoparticle products, most of which are in the research or development stage, may not be completed or, if completed, may not be readily accepted by expected end users;

(2) Even if our potential customers complete development of and find a market for their products, such potential customers may determine to use nanoparticle products of our competitors for various reasons, including:

- o We may be unable to customize our nanoparticle products to meet the distinct needs of potential customers;

- o Potential customers may purchase from competitors because of perceived or actual quality or compatibility differences; and

- o Our marketing and branding efforts may be insufficient to attract a sufficient number of customers; and

(3) Because of our limited funding, we may be unable to continue our development efforts until a strong market for nanoparticles develops

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

(1) Our pending patent applications may not be granted for various reasons, including the existence of similar patents or defects in the applications;



(2) The patents we have been granted may be challenged, invalidated or circumvented because of the pre-existence of similar patented or unpatented intellectual property rights or for other reasons;

(3) Parties to the confidentiality and invention agreements may have such agreements declared unenforceable or, even if the agreements are enforceable, may breach such agreements;

(4) The costs associated with enforcing patents, confidentiality and invention agreements or other intellectual property rights may make aggressive enforcement cost prohibitive;

(5) Even if we enforce our rights aggressively, injunctions, fines and other penalties may be insufficient to deter violations of our intellectual property rights; and

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

Because the value of our company and common shares is rooted primarily in our proprietary intellectual property rights, our inability to protect our proprietary intellectual property rights or gain a competitive advantage from such rights could have a material adverse effect on our business.

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

- We have determined to dispose of the Tennessee mineral property and expect such disposition to take place during 2005. We do not expect to receive significant value for the project's assets, even if they are sold, and believe that costs associated with the disposition transaction will equal or exceed proceeds to Altair from the disposition transaction. We will not be able to begin remediation work of the Tennessee mineral property until after the remediation plan is approved by the applicable regulatory authorities, and costs of remediation are uncertain until such plan approval is obtained and the scope of the work is determined.

The foregoing factors represent only a sampling of the most significant of the risks associated with an investment in the Company.

In addition to the foregoing, we have included additional risk factors and other cautionary statements contained in our other filings with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the year ended December 31, 2003. We recommend that you review such documents prior to investing in our common shares.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We do not have any derivative instruments, commodity instruments, or other financial instruments for trading or speculative purposes, nor are we presently at material risk for changes in interest rates on foreign currency exchange rates.



Item 4. Controls and Procedures

(a) Based on the evaluation of our "disclosure controls and procedures" (as defined in the Securities Exchange Act of 1934 Rules 13a-15(e) or 15d-15(e)) required by paragraph (b) of Rules 13a-15 or 15d-15, our president and our chief financial officer have concluded that, as of September 30, 2004, our disclosure controls and procedures were effective.

(b) We are not presently required to conduct quarterly evaluations of our internal control over financial reporting pursuant to paragraph (d) of Rules 13a-15 or 15d-15 promulgated under the Exchange Act. We are, however, in the process of designing, evaluating and implementing internal controls in anticipation of the date when we will become subject to such evaluation requirements.

PART II - OTHER INFORMATION

Item 2. Changes in Securities and Use of Proceeds

During the quarter ended September 30, 2004, we issued 100,000 common shares to a service provider in return for investor relations services. Such common shares will be offered and sold in reliance upon the exemption for sales of securities not involving a public offering, as set forth in Section 4(2) of the Securities Act and Rule 506 promulgated under the Securities Act based upon the following: (a) the investor represents and warrants to the Company that it is an "accredited investor," as defined in Rule 501 of Regulation D promulgated under the Securities Act and has such background, education, and experience in financial and business matters as to be able to evaluate the merits and risks of an investment in the securities; (b) there is no public offering or general solicitation with respect to the offering; the investor is any existing shareholder of the Company and the investor represents and warrants that it is acquiring the securities for its own account and not with an intent to distribute such securities; (c) the investor is provided with an offering summary, a copy of the most recent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K of the Company and all other information requested by the investor with respect to the Company, (d) the investor acknowledges that all securities being purchased are "restricted securities" for purposes of the Securities Act, and agrees to transfer such securities only in a transaction registered with the SEC under the Securities Act or exempt from registration under the Securities Act; and (e) a legend is placed on the certificates and other documents representing each such security stating that it is restricted and could only be transferred if subsequently registered under the Securities Act or transferred in a transaction exempt from registration under the Securities Act.

Item 5. Other Information

On November 10, 2004 we entered into employment agreements with certain of our executive officers and other employees, including Mr. Douglas Ellsworth, Senior Vice President, and Mr. Edward Dickinson, Chief Financial Officer. Each of the agreements are 18 months in duration and provide for base salaries, bonuses at the discretion of the board of directors, standard company benefits available to all employees and severance payments equal to base salary plus COBRA health insurance premiums for a nine-month period in the event of early termination by the Company without cause. The base salary for Mr. Ellsworth is $125,000, and the base salary for Mr. Dickinson is $115,000. The agreements also contain non-compete and non-solicitation covenants on the part of the executives while they are employed by the Company and during a period of 12-24 months following the termination of employment.



On August 16, 2004, we entered into an employment agreement with Dr. Alan Gotcher, our new Chief Executive Officer. The agreement is 24 months in duration (subject to an option on the part of the Company to extend for an additional year) and provides for base salaries, bonuses at the discretion of the board of directors, standard company benefits available to all employees and severance payments equal to base salary plus COBRA health insurance premiums for a nine-month period in the event of early termination by the Company without cause. The base salary for Dr. Gotcher is $275,000. In addition, the Company granted Dr. Gotcher an option to purchase, during a ten-year term, up to 300,000 shares of common stock of the Company at an exercise price equal to the closing price of such shares on August 16, 2004. Such option is subject to vesting based upon the market price of the Company's common stock. The agreement also contains non-compete and non-solicitation covenants on the part of Dr. Gotcher while he is employed by the Company and during a period of 12 months following the termination of his employment.

Item 6. Exhibits

See Exhibit Index attached hereto.



SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Altair Nanotechnologies Inc.

| | |
|---|---|
| November 15, 2004 | By: /s/ Alan J. Gotcher |
| Date | Alan J. Gotcher, Chief Executive Officer |
| November 15, 2004 | By: /s/ Edward H. Dickinson |
| Date | Edward H. Dickinson, Chief Financial Officer |



EXHIBIT INDEX

| Exhibit No. | Exhibit | Incorporated by Referenc |
|---|---|---|
| 10.1 | Employment Agreement of Douglas Ellsworth | Filed herewith |
| 10.2 | Employment Agreement of Edward Dickinson | Filed herewith |
| 10.3 | Employment Agreement of Alan J. Gotcher, Ph.D. | Filed herewith |
| 31.1 | Section 302 Certification of Chief Executive Officer | Filed herewith |
| 31.2 | Section 302 Certification of Chief Financial Officer | Filed herewith |
| 32.1 | Section 906 Certification of Chief Executive Officer | Filed herewith |
| 32.2 | Section 906 Certification of Chief Financial Officer | Filed herewith |