ALTAIR NANOTECHNOLOGIES INC.

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ALTAIR
NANOTECHNOLOGIES INC.

2002 ANNUAL REPORT

Corporate Profile

Nanotechnology is rapidly emerging as a unique industry sector. Altair Nanotechnologies is positioning itself through product innovation within this emerging industry to become a leading supplier of nanomaterial technology and nanomaterials worldwide. Altair owns a proprietary technology for making nanocrystalline materials of unique quality both economically and in large quantities. The company is currently developing special nanomaterials with potential applications in pharmaceuticals, batteries, fuel cells, solar cells, advanced energy storage devices, thermal spray coatings, catalysts, cosmetics, paints and environmental remediation. The technology may also be used to make paint pigment at a cost forecast to be substantially lower than commercial technologies employed today.

Nanotechnology

According to MIT Technology Review, "nanotechnology (the science of the extremely small) is the most significant emerging materials technology for this century." This new technology, through its capability of altering component materials, significantly impacts the design and performance of most all industrial products including computers, telecommunications equipment, the production and storage of energy, biotechnology and pharmaceuticals. According to Mihail Roco, nanotech advisor to the White House, "because of nanotechnology, we'll see more changes in the next 30 years than we saw in all the last century."

Nanoparticle size is defined as 1-100 nanometers (billionths of a meter). At their smallest, nanoparticles are near molecular sized. Particles this size exhibit unique physical and electrochemical properties; properties that are expected to enable manufacture of stronger, harder, more wear resistant materials and to make entirely new products. Nanomaterials are already used to make improved products for alternative energy, advanced ceramics, catalysts, cosmetics, paints and coatings and environmental remediation. Scientists are rapidly developing new applications in a diverse range of industrial sectors such as telecommunications, computers, pharmaceuticals and medical devices.

Dear and Valued Shareholders,

As the President and as the CEO of an emerging technology company, we are responsible for identifying opportunities to apply the company's resources and intellectual property to maximize shareholder value. Over the past year, Altair has increased its base of intellectual property in both existing targeted markets and new markets such as pharmaceuticals. We have expanded our efforts in select markets, identified and began working on new business opportunities and have implemented actions to concentrate on businesses with the best prospects for near term profitability. The overall economy and business environment was greatly impacted by world events triggered by the September 11, 2001 terrorist attack on New York City and Washington, DC. Generally, investors rewarded companies with proven profitability and avoided emerging technology companies. Altair's goal for 2003 is to become one of those profitable companies.

At the start of 2002 we had reason to believe that before the end of the year at least one battery company would be using our nanosized lithium titanate spinel to commercially manufacture batteries that could be recharged in minutes. As these companies began receiving samples of our battery materials, they realized that they didn't have the capacity or experience to work with nanomaterials and didn't have an electrolyte that could withstand the heat produced by the fast charge and discharge rates. These problems are being solved, and the opportunities within this industry are indeed real. We also thought, as did other companies within the industry, that the market for nano-based thermal sprays would expand rapidly as these sprays significantly extend the life of severe service surfaces needed for the aerospace, process, mining, autoclave and chemical industries. Although the thermal spray market for nanomaterials did not develop as rapidly as we expected, this business area did generate the highest revenue stream for the company and that stream continues to grow. We expect continued and expanding sales in this business segment for 2003 and beyond.

We realized during 2002 that some of the markets we targeted would take longer to materialize than we thought. Altair management changed directions, refocusing and repositioning our work and assets to concentrate mainly on three industries that could maximize shareholder value in the near term. These are the pharmaceutical, pigment, and environmental industries, the latter including homeland security applications. To pursue these industries, top management was expanded with the appointment of Dr. Rudi E. Moerck to the position of President of Altair Nanotechnologies Inc. Over the past twelve months and with a very modest budget, the company has made significant advances within these industries – creating a firm foundation for 2003.

Pharmaceuticals

Unlike traditional pharmaceutical companies that can spend millions of dollars and take several years for development before a potential product reaches the in vivo testing stage, under Dr. Moerck's guidance, Altair developed a new drug candidate based on our experience with lanthanum compounds combined with our nanomaterial know-how. Two pharmaceutical companies began testing our new drug candidate RenaZorb™ in rats and dogs before year's end – truly a major accomplishment. RenaZorb, a phosphate binder for the treatment of elevated phosphate levels in kidney dialysis patients with end stage renal disease (ESRD), has demonstrated significant effectiveness in binding phosphate in both the laboratory and in animals. This market has been estimated at between $500 to $600 million with potential to grow to $1 billion with a product that is properly priced, requires less dosing and demonstrates improved patient compliance characteristics.

Test results have shown that animals treated with RenaZorb showed excellent reductions of phosphorus in urinary excretions – positive proof of the drug's efficacy in binding phosphate. Additionally, RenaZorb reduced phosphate progressively according to the dose administered. There were no negative observations regarding the animals during the testing program and no reduction in their food intake.

Laboratory results indicate that RenaZorb has some advantages compared to Genzyme's Renagel™, the only FDA approved phosphate binder. With positive test results in hand, we believe we can overcome

the issues pertaining to product cost and dosing levels and provide a product with much-improved patient compliance. By year-end Altair had entered into eight confidentiality agreements for RenaZorb, including two testing agreements.

Confident of RenaZorb's effectiveness and competitive advantage, we have retained a major financial institution as our advisor to assist with a comprehensive evaluation of our strategic alternatives pertaining to RenaZorb. We will rely on this advisor, which has a strong presence within the pharmaceutical industry, to identify and introduce management to companies in the industry that have a strong interest or a need for products addressing phosphate removal and are interested in licensing our technology.

Titanium Dioxide Pigment

Altair's nanotechnology platform is based on a proprietary process for producing white titanium dioxide (TiO_2) pigment from ilmenite ore concentrates. Acquired in late 1999, Altair has modified and advanced the development of the process to make TiO_2 nanoparticles. In April 2002, we were awarded a patent for the enhanced process now named the Altair Hydrochloride Pigment Process (AHPP). This patent represents the first significant technological advancement in the white pigment industry in over 50 years. The total titanium dioxide pigment industry generates annual revenue of approximately $9 billion. Pigment is used in many products including paints, plastics, inks, paper, rubber, cosmetics and synthetic fibers.

The AHPP provides the pigment industry several potential benefits, including a reduction in production costs, as the process uses less energy, the use of low-cost feedstock and the elimination of environmentally unfriendly waste by-products. In addition to the production of white titanium dioxide from ilmenite ore concentrates, AHPP is capable of producing both rutile and anatase TiO_2 pigment base materials, nanomaterials and other specialty titanates.

We are currently working with one of the largest materials companies in the Asia Pacific region. Under the terms of the agreement, we are providing a phased development program. Phase I affirmed the suitability of this company's concentrates to produce TiO_2 pigment using AHPP. The work under Phase I was successfully completed and we submitted a Phase II 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 to 20,000 metric tons of titanium dioxide pigment per year.

Our patented AHPP has created interest in the People's Republic of China (PRC) where the government disfavors the construction of new pigment plants using the older sulfate process. The PRC is potentially the largest market for our titanium pigment technology as China possesses world-class reserves of titanium ore and very favorable labor costs. Because of the cultural and business ideologies, we have entered into an agreement naming Flowco our exclusive agent to market AHPP in the PRC. Flowco currently represents a number of American and European companies in the PRC and has successfully sold manufacturing plants and services in the PRC for over ten years. During a recent trip to China, several companies, including the Government Engineering Agency overseeing TiO_2 development in the PRC, expressed interest in AHPP and the potential to license the process.

The Environment and Homeland Security

In May 2002 we entered into an agreement with the University of Nevada, Reno, (UNR) to prepare advanced drinking water purification materials as the demand for removal of arsenic and other heavy metals has been significantly increased with the Bush Administration and Environmental Protection Agency initiatives that greatly reduce allowable arsenic content in drinking water. Using our durable titanium porous crystalline catalyst support structures that accommodate surface additives such as lanthanum compounds, our objective is to bring the two technologies together for commercialization of a product to quickly and economically purify drinking water.

Just after the beginning of fiscal 2003, we entered into a teaming agreement with Western Michigan University (WMU). WMU is a national leader in nanobioenvironmental chemistry research and the founding entity of the Nanotechnology Research and Computation Center. Altair and WMU will jointly develop titanium dioxide nanoparticle sensors for the detection of chemical and biological weapons. These nanosensors could be dispersed in coatings for military vehicles or embedded within military and security uniforms providing an early detection and warning system. Our management team, along with that of WMU, believes this research has significant national defense applications, as well as a multitude of civilian applications.

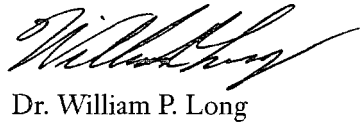
Altair and WMU will also collaborate on the development of a nanoparticle-based product that binds and concentrates radioactive materials from wastes. Altair's titanium dioxide nanoparticles remain stable under harsh conditions, including extreme temperatures, acidity and alkalinity. This structural constancy, together with WMU's ability to functionalize the nanoparticles, makes them highly suitable for the potential concentration of high-level nuclear waste and, as a result, a reduction in the number of shipments of these materials to the final storage facilities. Through a joint effort with WMU, we have received a U.S. Department of Energy grant of approximately $1 million. WMU and Altair will apply for additional funding for these projects.

In conclusion, we are more focused today and are continuing to make significant advances within our target industries – creating a solid foundation for growth in 2003. Our corporate objectives for the new year include revenue generating transactions in pharmaceuticals, the pigment industry, and seeking additional grants and funding for our environmental and homeland security projects. Completion of one or more of these targeted transactions should result in profitability and stability for the company. This is our challenge and our goal.

We will continue to make public announcements of our activities a priority and we value a continuing dialog with our shareholders. Altair wishes to thank you, our shareholders, for your investment in our company and your continued support.

On behalf of the Board,

Dr. Rudi E. Moerck
President



Dr. William P. Long
Chief Executive Officer

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

FORM 10-K

[X] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2002

[ ] 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	None
(State or other jurisdiction of incorporation)	*(Commission File No.)*	*(IRS Employer Identification No.)*

1725 Sheridan Avenue, Suite 140 Cody, Wyoming 82414
(Address of principal executive offices, including zip code)

Registrant's telephone number, including area code: (307) 587-8245

[ ] Securities registered pursuant to Section 12(b) of the Act: None

[X] Securities registered pursuant to Section 12(g) of the Act:

Common Shares, no par value	Nasdaq SmallCap Market
(Title of Class)	*(Name of each exchange on which registered)*

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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [ ]

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

The aggregate market value of the common shares held by non-affiliates of the Registrant on March 19, 2002, based upon the closing sale price of the common shares on the NASDAQ Stock Market of $.92 per share on March 19, 2002, was approximately $2,592,740. Common Shares held by each officer and director and by each other person who may be deemed to be an affiliate of the Registrant have been excluded. As of March 19, 2002, the Registrant had 22,813,120 common shares outstanding.

DOCUMENTS INCORPORATED BY REFERENCE
None

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FINANCIAL STATEMENTS

PART I

*This Annual Report on Form 10-K for the year ended December 31, 2002 (this "**Form 10-K**") contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "**Securities Act**"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"), that involve risks and uncertainties. Purchasers of any of the common shares, no par value (the "**common shares**") of Altair Nanotechnologies Inc. ("**Altair**" or the "**Company**") are cautioned that the Company's actual results will differ (and may differ significantly) from the results discussed in the forward-looking statements. Factors that could cause or contribute to such differences include those factors discussed herein under "Factors That May Affect Future Results" and elsewhere in this Form 10-K generally. The reader is also encouraged to review other filings made by the Company with the Securities and Exchange Commission (the "**Commission**") describing other factors that may affect future results of the Company.*

Item 1. *Business*

Certain technical terms used in the following description of our business are defined in a glossary set forth on page 18. We have identified such terms by italicizing them the first time they are used in the text. Unless the context requires otherwise, all references to "**Altair**," "**we**," "**Altair Nanotechnologies Inc.**," or the "**Company**" in this Form 10-K refer to Altair Nanotechnologies Inc. and all of its subsidiaries.

In relation to the Tennessee mineral property, Altair is an exploration stage company (as defined in Guide 7 promulgated under the Securities Act of 1933, as amended), and there is no assurance that a commercially viable mineral deposit exists on the Tennessee mineral property or any other property leased by Altair. We will cease to be an exploration stage company with respect to the Tennessee mineral property only when and if we have established the existence of a commercially minable deposit.

General

Altair Nanotechnologies Inc. was incorporated under the laws of the Province of Ontario, Canada in April 1973 for the purpose of acquiring and exploring mineral properties. It was redomesticated in July 2002 from the Business Corporation Act (Ontario) to the Canada Business Corporations Act, a change which causes Altair to be governed by Canada's federal corporate statute. The change reduces the requirement for resident Canadian directors from 50% to 25%, thereby allowing us greater flexibility to attract qualified nominees to our board.

During the period from inception through 1994, we acquired and explored multiple mineral properties. In each case, sub-economic mineralization was encountered and the exploration was abandoned. Since 1994, we have also devoted substantial resources to the development and testing of mineral processing equipment for use in the recovery of fine, heavy mineral particles.

In November 1999, we acquired all patent applications, technology and tangible assets related to a hydrometallurgical process developed by BHP Minerals International, Inc. ("**BHP**") primarily for the production of titanium dioxide products from titanium bearing ores or concentrates (the "**titanium processing technology**"), and all tangible equipment and other assets used by BHP to develop and implement the titanium processing technology (the "**titanium processing assets**"). We plan to initially employ the titanium processing technology as a platform for the sale of contract services, intellectual property licenses and for the production and sale of metal oxide nanoparticles in various applications. See "—Titanium Pigment Processing Technology."

We have also leased, and are exploring, approximately 8,700 acres of land near Camden, Tennessee (the "**Tennessee mineral property**") to determine whether it would be *amenable* to large-scale mining for titanium and zircon. See "—Tennessee Mineral Property."

During 1996, we acquired the rights to the Campbell Centrifugal Jig, since modified and renamed the Altair Centrifugal Jig (the "jig"). The jig is a machine that uses a rotating circular screen and pulsating water to separate valueless mineral particles from more valuable mineral particles based on the differences in their *specific gravity*. During 2002, we elected to terminate further development work on the jig for the foreseeable future and instead concentrate our limited resources on the development of the titanium processing technology. As a result, we recorded an adjustment during the second quarter of 2002 to write off the remaining net book value of the jig assets and related patents in our financial statements. See "—The Jig."

We have experienced an operating loss in every year of operation. In the fiscal year ended December 31, 2002, we experienced a net loss of $9,921,496. Certain information regarding the net sales, income (loss) from operations and assets associated with each of the titanium processing, jig and Tennessee mineral property segments of our business are set forth in Note 13 to the Consolidated Financial Statements of the Company attached hereto following the signature and certification pages and are incorporated into this Form 10-K by this reference.

Altair currently has two wholly-owned subsidiaries, Fine Gold Recovery Systems, Inc., a Nevada corporation ("Fine Gold"), and Mineral Recovery Systems, Inc., a Nevada corporation ("MRS"). Altair also has two indirect wholly-owned subsidiaries, Altair Nanomaterials, Inc., a Nevada corporation, and Tennessee Valley Titanium, Inc., a Nevada corporation.

Titanium Pigment Processing Technology

Description of the Titanium Processing Technology

On November 15, 1999, we purchased from BHP all patent applications, technology and tangible assets related to a hydrometallurgical process developed by BHP primarily for the production of titanium dioxide products from titanium bearing ores or concentrates (i.e., the titanium processing technology), and all tangible equipment and other assets used by BHP to develop and implement the titanium processing technology (i.e., the titanium processing assets). The titanium processing technology is capable of producing conventional titanium dioxide pigment products. Conventional titanium dioxide pigments are finely-sized powders consisting of titanium dioxide crystals. These powders may be either *anatase* or *rutile* phase (shape) and approximate 0.17 to 0.30 *microns* in size. Our titanium processing technology is also capable of producing titanium dioxide and other metal oxide nanoparticles. These are specialty products with a size range of 10 to 100 nanometers (approximately one tenth the size of conventional pigments). The primary products currently being produced in the processing plant are titanium dioxide, lithium titanate and stabilized zirconia nanoparticles.

The titanium processing technology is based on a proprietary dense-phase crystal growth technique which controls crystal formation using a combination of mechanical and fluid dynamics and chemical and thermal control. Through introduction of very small quantities of selected chemicals ("doping elements") during crystal growth, the size, phase, catalytic and *photocatalytic* activity and size distribution of crystals can be controlled within narrow limits and to specification.

Titanium Processing Assets.

The titanium processing assets consist principally of a production facility located in Reno, Nevada in a building, formerly leased, that we purchased from BHP in 2002. During 2000, we installed additional equipment to increase production capacity to a nominal annual amount of 200 tons of nanoparticles. We also added a separate pilot facility to produce large sample quantities of product for development, test and evaluation purposes. In 2001, we added hydration and filtering equipment to improve production processing. In 2002, we purchased advanced milling equipment to improve product quality.

Plans for Development of the Titanium Pigment Processing Technology.

The titanium processing technology has potential to produce both titanium pigments, which are commercially traded in bulk, and nanoparticles, which are sold on specialty product markets. During 2002, our efforts were directed toward development of nanoparticle products, pharmaceutical products and titanium pigment production.

Nanoparticle Products. For the year ended December 31, 2002, we generated $134,925 of revenue through sales of titanium dioxide, lithium titanate and yttria stabilized zirconia nanoparticles and other materials. These products were used principally in thermal spray and catalyst applications and for developmental work on battery materials. We are also developing nanoparticle products that may be useful in controlling algae in swimming pools, in cosmetics, in self-cleaning and sanitizing and in environmental purification.

Pharmaceutical Products. In the second quarter of 2002, we initiated research and development efforts directed toward the utilization of nanomaterials in the pharmaceuticals industry. In July 2002, we announced the development of a new active pharmaceutical ingredient ("**API**") for the treatment of hyperphosphatemia (elevated serum phosphate levels) in patients undergoing kidney dialysis, as well as a new drug delivery system using inorganic ceramic nanoparticles. This API, given the name RenaZorb™, showed an excellent capacity for phosphate removal in laboratory tests using simulated stomach acid. Testing of this product using animals was initiated in late 2002 and is expected to be completed during the first quarter of 2003. We are currently seeking business relationships with pharmaceutical companies that can conduct additional testing and development, seek necessary FDA approvals and take the other steps necessary to bring the new pharmaceutical ingredient and drug delivery system to market.

Titanium Pigment Production. In late 2002, we entered into a contract with a large materials company to determine whether an ore concentrate produced by them is suitable for making white titanium dioxide pigment. Extraction and iron removal work has been completed and purification and pigment production steps have begun. We expect to complete the project during the first quarter of 2003. If the project is successful, we hope to enter into a contract to license our technology for the production of titanium dioxide pigment. A second agreement based on an ore body located in Vietnam was also signed in late 2002, but no work has as yet been done.

Products In Development Using the Titanium Processing Technology.

To date, we have developed titanium dioxide nanoparticles and other products we intend to initially produce with the titanium processing technology. The designation, description, potential applications and status of development of our products that we have publicly announced are as follows:

Product Designation	Description	Potential Applications	Status of Development & Sales
Titanium Dioxide Pigment Process	This technology is a low cost, environmentally preferred method of making titanium dioxide pigment.	The technology may be licensed to mineral companies or pigment companies.	The Company is presently working on one development contract of $100,000 and has signed a $250,000 contract for development, subject to funding. Additional interest has been expressed.
TiNano™ 40 VHP	This is an uncoated, high purity titanium dioxide nanoparticle product with good thermal stability.	Environmental purification, photocells, catalyst and similar ceramic applications, self-cleaning & sanitizing uses and thermal spray coatings. Intermediate for manufacture of derivatives such as lithium titanate and barium titanate.	During 2002, we sold $85,900 of this product to 31 customers. Of this amount, $61,200 was sold to a customer for commercial thermal spray applications. The remainder was sold for use primarily in the testing and development of thermal spray, catalyst and chemical mechanical planarization applications. We have received follow up orders from two customers. Development of such product is substantially complete. Commercial viability is dependent upon when, and if, potential customers decide to incorporate such product into end products they are developing.
TiNano™ 40 USP	This product meets US Pharmacopeia specifications and exhibits high UV absorption characteristics, and high thermal stability.	Cosmetic and other uses requiring US Pharmacopia purity specifications. USP grade may also be used in many of the VHP applications and has greater temperature stability.	During 2002, we sold $800 of this product to five customers. We are developing coating procedures to make TiNano™ 40 CNPC from this regulated material. Development of such product is substantially complete. Commercial viability is dependent upon when, and if, potential customers decide to incorporate such product into end products they are developing.
TiNano™ 40 HPC	This product exhibits high UV absorption, high photo catalytic activity and excellent thermal stability.	Environmental purification, photocells, catalysts, and similar ceramic applications. Also may be used for self-cleaning and sanitizing applications.	During 2002, we sold $650 of this product to one customer. We intend to discontinue this product as other products overlap this market.
TiNano™ 40 RPC	This product exhibits high UV absorption. It exhibits reduced photo catalytic activity achieved using our inorganic coating rather than the traditional Si-Al treatment. Also exhibits excellent thermal stability.	Cosmetics, plastics and coatings applications requiring reduced photochemical activity.	During 2002, we sold $150 of this product to two customers. We are developing a dispersion technology for application in plastics, organic formulations and wood treatment. Development of the dispertion technology is ongoing. Commercial viability is dependent upon when, and if, potential customers decide to incorporate such product into end products they are developing and is projected during 2003.

Product Designation	Description	Potential Applications	Status of Development & Sales
TiNano™ 40 CNPC	This product exhibits high UV absorption and has excellent thermal properties. The product is USP grade TiO_2 coated with hydrous alumina and silica. The coating substantially eliminates photo catalytic activity.	Cosmetic and coating applications.	During 2002, we sold $150 of this product to two customers. We are developing a coating and dispersion technology. Development of the dispertion technology is ongoing. Commercial viability is dependent upon when, and if, potential customers decide to incorporate such product into end products they are developing and is projected during 2003.
Lithium Titanate Spinel	This product is a robust crystalline structure of lithium titanate. It withstands high lithium insertion rates with very little distortion.	Lithium ion batteries where high charge and discharge rates are desired.	During 2002, we sold $18,200 of lithium titanate to nine customers for use in testing and development of battery materials. Development of such product is substantially complete. Commercial viability is dependent upon when, and if, potential customers decide to incorporate such product into end products they are developing.
Yttria Stabilized Zirconia	This product is a nano-sized crystalline material with excellent stability and coating characteristics. At high temperatures, it has the capability for ionic conduction of oxygen.	Used in solid oxide fuel cell components and as a ceramic coating.	Fuel cell components have been made and tested. In 2002, we sold $1,000 of this product for testing in thermal spray applications. Development of such product is substantially complete. Commercial viability is dependent upon when, and if, potential customers decide to incorporate such product into end products they are developing.
RenaZorb™	This product is a nanoparticle-sized lanthanum-based ceramic material with a large surface area and capability to bind phosphates and selected other anions. (See also text discussion in following subsection)	This pharmaceutical can be used for controlling serum phosphate levels in kidney dialysis patients and in chemically related products (See also text discussion in following subsection)	Laboratory testing was completed in 2002. Testing using animals was begun in late 2002 and will be completed during first quarter 2003. Although FDA approval of the product may take several years, Altair anticipates receiving license fees in 2003. (See also text discussion in following subsection and Item 7. Management's Discussion of Financial Condition and Results of Operations)
Unnamed Drug Delivery Device	This product is a micron-sized hollow sphere whose structure is composed of interlocked nanoparticles. It is highly porous. (See also text discussion in following subsection)	Drug delivery device.	Development of such product is substantially complete. Commercial viability is dependent upon when, and if, potential customers decide to incorporate such product into end products they are developing.
NanoCheck™	This product is a compound with large surface area that is insoluble in water over a wide pH range.	This product is intended for the swimming pool and aquarium markets for the removal of phosphate, thereby preventing algae growth.	Several versions are presently undergoing test and evaluation.

The products identified above, and other products we are developing with the titanium processing technology, are generally not commodities and must be customized for a specific application working in cooperation with the end user. Accordingly, unless and until we receive an order containing specifications with respect to commercial quantities of each nanoparticle product, that product is necessarily in the development phase. To date, we have sold commercial quantities of TiNano™ 40 to one customer for resale in commercial thermal spray applications.

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

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

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

Existing phosphate binders include Tums™ antacid, which contains calcium carbonate, and also aluminum hydroxide-based products such as Gaviscon™ manufactured by Glaxo Smith Kline, both of which are available over the counter, as well as Renagel™ (chemical name sevelmer) manufactured by Genzyme, which is available only by prescription. In addition, Fosrenol™, lanthanum carbonate tetra hydrate ("LCTH"), developed by Shire Pharmaceuticals ("Shire") of the UK, is awaiting United States FDA and foreign regulatory approvals, which are expected in mid-2003. Shire announced in March 2003 that it had received an approvable letter from the FDA for Fosrenol™. The approvable letter requested additional data and analysis from Shire.

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

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

Fosrenol™ (LCTH), for which US FDA approval is pending, is expected to be marketed as a chewable tablet with a proposed dosage of 1.5 to 3.0 grams active drug per day. As with all medicines, Fosrenol™ will probably display some side effects but these are expected to be minor. It has been reported that the use of Fosrenol does increase serum lanthanum levels compared with levels in patients taking a placebo. RenaZorb™, which is nanotechnology based, is expected to be developed in a tablet or capsule dosage form with a projected dosage of 0.6 to 2.0 grams per day. Although we have done no human testing on RenaZorb™, we believe RenaZorb™ has the potential for fewer side effects, lower cost and better patient compliance. We base these

possible advantages upon *in vitro* (laboratory) testing conducted by Altair in which RenaZorb was compared to LCTH, the active chemical in Fosrenol. Our in vitro testing showed that RenaZorb binds at least 30% more phosphate per gram of drug than LCTH, therefore requiring a lower dose. Lower dose often correlates well with a reduction of observed side effects in chemically related homologous compounds.

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

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

To date, our research on drug delivery systems involving the use of nanoparticles has been limited to coating known drugs on the surface of titanium dioxide nanoparticles. We have not done any animal or human testing with our new drug delivery systems and do not have the expertise, resources or capacity to complete such testing. We are currently seeking business relationships with pharmaceutical companies that can conduct additional testing and development using their pharmaceutical active ingredients to coat the Altair nanomaterials and then seek necessary FDA approvals and take the other steps necessary to bring the combined drug delivery system to market. Because of the early stage of development of these drug delivery systems, we are unable to state with any certainty how (or if) such drug delivery systems would be used and, if used, what the uses for such systems would be and what the comparative advantages, sides effects and other aspects of such drug delivery systems would be. Nevertheless, based upon our early testing, we believe that the following uses of a nanoparticle-based drug delivery system are feasible:

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

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

Hard to Dissolve Drugs. Our drug delivery system may also be used to deliver drugs that work in the gastrointestinal tract without being absorbed. These types of drugs remove unwanted materials from the digestive systems. Possible uses for these types of drugs include lowering cholesterol. Another use for our drug delivery system would be for highly insoluble drugs that need greater absorption to enter the blood stream. The significant increase in surface area of our titanium dioxide micro-spheres may allow greater drug absorption. This greater absorption may also be used to redevelop previously failed candidate drug compounds that were unsuccessful because of inadequate absorption rates or amounts.

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

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

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

Target Market for Products of the Titanium Processing Technology.

Nanoparticle Products. End users of these specialty chemicals typically work closely with suppliers to set product specifications, which may or may not be subsequently certified for individual applications. Very little nanoparticle product is sold as a fungible "shelf-item" product.

Altair's plan for nanoparticle market entry has been to prepare a suite of products that have a range of physical and chemical properties. Potential nanoparticle end users are invited to test our basic products and to separately work with us so that we may tailor a nanoparticle product for their particular use. We have filled 380 orders requesting 886 samples of nanoparticle products from the 470 companies and laboratories that have contacted us. Based on sales to date and sample requests, applications for and interest in our nanoparticles are seemingly most advanced in applications for batteries (lithium titanate), thermal sprays (titanium dioxide), solid oxide fuel cells (yttrium stabilized zircon) and catalysts (both titanium dioxide and yttrium stabilized zircon). These are applications from which we hope to make large-volume commercial sales in the future.

Pharmaceutical Products. Our pharmaceutical product RenaZorb™ was developed for the treatment of elevated phosphate levels in kidney dialysis patients. According to information published by AnorMED, the worldwide market for phosphate binders for chronic renal failure patients is approximately $400 million to $600 million annually. It is not our intent to manufacture pharmaceuticals but, rather, to grant licenses to pharmaceutical companies for the manufacture and sale of products developed using our technology. We are seeking business relationships with pharmaceutical companies that can conduct additional testing and development using their pharmaceutical active ingredients to coat our experimental drug delivery system and then seek necessary FDA approvals and take the other steps necessary to bring the combined drug delivery system to market.

We have entered into eight confidentiality agreements relating to the development/licensing of RenaZorb™, and we have recently received new inquiries. Animal testing of RenaZorb™ began in December 2002 and is currently being conducted by two pharmaceutical companies, one of which is testing in dogs and both of which are testing in rats. We have written testing agreements with both these companies. We expect the results of these tests in mid-March. Assuming such results are positive, RenaZorb™ will have to undergo human testing and receive FDA approval before it could be approved for marketing. Human testing typically

takes 1 to 2 years and, if merited by the results of animal testing, is expected to begin in 2003. FDA approval typically occurs between 3 and 5 years following the completion of animal testing, although we believe that FDA approval of Fosrenol™, a chemically related drug, could accelerate the approval process for RenaZorb™.

Titanium Pigments. Altair is attempting to identify one or more large minerals companies to license the titanium dioxide pigment application of its titanium processing technology. Altair has entered into contracts with two materials companies under which Altair has performed, or will perform, test work related to large-scale production of titanium dioxide pigments using our technology. With respect to one of the materials companies, Altair has 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 10,000-20,000 metric tons of titanium dioxide pigment per year.

Research, Testing and Development of the Titanium Processing Technology.

Our titanium processing technology is the result of several years of research and development work done by BHP. We are continuing the research and development work to both improve the process and to develop commercial applications for it. Such work is being conducted by the former BHP employees who became employees of the Company on January 1, 2001. During fiscal 2002, we incurred $560,000 in research and development expenses related to the titanium processing technology. During fiscal 2001, we incurred $541,000 in research and development expenses related to the titanium processing technology, and during fiscal 2000, we incurred $1,426,000 in research and development expenses related to the titanium processing technology. During 2002, we received $90,300 from a materials company in return for testing the company's mineral concentrates in the production of titanium dioxide pigments using our titanium processing technology. No customer-sponsored research was undertaken in 2001 or 2000.

In addition, we are engaged in or seeking joint research and development efforts with potential customers and other interested parties with regard to our nanoparticle products, pharmaceutical products and titanium pigment production technology.

The Titanium Processing Technology and Proprietary Rights.

BHP filed several patent applications with the United States Patent and Trademark Office with respect to the titanium processing technology, and the applications have been transferred to us. We have subsequently filed 13 additional patent applications relating to nanoparticle technology. In August 2002, we filed a patent application covering the development of a new active pharmaceutical ingredient for the treatment of hyperphosphatemia (elevated serum phosphate levels) in patients undergoing kidney dialysis, as well as a new drug delivery system using inorganic ceramic nanoparticles. During 2002, three patents were awarded to us covering the production of titanium pigment and nanomaterials using our technology, which patents expire in 2019. All other applications are in the review process.

The potential value of our titanium processing technology, and each application of it, lies in the likelihood that patents will be granted with respect to patent applications and that granted patents are valid and enforceable. We can provide no assurance that the patents requested in all patent applications material to our business will be granted or that granted patents will be enforceable. Our business would be materially adversely affected if one or more patent applications are not granted or if granted patents are determined to be unenforceable.

Competition--the Titanium Processing Technology.

Our titanium processing technology is fundamentally different from current commercial processing techniques. Other processes are based on either a precipitation of particles from aqueous solution or the formation of crystallites from molten droplets of titanium oxide generated in high temperature flame reactors. Our process is a dense-phase crystal growth technique which controls crystal formation using a combination of mechanical and fluid dynamics and chemical and thermal control.

Our process permits exceptional control over particle size, shape, and crystalline form. Our titanium processing technology produces discrete anatase crystals in nanometer sizes and may be doped to be thermally stable up to 800 degrees Centigrade. By remaining stable in high-temperature processing, nanoparticles produced by our titanium processing technology retain the desired nanoparticle size and crystalline phase. In addition, our technology is designed to minimize process effluents needing environmental remediation and to accept a wide variety of naturally occurring titanium feed stocks.

We have not operated the titanium processing technology at a commercial scale. Accordingly, we cannot describe processing efficiencies and costs associated with our titanium processing technology or compare such efficiencies and costs to those of competitors.

In addition, our ability to capitalize on and develop our technology may be limited by the limited amount of capital we have available and our lack of a substantial operating history. Competing nanoparticle producers generally are financially strong corporations with established customer relationships and operating histories. The titanium dioxide nanoparticle business is a young industry subject to rapid technological changes and there is wide disparity within the industry with respect to the composition and attributes of nanoparticle products. The manufacturing methods and costs to manufacture also vary greatly, with certain methods lending themselves to specific niche applications. As a result, competition within the industry is driven by a variety of factors, principally price and product attributes. Our marketing efforts have centered around our ability to produce a wide range of products at attractive prices.

Royalty Obligations Related to Our Titanium Processing Technology.

We purchased our titanium processing technology and titanium processing assets from BHP pursuant to an Asset Purchase and Sale Agreement dated November 15, 1999 which included an obligation to pay royalties based on product sales realized through use of the titanium processing technology. From November 15, 1999 through August 8, 2002, we paid BHP a total of $2,067 of royalties. On August 8, 2002, we entered into a transaction with BHP wherein we purchased from BHP the land and building that houses the titanium processing assets. In connection with the purchase, the requirement to pay royalties was terminated effective August 12, 2002. See "Item 2. Properties" for additional information on the land and building acquired from BHP.

Tennessee Mineral Property

Description of the Tennessee Mineral Property.

The Tennessee mineral property consists of approximately 8,700 acres of land containing fine, heavy minerals that we have leased in or near Camden, Tennessee.

Prior to our beginning to acquire leases on the Tennessee mineral property in 1996, sections of the Tennessee mineral property were leased or owned by each of E.I du Pont de Nemours and Company (from 1950 to 1954), KerrMcGee Corporation (from 1975 to 1989), and BHP Minerals International Inc. (from 1991 to 1994). Each of these predecessors engaged in drilling, sampling and other exploratory activities on the Tennessee mineral property but, based upon such predecessors' particular circumstances and the economics of the period, elected to stop work and relinquish property rights.

The topography of the Tennessee mineral property consists of vegetation-covered rolling hills comprised of sands deposited in an ancient beach environment. Minerals on the Tennessee mineral property occur in the Cretaceous McNairy formation, and heavy minerals comprising 2% to 8% of the sand (by weight) are typical. he mineralized sands on the Tennessee mineral property have not yet been proven to be a reserve (as defined in Regulation S-K, Item 802, Guide 7 promulgated under the Exchange Act), and our limited operations and proposed plan with respect to it are exploratory in nature.

Research and Exploration on the Tennessee Mineral Property.

From 1996, our exploration activities on the Tennessee mineral property have included geologic mapping, collection of bulk samples for metallurgical testing, drilling of 156 auger holes between 30 and 100 feet deep and preparation of geologic models. Our geologic model also incorporates 40 drill holes completed by an earlier exploration company.

During 1997, we collected approximately 5,000 pounds of representative sand for testing from an exposed sand horizon. This sample was processed by an independent Florida heavy sands producer and Altair to produce representative samples of market-quality products. The sample results were reviewed by an independent consulting group hired by us to prepare a pre-feasibility study of approximately 5,200 acres of the Tennessee mineral property known as the "Camden Property." The consultants examined heavy mineral suites from the Camden Property (prepared from sands naturally containing about 4% heavy minerals and 96% quartz) and found that titanium bearing minerals constitute about 65% of the total heavy mineral portion of the suite, zircon accounted for 15% of the heavy mineral portion of each suite and the remainder was non-valuable heavy minerals. The study, completed in July 1998, also indicated that market-quality ilmenite, rutile and zircon products could be produced from such heavy minerals suites and that markets currently exist for such products.

In August 1998, based on the consultant's pre-feasibility report, we commenced additional feasibility testing. This consisted of testing the use of fine mineral spiral equipment in Florida on Tennessee mineral property sands followed by spiral equipment testing of Tennessee mineral property sands at an equipment contractor's facility. In 2000, based on the contractor's test results, we designed and commissioned construction of a spiral-based pilot plant for testing at the Tennessee mineral property. The plant was erected at Camden, and testing operations began in early 2001 (see "Location and Status of Work on the Tennessee Mineral Property"). Further feasibility testing is expected to involve, among other things, the following:

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

Subsequent to completion of the 1998 pre-feasibility study, our further exploration of the Tennessee mineral property has suggested the existence of additional heavy mineral sands in an area northwest of the Camden Property known as "Little Benton." Preliminary data indicate that Little Benton contains mineralization similar to the Camden Property. We have approximately 3,500 acres under lease in the Little Benton area and intend to conduct further testing in the future.

Expenditures on the Tennessee mineral property were $599,000 in 2002, $931,000 in 2001 and $4,769,000 to date. Expenditures have been incurred for pilot plant design, fabrication and site preparation, leasehold minimum advance royalty payments, and other related exploration activities. During 2002, due to a lack of resources, we reduced our expenditures on the Tennessee mineral property to a minimal amount and did no further exploration or development work. We anticipate spending between $150,000 and $300,000 maintaining the Tennessee mineral property during 2003.

Products and Competition--the Tennessee Mineral Property.

Based on the exploratory work done to date, we anticipate that the saleable products which could be produced from the Tennessee mineral property are ilmenite, rutile and zircon. Testing at the Tennessee mineral property indicates that Camden ilmenites contain from 64% to 72% titanium dioxide. Ilmenites

commercially traded today typically contain 40% to 70% titanium dioxide and are used primarily in the production of titanium dioxide pigment, a specialty chemical used principally as a whitener and opacifier for paper, plastics and paint. According to the latest U.S. Geological Survey report, ilmenite is the most abundant naturally occurring, commercially produced titanium mineral and supplies approximately 90% of the world demand for titaniferous material. The value of titanium mineral concentrates consumed in the United States in 2002 was approximately $450 million. There are presently two entities in the United States which produce ilmenite concentrate from heavy mineral sands and virtually all production is used by four titanium pigment producers whose plants are primarily located in the southeastern U.S. Pigment producers use various methods to process ilmenite concentrate into titanium dioxide pigment and require that the concentrate feedstock meet certain chemical and size criteria applicable to the process being used.

Rutile, which generally contains greater than 95% titanium dioxide, is also used in the production of titanium dioxide pigment. In pigment products, its processing costs are significantly less than ilmenite due to the higher concentration of titanium dioxide. Although this greatly enhances its market value, rutile is much less abundant than ilmenite, representing approximately 5% of the total heavy minerals contained in the Tennessee mineral property.

Zircon, which is used in ceramic, refractory and foundry applications, represents approximately 15% of the heavy minerals contained in the Tennessee mineral property. Zircon sand is currently being produced at three mines in the southeastern U.S. and in several countries around the world. Titanium-bearing minerals and zircon are commonly found and mined together.

Location and Status of Work on the Tennessee Mineral Property.

On the following page is a location map for the Camden and Little Benton region, within which are the leased parcels we collectively refer to as the Tennessee mineral property. Access within blocks is via a network of County and farm roads. Lease blocks in the Camden area are made up of contiguous rural tracts. Land uses are dominantly forestry and cattle grazing. Bottom lands are sometimes used for row crops. There is no history of mining in these areas.

Altair has an operational pilot plant on the Camden lease block. Pilot plant operations are fully permitted with the state of Tennessee and federal agencies. The plant includes dedicated electrical service, a lay-down area for heavy mineral sand samples, and a combined water storage/sand placement structure. Plant elements include a feed system, conveyors, trommel, two stages of cyclones, and a five-stage spiral plant.

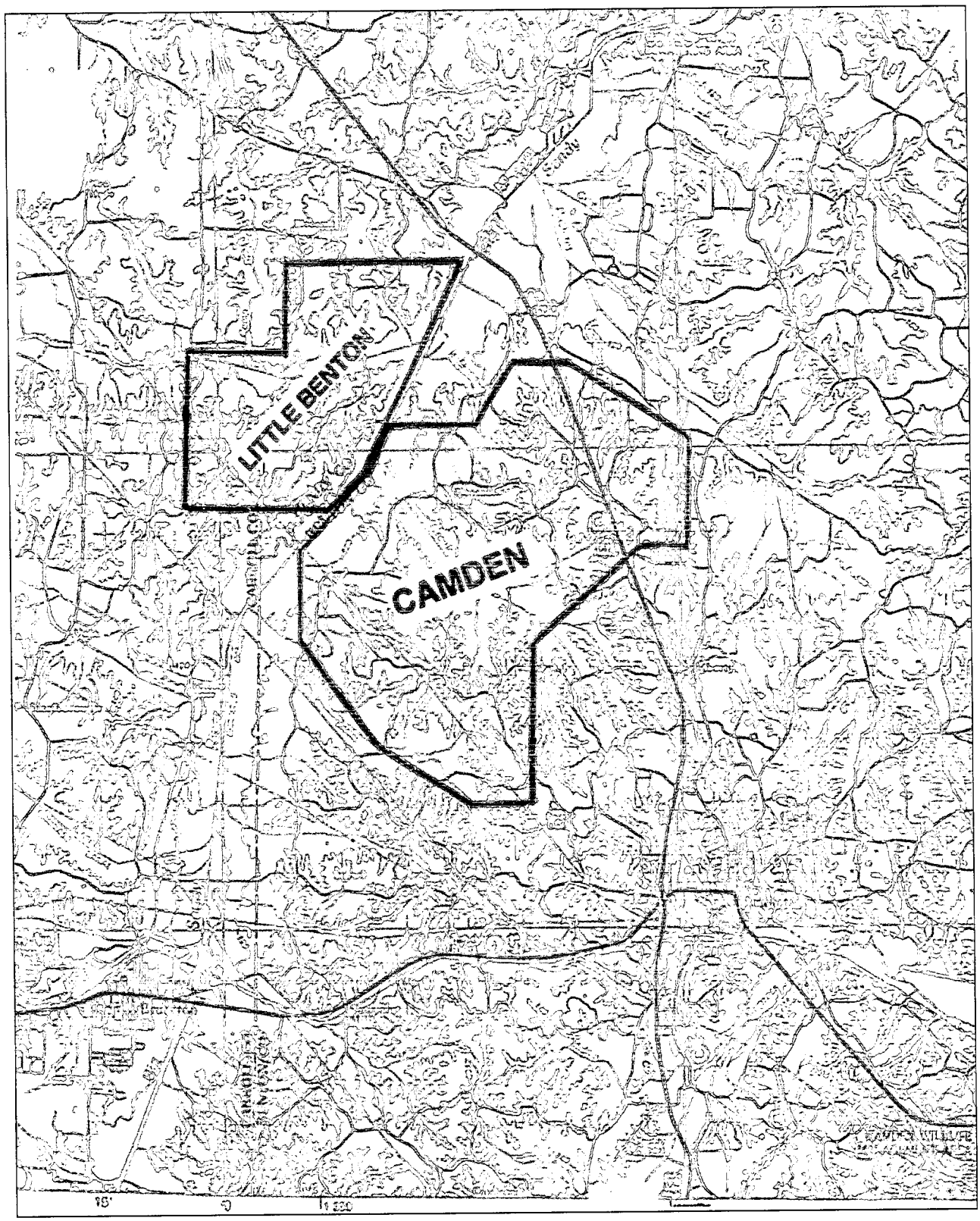
During 2001, we excavated 970 tons of material from four sites in the Camden leasehold area and processed it through the test facility. Plant operations closely approximated design expectations and we incurred no significant operating problems. Processing of the sample material yielded titanium recoveries exceeding 80% and zirconium recoveries exceeding 90%. These percentages represent the amounts of titanium and zirconium recovered as a percentage of the total titanium and zirconium contained in the sample. Heavy mineral concentrates were subsequently processed through an off-site dry mill to prepare sample products which are now being analyzed by interested parties.

Research, Testing and Development of the Tennessee Mineral Property.

During 2002, we did no additional development work and limited our expenditures to $599,000. This compares to the $931,000 in exploration and development expenses we incurred in fiscal 2001 and $1,218,000 in exploration and development expenses we incurred in fiscal 2000 related to the Tennessee mineral property.

We plan to further develop the property by joining with a qualified partner, if available, to provide additional financial, engineering and corporate resources.

Tennessee Mineral Property



The Jig

Description of the Jig.

The Altair Centrifugal Jig segregates particles based on differences in their specific gravity. Such technology may be categorized as a "gravity separation" process. Gravity separators are widely used in minerals beneficiation because of their relative simplicity, low cost of operation and ability to continuously treat large tonnage throughput. Preliminary demonstration tests conducted by Altair and a previous owner of the jig suggest that the jig may be commercially useful in a number of applications, including:

- Recovery of ultra fine gold from waste streams or former tailings;
- Recovery of zircon, rutile, ilmenite, leucoxene, and other valuable fractions from heavy mineral sand operations;
- Sulfur and ash removal from fine coal;
- Recovery of tin and iron ore fines from fine tailings;
- Concentration of heavy minerals, such as anatase, aparite, barite, cassiterite, chromite, columbite, industrial diamonds, fluorite, various garnets, monazite, tantalite and wolframite; and
- Remediation of nuclear waste.

Several prototype and demonstration jigs have been built and tested by Altair and previous owners of the jig. Our Series 12 Jig stands about six feet tall, requires floor space of about 25 square feet and weighs approximately 2,000 pounds. Our Series 30 Jig stands about 10 feet tall, requires floor space of about 54 square feet and weighs approximately 7,000 pounds. Recently constructed jigs have been mounted on metal frames along with jig auxiliary equipment—pulse water pump and tank and control panel—for transport by truck and rapid on-site installation.

How the Jig Works.

A conventional jig separates a slurry of mineral particles as it flows across the top of a screen. Water is periodically pulsed up through the screen to eliminate interparticle friction and allow differential settling according to the variations in the net specific gravities of the ore. Heavier minerals are allowed to pass downward through the screen while lighter materials flow across the screen to a discharge point. The jig operates according to conventional jig principles except that the screen surface is cylindrical and is rotated to subject the particles to centrifugal forces. As currently designed, materials to be processed by the jig are introduced into the top of the jig in a slurry mix with water. The slurry is diffused across the top of the interior of a vertical cylindrical screen which is rotating. Water is pulsed through the screen allowing differential separation in the slurry material. Heavy particles pass through the screen, are collected, and exit the machine in a "concentrate" stream. Lighter particles flow down the screen interior, are collected and exit out the bottom of the machine in a separate "tails" stream. Use of the jig requires no chemical additives. In operation, the jig utilizes a combination of standard mechanical jig and *centrifugal* technologies. The jig is of simple mechanical design with few wear surfaces. To compete as a viable commercial unit, the jig must perform reliably over long time periods. The 600+ hours that we have tested and operated the Series 30 Jig is insufficient to give assurance as to the length of the operating life of the jig.

Target Markets for the Jig.

In the long run, the jig may potentially be useful for a number of applications, the most promising of which may be the processing of heavy mineral sands to recover titanium and zircon. In September 2002, we completed a consulting project for a titanium pigment producer. The project was a test in which the jig was used to determine the feasibility of recovering fine particles of titanium dioxide from pigment processing waste at a plant site. The pigment producer has analyzed the test results and has requested a proposal from

us to proceed with a full-scale project to recover the titanium dioxide from the waste ponds at the plant. We responded with the requested proposal and are awaiting further word from the pigment producer.

In the meantime, we are not actively marketing the jig on a retail basis, but are seeking opportunities to exploit the jig for projects similar to that described above. We are also seeking a partner who has adequate resources to develop and market the jig or sell the jig technology.

Jig Technology and Proprietary Rights.

Initial patents related to the concept of the jig as a whole were issued in the United States, South Africa, United Kingdom, Australia and Canada. These patents expired on various dates between May 1999 and December 2000. A series of second patents with respect to the process by which water is pulsed through the cylindrical screen on the jig, a critical component differentiating the jig from competing products, have been issued in the United States, South Africa, Japan, Europe, Australia, Canada, United Kingdom, Germany and France. These patents expire on various dates between January 2010 and January 2011. A third series of patents with respect to an efficiency enhancing component of the jig have been issued in the United States, Europe, Australia, Japan, South Africa, Canada and Brazil. These patents have expiration dates between April and November 2018.

Competition for the Jig.

Various mineral processing technologies perform many functions similar or identical to those for which the jig is designed. Minerals processing technologies are generally predicated on the physical and chemical characteristics of the materials being processed. A minerals processor may exploit contrasts in size, specific gravity, hardness, magnetic susceptibility, electrical conductivity, and similar characteristics to selectively extract and concentrate mineral constituents. Minerals processors also exploit variations in chemical reactivity and molecular affinity to selectively separate minerals.

The jig competes in an arena in which particle specific gravity is the primary criteria for particle segregation and capture. Competing technologies include spirals and cones, which are most effective in feed sizes larger than 150 mesh, froth flotation devices, which can be effective on particles 200 mesh or smaller in size and heavy media separation, which is effective primarily in the removal of ash from coal and in small-scale analytic laboratory applications. Competing jig-like products include the following:

- The Kelsey jig, which was developed in Australia and, although more complicated than the jig, incorporates similar centrifugal and jig technologies. According to the Kelsey jig's manufacturer, MD mineral technologies, Kelsey jigs are in service at 25 plants worldwide.
- The Falcon Concentrator, which was developed in Canada and is used mainly for pre-concentration and scavenging. A centrifugal device, its applications to date have been in the gold and tantalum industries.
- The Knelson Concentrator, which was developed in Canada and is a batch concentrator rather than a jig. (A batch concentrator differs from the jig in that it process a finite "batch" of material, is completely emptied, and then processes a completely new finite batch, while the jig processes a continuous flow of materials). Our understanding is that the Knelson Concentrator is best suited to small volumes. Knelson Concentrators have been installed in various mining applications, primarily gold, throughout the world.

Long term testing needs to be completed to accurately define operating costs and operating efficiencies associated with the jig as compared to competing products. Results from further tests or actual operations may reveal that these alternative technologies and products are better adapted to any or all of the uses for which the jig is intended. Moreover, regardless of test results, consumers may view any or all of such alternative technologies as technically superior to, or more cost effective than, the jig.

Altair is a small player in an industry comprised of major mining companies possessing tremendous capital resources and we are an insignificant competitive factor in the industry. There is no assurance that competitors, many of whom may have significant capital and resources, will not develop or are not now in the process of developing competitive equipment that may be functionally or economically superior to our equipment.

Research, Testing and Development of the Jig.

We have concluded that, in the foreseeable future, our limited human and financial resources can most effectively be utilized in the development of the titanium processing assets and titanium processing technology. Accordingly, during 2002, we incurred only those expenditures (estimated at $27,000) necessary to maintain the jig. This compares to the $11,000 in research and development expenses we incurred in fiscal 2001 and $43,000 in research and development expenses we incurred in fiscal 2000 related to the jig.

We are seeking to sell the jig technology or license it to others who have adequate resources to complete development of the jig, establish marketing and distribution channels and initiate manufacturing. At the same time, we are seeking special project work where the jig may be utilized profitably.

Subsidiaries.

Altair Nanotechnologies Inc. was incorporated under the laws of the province of Ontario, Canada in April 1973 under the name Diversified Mines Limited, which was subsequently changed to Tex-U.S. Oil & Gas Inc. in February 1981, then to Orex Resources Ltd. in November 1986, then to Carlin Gold Company Inc. in July 1988, then to Altair International Gold Inc. in March 1994, then to Altair International Inc. in November 1996 and then to Altair Nanotechnologies Inc. in July 2002. In July 2002, Altair Nanotechnologies Inc. redomesticated from the Ontario Business Corporations Act to Canada's federal corporate statutes, the Canada Business Corporations Act.

Fine Gold was acquired by Altair in April 1994. Fine Gold has earned no operating revenues to date. Fine Gold acquired the intellectual property associated with the jig in 1996. Altair intends that Fine Gold will hold and maintain jig technology rights, including patents.

MRS was incorporated by Altair in April, 1987 and was formerly known as Carlin Gold Company. MRS previously has been involved in the exploration for minerals on unpatented mining claims in Nevada, Oregon and California. All mining claims have now been abandoned. MRS currently holds, directly or indirectly, all of Altair's interest in the Tennessee mineral property, and Altair intends that MRS will continue to lease or acquire and explore mineral properties in the future, particularly properties that contain minerals that may be processed with the jig.

Altair Nanomaterials, Inc. was incorporated in 1998 as a wholly-owned subsidiary of MRS and holds all of the Company's interest in our titanium pigment processing technology and related assets. The remaining 100% owned subsidiary, Tennessee Valley Titanium, does not presently have any assets or operations.

Government Regulation and Environmental Concerns.

Government Regulation.

Our exploration of the Tennessee mineral property, testing of the jig, and operation of the titanium pigment processing facility are, and any future testing, operation, construction or mining activities of Altair will be, subject to a number of federal, state, and local laws and regulations concerning mine and machine safety and environmental protection. Such laws include, without limitation, the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, and the Comprehensive Environmental Response Compensation Liability Act. Such laws require that we take steps to, among other things, maintain air and

water quality standards, protect threatened, endangered and other species of wildlife and vegetation, preserve certain cultural resources, and reclaim exploration, mining and processing sites.

Compliance with federal, state, or local laws or regulations represents a small part of our present budget; nevertheless, continued compliance may be extremely costly, especially if we actually commence extraction operations on the Tennessee mineral property. If we fail to comply with any such laws or regulations, a government entity may levy a fine on us or require us to take costly measures to ensure compliance. Any such fine or expenditure may adversely affect our development.

We are committed to complying with and, to our knowledge, are in compliance with, all governmental regulations. We cannot, however, predict the extent to which future legislation and regulation could cause us to incur additional operating expenses, capital expenditures, and/or restrictions and delays in the development of our products and properties.

Environmental Regulation and Liability.

Any proposed mining or processing operation on the Tennessee mineral property, at the titanium pigment processing facility or any other property acquired by us will be subject to federal, state, and local environmental laws. Under such laws, we may be jointly and severally liable with prior property owners for the treatment, cleanup, remediation, and/or removal of substances discovered on the Tennessee mineral property or any other property used by us, which are deemed by the federal and/or state government to be toxic or hazardous ("Hazardous Substances"). Courts or government agencies may impose liability for, among other things, the improper release, discharge, storage, use, disposal, or transportation of Hazardous Substances. We might use Hazardous Substances and, although we intend to employ all reasonably practicable safeguards to prevent any liability under applicable laws relating to Hazardous Substances, companies engaged in mineral exploration and processing are inherently subject to substantial risk that environmental remediation will be required.

Employees.

The business of Altair is currently managed by Dr. William P. Long, Chief Executive Officer of the Company, Dr. Rudi E. Moerck, President of the Company and Mr. C. Patrick Costin, Vice President of the Company and President of MRS and Fine Gold. In addition, we employ a Chief Financial Officer and 20 additional employees. Aside from Dr. Long, Mr. Costin and the Chief Financial Officer, we have no employment agreements with any of our personnel.

We do not anticipate that the number of Company employees will significantly increase until we have sufficient sales and business activity to warrant it.

Where You Can Find More Information

We file annual, quarterly, and current reports, proxy statements, and other information with the SEC. You may read and copy any reports, statements, or other information that we file at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. The SEC also maintains an Internet site (http://www.sec.gov) that makes available to the public reports, proxy statements, and other information regarding issuers, such as Altair, that file electronically with the SEC.

Our common shares are quoted on the Nasdaq SmallCap Market. Reports, proxy statements and other information concerning Altair can be inspected and copied at the Public Reference Room of the National Association of Securities Dealers, 1735 K Street, N.W., Washington, D.C. 20006.

Enforceability of Civil Liabilities Against Foreign Persons.

We are a Canadian corporation, and a majority of our directors are residents of Canada. In addition, certain of our experts (including Canadian legal counsel) are located in Canada. As a result, investors may be unable to effect service of process upon such persons within the United States and may be unable to enforce court judgments against such persons predicated upon civil liability provisions of the United States securities laws. It is uncertain whether Canadian courts would (i) enforce judgments of United States courts obtained against us or such directors, officers or experts predicated upon the civil liability provisions of United States securities laws or (ii) impose liability in original actions against Altair or its directors, officers or experts predicated upon United States securities laws.

Glossary of Terms.

Anatase means one of three naturally occurring mineral phases of titanium dioxide (along with rutile and brookite). Anatase particles have a tetragonal crystal structure.

Ash means inorganic residue remaining after coal combustion. Ash is an undesirable component of coal because it reduces thermal value and produces a waste product after combustion.

Centrifugal force means the component of force on a body in curvilinear motion that is directed away from the axis of rotation.

Ilmenite means a titanium-bearing oxide mineral containing variable percentages of iron and used as a raw material in the production of titanium pigments.

Iron ore fines means particles of iron ore, usually less than 1 millimeter in diameter.

Lithium titanate is a compound of lithium, titanium and oxygen.

Mesh means one of the openings or spaces in a screen. The value (size) of the mesh is given as the number of openings per linear inch.

Micron means one millionth of a meter. One micron equals 1000 nanometers.

Mill means a building with machinery for processing ore. Dry mill refers to heavy minerals sand processing of dry materials. Wet mill refers to heavy minerals sand process of material that are mixed with water in slurry.

Photocatalytic means a process by which light frequencies activate the catalytic nature of a substrate.

Rutile means one of three naturally occurring mineral phases of titanium dioxide (along with anatase and brookite). Rutile particles have a tetragonal crystal structure.

Specific gravity means the ratio of the mass of a solid or liquid to the mass of an equal volume of water at a specified temperature.

Suite means an assemblage of minerals which naturally occur together (i.e. a mineral suite).

Tails or tailings means those portions of washed ore that are regarded as too poor to be treated further, as distinguished from material (concentrates) that is to be smelted or otherwise utilized.

Tantalum is rare metal that is ductile (i.e. not brittle) easily fabricated, highly resistant to corrosion by acids, and a good conductor of heat and electricity and has a high melting point. The major use for tantalum, as tantalum metal powder, is in the production of electronic components, mainly tantalum capacitors. Major end uses for tantalum capacitors include portable telephones, pagers, personal computers, and automotive electronics.

Yttrium is an element on the periodic table.

Forward-looking Statements.

This Form 10-K contains various forward-looking statements. Such statements can be identified by the use of the forward-looking words "anticipate," "estimate," "project," "likely," "believe," "intend," "expect," or similar words. These statements discuss future expectations, contain projections regarding future developments, operations, or financial conditions, or state other forward-looking information. When considering such forward-looking statements, you should keep in mind the risk factors noted in the following section and other cautionary statements throughout this Form 10-K and our other filings with the Commission. 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 Form 10-K or any other applicable filings materializes, or any other underlying assumptions prove incorrect, our actual results may vary materially from those anticipated, estimated, projected, or intended.

Among the key factors that may have a direct bearing on our operating results are risks and uncertainties described under "Factors That May Affect Future Results," including those attributable to the absence of significant operating revenues, the absence of profits, uncertainties regarding the development and commercialization of the jig, uncertainties regarding the quality, quantity and grade of minerals on the Tennessee mineral property, risks related to our proposed development and exploitation of our titanium processing technology and titanium processing assets and uncertainties regarding our ability to obtain capital sufficient to continue our operations and pursue our proposed business strategy.

Factors that May Affect Future Results.

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

To date, we have not generated substantial revenues from operations. We have generated $268,041 of revenues from our titanium processing technology and $28,270 from use of the jig in consulting contracts. We have not completed exploration of the Tennessee mineral property. We can provide no assurance that we will ever generate revenues from the Tennessee mineral property or that we will generate substantial revenues from the titanium processing technology and the jig.

We may continue to experience significant losses from operations.

We have experienced a loss from operations in every fiscal year since our inception. Our losses from operations in 2001 were $6,021,532 and our losses from operations in 2002 were $8,771,378. Although we have made projections of possible one-time profitability during 2003, such projections are based solely on an expectation that we will enter into a license agreement with respect to our new RenaZorb™ product and that such license agreement will include, among other things, a one-time up-front multi-million dollar payment. We may not enter into any such license agreement, or such license agreement may not involve any significant up-front payments. Even if we do receive a significant up-front payment during 2003 and achieve one-time profitability, we will thereafter experience a net operating loss until, and if, the titanium processing technology, the jig and/or the Tennessee mineral property begin generating significant, sustained revenues. Even if any or all such products or projects begin generating significant, sustained revenues, the revenues may not exceed our costs of production and operating expenses.

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

As of December 31, 2002, we had $244,681 in cash, and a working capital deficit of $204,365. Although we have raised additional capital since December 31, 2002, we do not expect that this capital, when combined with projected revenues from nanoparticle sales, will be sufficient to fund our ongoing operations. Accordingly,

we will need to raise significant amounts of additional capital in the future in order to sustain our ongoing operations and continue the testing and additional development work necessary to place the titanium processing technology into continuous operation. In addition, we will need additional capital for exploration of the Tennessee mineral property. If we determine to construct and operate a mine on the Tennessee mineral property, we will need to obtain a significant amount of additional capital to complete construction of the mine and commence operations.

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

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

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

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

As of December 31, 2002, there were outstanding warrants to purchase up to 9,170,171 common shares at a weighted average exercise price of $1.92 per share and options to purchase up to 4,061,700 common shares at a weighted average exercise price of $3.83 per share. The existence of such warrants and options may hinder future equity offerings, and the exercise of such warrants and options may further dilute the interests of all shareholders. Future resale of the common shares issuable on the exercise of such warrants and options may have an adverse effect on the prevailing market price of the common shares.

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

In order to illustrate the relationship between the market price of our common shares and the issuance of common shares upon the exercise of conversion rights that may accrue under the Second Amended and Restated Secured Term Note, the following table sets forth how many additional common shares would be issued upon the exercise of such conversion rights if such conversion rights accrue and the average of the closing price of our common stock for the five trading days ending on the day before each conversion right

accrues are (a) $1.43 or greater, (b) $0.50 per share, (c) $0.25 per share, and (d) $0.10 per share. Such prices are selected for illustration purposes only and do not reflect our actual estimate of the average of the closing price of our common stock for any particular period.

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

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

(2) Represents percentage of outstanding common shares following exchange assuming the 30,244,348 common shares outstanding on December 31, 2002 are outstanding on the date of conversion.

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

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

We have limited financial and other resources and, because of our early stage of development, have limited access to capital. We compete or may compete against entities that are much larger than we are, have more extensive resources than we do and have an established reputation and operating history. Because of their size, resources, reputation, history and other factors, certain of our competitors may have better access to capital and other significant resources than we do and, as a result, may be able to exploit acquisition and development opportunities more rapidly, easily or thoroughly than we can.

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

We have pledged all of the intellectual property, fixed assets and common stock of Altair Nanomaterials, Inc., our second-tier wholly-owned subsidiary, to secure repayment of a Second Amended and Restated Secured Term Note with a face value of $1,400,000 and a due date of March 31, 2004. Altair Nanomaterials, Inc. owns and operates the titanium processing technology we acquired from BHP in 1999. The Second Amended and Restated Secured Term Note is also secured by a pledge of the common stock and leasehold assets of Mineral Recovery Systems, Inc., which owns and operates our leasehold interests in the Camden, Tennessee area. If we default on the Second Amended and Restated Secured Term Note, severe remedies will be available to the holder of the Second Amended and Restated Secured Term Note, including immediate seizure and disposition of all pledged assets.

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

In August 2002, we entered into a purchase and sale agreement with BHP Minerals International Inc. to purchase the land, building and fixtures in Reno, Nevada where our titanium processing assets are located. In connection with this transaction, BHP also agreed to terminate our obligation to pay royalties associated with

the sale or use of the titanium processing technology. In return, we issued to BHP a note in the amount of $3,000,000, at an interest rate of 7%, secured by the property we acquired. The first payment of $600,000 of principal plus accrued interest is due February 8, 2006. Additional payments of $600,000 plus accrued interest are due annually on February 8, 2007 through 2010. If we fail to make the required payments on the note, BHP has the right to foreclose and take the property. If this should occur, we would be required to relocate our titanium processing assets and offices, causing a significant disruption in our business.

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

Virtually any proposed use of the titanium processing technology, the jig or the Tennessee mineral property would be subject to federal, state and local environmental laws. Under such laws, we may be jointly and severally liable with prior property owners for the treatment, cleanup, remediation and/or removal of any hazardous substances discovered at any property we use. In addition, courts or government agencies may impose liability for, among other things, the improper release, discharge, storage, use, disposal or transportation of hazardous substances. We might use hazardous substances and, if we do, we will be subject to substantial risks that environmental remediation will be required.

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

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

We are dependent on key personnel.

Our continued success will depend to a significant extent on the services of Dr. William P. Long, our Chief Executive Officer, Dr. Rudi Moerck, our President, and Mr. C. Patrick Costin, our Vice President and President of Fine Gold and MRS. The loss or unavailability of Dr. Long, Dr. Moerck or Mr. Costin could have a material adverse effect on us. We do not carry key man insurance on the lives of Dr. Long, Dr. Moerck or Mr. Costin.

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

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

The market price of our common shares is extremely volatile.

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

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

We may be delisted from the Nasdaq SmallCap Market.

Our listing on the Nasdaq SmallCap Market is conditioned upon our compliance with the NASD's continued listing requirements for such market by June 2003, including the $1.00 per share minimum bid requirement. If the market price for our common shares has not increased to $1.00 per share for at least 10 consecutive days by June 2003, we expect to be delisted from the Nasdaq SmallCap Market. The Staff of Nasdaq has indicated that it may submit to the SEC a proposed rule or policy change which, if approved by the SEC, could lead to an additional 180 day extension beyond June 2003 in order to meet the $1.00 per share minimum bid requirement; however, even if such change were to be approved, we would not likely be eligible for such additional 180 extension unless our we had a minimum stockholders' equity balance of $5,000,000 in June 2003. We presently do not have a stockholders' equity balance of $5,000,000 and, absent a significant infusion of capital, do not expect to have such a balance in June 2003. Delisting from the Nasdaq SmallCap Market may have a significant negative impact on the trading price, volume and marketability of our common shares.

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

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

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

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

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

Although we may receive some significant one-time payments in various stages of the testing and evaluation of the pharmaceutical application of our technology, we are not expecting to receive significant ongoing revenue unless and until an end product incorporating the technology goes to market.

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

Because of our relatively small size and limited resources, we do not plan to use our titanium processing technology for large-scale production of titanium dioxide pigments; we have, however, entered into discussions with various minerals and materials companies about licensing our technology to such entities for large-scale production of titanium dioxide pigments. We have not entered into any long-term licensing agreements with respect to the use of our titanium processing technology for large-scale production of titanium dioxide pigments and can provide no assurance that we will be able to enter into any such an agreement. Even if we enter into such agreement, we would not receive significant revenues from such license until feasibility testing is complete and, if the results of feasibility testing were negative, would not receive significant revenues at any time.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Item 2. *Properties*

We maintain a registered office at 56 Temperance Street, Toronto, Ontario M5H 3V5. We do not lease any space for, or conduct any operations out of, the Toronto, Ontario registered office. In addition, we lease 900 square feet of office space at 1725 Sheridan Avenue, Suite 140, Cody, Wyoming 82414, which serves as the corporate headquarters for Altair and its subsidiaries. Our lease for the Cody, Wyoming office space may be terminated by either party on 30 days' prior written notice.

On August 8, 2002, we entered into a purchase and sale agreement with BHP wherein we purchased the land, building and fixtures at 204 Edison Way, Reno, Nevada 89502, where our titanium processing assets are located. The building contains approximately 80,000 square feet of production, laboratory, testing and office space. Upon completion of the purchase transaction, we vacated 5,700 square feet of leased office space at 230 South Rock Boulevard, Suite 21, Reno, Nevada which had been leased on a month-to-month basis, and relocated the employees that had occupied that office to the 204 Edison Way building.

MRS leases approximately 1,550 square feet of laboratory space at 7950 Security Circle, Reno, Nevada 89506, for its jig testing operations. The test facility lease may be terminated by either party upon eight weeks prior written notice. We believe that the existing offices and test facilities of Altair and its subsidiaries are adequate for our current needs. In the event that alternative or additional office space is required, we believe we could obtain additional space on commercially acceptable terms.

The Tennessee mineral property consists of approximately 8,700 acres of real property located near Camden, Tennessee, which MRS leases from multiple owners of the real property. Such leases grant MRS certain exclusive rights, including the right to explore, test, mine, extract, process, and sell any minerals or other materials found on the land, in exchange for the payment of minimum annual advanced royalty payments prior to commencement of production on the properties (or after commencement of production, to the extent production royalty payments do not equal nominal royalty payments) and, thereafter, production royalty payments in an amount equal to a percentage of the value of minerals mined and sold from the property. See the Notes to the Consolidated Financial Statements for information regarding present and future minimum advance royalty payments. The leases typically are for a minimum term of ten years, and may be extended indefinitely at MRS' option, provided Altair is actively conducting exploration, development, or mining operations. The leases are cancelable by MRS at any time, and are cancelable by the lessor in the event MRS breaches the terms of the lease. he minerals on the Tennessee mineral property have not yet proven to be a reserve, and our operations and proposed plan with respect to it are exploratory in nature. See "Item 1. Business--Tennessee Mineral Property." The Tennessee mineral property is accessed by public roads and, to our knowledge, has not been used in prior mining operations.

Item 3. *Legal Proceedings*

We are from time to time involved in routine litigation incidental to the conduct of our business. We are currently not involved in any suit, action or other legal proceedings, nor are we aware of any threatened suit, action or other legal proceedings which management believes will materially and adversely affect the business or operations of Altair or its subsidiaries.

Item 4. *Submission of Matters to a Vote of Security Holders*

We did not submit any matters to a vote of security holders during the fourth quarter of the 2002 fiscal year.

PART II

Item 5. *Market for the Common Shares and Related Shareholder Matters*

Market Price

Our common shares are traded on the Nasdaq SmallCap Market under the symbol "ALTI." The following table sets forth, for the periods indicated, the high and low sale prices for our common shares, as reported on our principal trading market at the time.

Fiscal Year Ended December 31, 2001	Low	High
1st Quarter	$1.000	$3.406
2nd Quarter	$1.969	$2.890
3rd Quarter	$1.230	$2.710
4th Quarter	$1.010	$1.790
Fiscal Year Ended December 31, 2002	**Low**	**High**
1st Quarter	$0.750	$1.560
2nd Quarter	$0.370	$1.140
3rd Quarter	$0.300	$0.930
4th Quarter	$0.450	$0.800

The quotations set forth above reflect inter-dealer prices, without retail mark-up, mark down or commission and may not represent actual transactions. The last sale price of our common shares, as reported on the Nasdaq National Market, on March 7, 2003 was $.39 per share.

Outstanding Shares and Number of Shareholders

As of March 7, 2003, the number of common shares outstanding was 30,799,492 held by 497 holders of record. In addition, as of the same date, we have reserved 4,991,700 common shares for issuance upon exercise of options that have been, or may be, granted under our employee stock option plans and 9,157,671 common shares for issuance upon exercise of outstanding warrants.

Dividends

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

Securities Authorized for Issuance under Equity Compensation Plans

We have stock option plans administered by the Board of Directors that provide for the granting of options to employees, officers, directors and other service providers of the Company. All option plans have been approved by security holders. We also have an Employee Stock Purchase Plan ("ESPP") which allows employees to purchase common shares through payroll deductions. The ESPP, which is a broadly-based plan open to all employees, has not been approved by shareholders. The following table sets forth certain information with respect to compensation plans under which equity securities are authorized for issuance at December 31, 2002:

Plan Catgory	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	4,061,700	$3.83	930,000
Equity compensation plans not approved by security holders	None	N/A	338,450
Total	4,061,700	$3.83	1,268,450

Recent Sales of Unregistered Securities

During the three-month period ended December 31, 2002, we offered and sold the following equity securities in private placements intended to be exempt from the registration requirements of the Securities Act and similar state securities laws:

Between October 4, 2002 and October 15, 2002, we sold 266,667 common shares and 266,670 warrants to purchase common shares to six accredited investors for net proceeds of $200,000. Each of these sales also included four options (for a total of 1,066,668 options), each option granting the investor the right to purchase the same quantity, and no less, of common shares and warrants at the same price as the initial placement. The options expire at staggered dates, the latest being April 15, 2003, and all of the options terminated if one of the options is permitted to expire without being exercised in full. Half of the warrants are exercisable at $1.25 and the other half are exercisable at $1.75. The warrants expire on the earlier of five years from the date of issue or, after one year from date of issue or anytime after the shares are registered, the 180th day following the date the closing price equals or exceeds the exercise price by more than $2.00 for 10 days, whether or not consecutive. The target price is $3.25 for half of the warrants and $3.75 for the other half of the warrants. During the three-month period ended December 31, 2002, options were exercised for 133,333 common shares, resulting in net proceeds of $100,000. All remaining options have terminated because of the holders' failures to exercise an option prior to its expiration.

On November 21, 2002, we issued 1,500,000 common shares to Doral 18, LLC ("Doral") in exchange for a reduction of the principal amount owed to Doral under a term note. The principal amount was reduced from $2,000,000 to $1,400,000. We also issued to Doral a warrant for 750,000 common shares exercisable at

$1.00 per share which expires on the earlier of November 21, 2007 or the 180th day following the date the closing price of our common shares equals or exceeds $3.00 for 5 consecutive days.

On November 26, 2002, we sold 1,562,500 common shares and 585,938 warrants to purchase common shares to six investors for net proceeds of $625,000. The warrants are exercisable at $1.00 and expire on the earlier of five years from the date of issue or, after one year from date of issue or anytime after the shares are registered, the 180th day following the date the closing price equals or exceeds $3.00 for 10 days, whether or not consecutive.

The above-described common shares, options and warrants were 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) each investor represented and warranted to the Company that it was an "accredited investor," as defined in Rule 501 of Regulation D promulgated under the Securities Act and had 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 was no public offering or general solicitation with respect to the offering, and each investor represented and warranted that it was acquiring the securities for its own account and not with an intent to distribute such securities; (c) each investor was 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) each investor acknowledged that all securities being purchased were "restricted securities" for purposes of the Securities Act, and agreed 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 was placed on the certificates and other documents representing each such security stating that it was 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.

In addition to the sales of unregistered securities described above, we adopted the ESPP on August 6, 2002, which allows employees to purchase common shares through payroll deductions and registered the common shares issuable under the ESPP on a Registration Statement on From S-8. Through December 31, 2002, a total of 161,550 common shares were issued under the ESPP, resulting in proceeds of $92,183.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common shares is Equity Transfer Services, Inc., Suite 420, 120 Adelaide Street West, Toronto, Ontario, M5H 4C3.

Canadian Taxation Considerations

Dividends paid on common shares owned by non-residents of Canada are subject to Canadian withholding tax. The rate of withholding tax on dividends under the Income Tax Act (Canada) (the "Act") is 25%. However, Article X of the reciprocal tax treaty between Canada and the United States of America (the "Treaty") generally limits the rate of withholding tax on dividends paid to United States residents to 15%. The Treaty further generally limits the rate of withholding tax to 5% if the beneficial owner of the dividends is a U.S. corporation which owns at least 10% of the voting shares of the Company.

If the beneficial owner of the dividend carries on business in Canada through a permanent establishment in Canada, or performs in Canada independent personal services from a fixed base in Canada, and the shares of stock with respect to which the dividends are paid is effectively connected with such permanent establishment or fixed base, the dividends are taxable in Canada as business profits at rates which may exceed the 5% or 15% rates applicable to dividends that are not so connected with a Canadian permanent establishment or fixed base. Under the provisions of the Treaty, Canada is permitted to apply its domestic law rules for differentiating dividends from interest and other disbursements.

A capital gain realized on the disposition of common shares by a person resident in the United States ("a **non-resident**") will be subject to tax under the Act if the shares held by the non-resident are "taxable Canadian property." In general, common shares will be taxable Canadian property if the particular non-resident used (or in the case of a non-resident insurer, used or held) the Common Stock in carrying on business in Canada or, pursuant to proposed amendments to the Act, where at any time during the five-year period immediately preceding the realization of the gain, not less than 25% of the issued and outstanding shares of any class or series of shares of the Company were owned by the particular non-resident, by persons with whom the particular non-resident did not deal at arms' length, or by any combination thereof. If common shares constitute taxable Canadian property, relief nevertheless may be available under the Treaty. Under the Treaty, gains from the alienation of common shares owned by a non-resident who has never been resident in Canada generally will be exempt from Canadian capital gains tax if the shares do not relate to a permanent establishment or fixed base which the non-resident has or had in Canada, and if not more than 50% of the value of the shares was derived from real property (which includes rights to explore for or to exploit mineral deposits) situated in Canada.

Item 6. *Selected Financial Data*

The following table sets forth selected consolidated financial information with respect to the Company and its subsidiaries for the periods indicated. The data is derived from financial statements prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP"). The selected financial data should be read in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and accompanying notes included herein. All amounts are stated in U.S. dollars.

For the Year Ended December 31,	2002	2001	2000	1999	1998
STATEMENTS OF OPERATIONS					
Revenues	$ 253,495	$ 42,816	$ -	$ -	$ -
Cost of sales	$ 93,583	$ 18,175	$ -	$ -	$ -
Operating expenses	$ 8,016,623	$ 6,046,173	$ 6,647,367	$ 3,729,534	$ 3,842,441
Interest expense	$ 1,151,388	$ 1,881,077	$ 215,216	$ 1,966	$ 959,612
Interest income	$ (2,105)	$ (148,980)	$ (83,440)	$ (134,811)	$ (335,037)
(Gain) loss on foreign exchange	$ 835	$ 402	$ (864,669)	$ 160,619	$ 17,109
Loss on extinguishment of debt	$ 914,667	$ -	$ -	$ -	$ -
Gain on forgiveness of debt	$ -	$ -	$ -	$ (67,442)	$ (25,805)
Loss on redemption of convertible debentures	$ -	$ -	$ -	$ -	$ 193,256
Net Loss	$ 9,921,496	$ 7,754,031	$ 5,914,474	$ 3,689,866	$ 4,651,576
Basic and diluted net loss per common share from operations	$ 0.40	$ 0.39	$ 0.34	$ 0.24	$ 0.31
Cash dividends declared per common share	$ -	$ -	$ -	$ -	$ -
Deficit, beginning of year	$ 29,412,826	$ 21,606,378	$ 15,691,904	$ 12,002,038	$ 7,350,462
Net loss	9,921,496	7,754,031	5,914,474	3,689,866	4,651,576
Preferential dividend	48,666	52,417	-	-	-
Deficit, end of year	$ 39,382,988	$ 29,412,826	$ 21,606,378	$ 15,691,904	$ 12,002,038
BALANCE SHEET DATA					
Working capital	$ (204,365)	$ (81,154)	$ 234,714	$ (5,931,717)	$ 3,008,789
Total assets	$ 8,914,405	$ 10,853,243	$ 16,651,770	$ 13,365,848	$ 7,103,267
Long-term obligations	$ 3,905,040	$ 1,462,060	$ 2,689,493	$ -	$ 31,091
Current liabilities	$ 604,503	$ 714,689	$ 3,741,366	$ 7,578,083	$ 222,431
Net shareholders' equity	$ 4,404,862	$ 8,676,494	$ 10,220,911	$ 5,787,765	$ 6,849,745

Item 7. *Management's Discussion and Analysis of Financial Condition and Results of Operations.*

The following discussion should be read in conjunction with the consolidated financial statements and notes thereto.

Overview

From inception through the end of 1993, our business consisted principally of the exploration of mineral properties for acquisition and exploration. During 1994, our focus changed as we became engaged in the acquisition, development and testing of mineral processing equipment for use in the recovery of fine, heavy mineral particles including gold, titanium, zircon and environmental contaminants. Since that time, we have continued exploring mineral properties on which we might use our patented mineral processing equipment.

In 1996, we acquired all patent rights to the Campbell Centrifugal Jig, since modified and renamed the Altair Centrifugal Jig. Since April 1996, we have acquired mineral leaseholds on approximately 8,700 acres of land in Tennessee. A prefeasibility study issued in July 1998 confirmed the existence of heavy minerals and suggests that the property warrants further exploration. Based on the results of these independent studies, we initiated additional feasibility testing, but have since suspended such testing due to a shortage of working capital.

In November 1999, we acquired all patent applications and technology related to a hydrometallurgical process developed by BHP Minerals International, Inc. ("BHP") primarily for the production of titanium dioxide products from titanium bearing ores or concentrates (the "titanium processing technology") and all tangible equipment and other assets (the "titanium processing assets") used by BHP to develop and implement the titanium processing technology.

The titanium processing technology has potential to produce both titanium pigments, which are commercially traded in bulk, and nanoparticles, which are sold on specialty product markets. During 2002, our efforts were directed toward development of nanoparticle products, pharmaceutical products and titanium pigment production.

Liquidity and Capital Resources.

We generated sales revenues of $253,495 in 2002 but incurred a net loss of $9,921,496. At December 31, 2002, our accumulated deficit was $39,382,988, or an increase of $9,970,162 over the accumulated deficit at December 31, 2001. This increase was due to the net loss for the year and a preferential warrant dividend of $48,666 recorded in connection with the repricing of certain warrants during 2002.

Our cash and short-term investments decreased from $599,884 at December 31, 2001 to $244,681 at December 31, 2002 due to the incurrence of operating costs and the lack of substantial revenues.

Amendment To Note Purchase Agreement; Security Issuances. On December 15, 2000, we and an investor entered into a Securities Purchase Agreement pursuant to which we issued an Asset-Backed Exchangeable term Note (the "2000 Note") and detachable warrants to purchase 350,000 common shares at $3.00 per share. The 2000 Note was in the principal amount of $7,000,000 with interest at a rate of 10% per annum. Net proceeds of $4 million from the 2000 Note were placed in a restricted bank account to secure a letter of credit and were scheduled to be released as principal payments were made. The 2000 Note was due and payable in full on December 15, 2003 and was secured by a pledge of the intellectual property and common stock of Altair Nanomaterials, Inc. and the common stock of Mineral Recovery Systems, Inc.

During 2001, we made cash payments of principal and interest against the 2000 Note of $1,894,000 and $387,000, respectively, and paid $919,000 of principal and interest through the exchange of 824,800 shares of our common stock in accordance with the terms of the 2000 Note.

On December 28, 2001, we entered into a Note Termination and Issuance Agreement with the investor. The 2000 Note was exchanged for a new note (the "2001 Note") having a face amount of $2,000,000. In addition, the letter of credit was terminated and $2,500,733 of restricted cash securing the letter of credit was paid to the investor. The 2001 Note had an interest rate of 11% per annum with interest payments due monthly. If interest was not paid, the investor automatically received the right to exchange (immediately or at any later date during the term) the monthly interest payment amount into common stock at a specified exchange price. The principal amount of the 2001 Note was due and payable on March 31, 2003. During 2002, a total of $215,808 in accrued interest was exchanged for an aggregate of 299,304 common shares.

In November 2002, we entered into a Note Amendment Agreement with the investor pursuant to which the $2,000,000 2001 Note was terminated in exchange for our issuance of 1,500,000 common shares and a $1,400,000 Second Amended and Restated Secured Term Note (the "2002 Note"). We also issued to the investor a warrant for 750,000 common shares exercisable at $1.00 per share during a five-year term in exchange for the investor's agreement to extend the due date of the 2002 Note to March 31, 2004 and eliminate certain restrictive covenants. The 2002 Note has an interest rate of 11% with the interest payable monthly in cash. The principal amount may be prepaid at any time with a 5% prepayment penalty. Under the terms of the 2002 Note, a conversion right with respect to $280,000 of principal accrues on each of March 1, 2003, June 1, 2003, September 1, 2003, December 1, 2003 and March 1, 2004. If the amount that would be subject to a conversion right is prepaid prior to the date of accrual, such conversion right does not accrue. Once a conversion right has accrued, the principal amount subject to that conversion right cannot be prepaid unless all principal amounts not subject to a conversion right have been prepaid in full. Each conversion right gives the investor the right to convert the subject principal amount into common shares at a conversion price equal to the lesser of (a) $1.00 per share and (b) 70% of the average of the closing price of our common shares for the five trading days ending on the trading day immediately preceding the date on which that conversion right accrued.

The 2002 Note is secured by a pledge of the equipment, intellectual property and common stock of Altair Nanomaterials Inc., which holds the titanium processing technology and titanium processing assets, and by a pledge of the leasehold interest in mineral deposits and common stock of Mineral Recovery Systems, Inc.

During 2002, we sold 4,903,093 common shares together with 3,584,334 warrants in private placements for gross proceeds of $3,335,122. The warrants are exercisable at prices ranging from $1.00 to $2.50 and expire on the earlier of five years from the date of issue or on specified dates after the closing price equals or exceeds prices ranging from $2.50 to $5.50. In addition, 286,169 previously issued warrants were exercised during 2002, resulting in net proceeds to us of $300,477.

Capital Commitments. The following table discloses aggregate information about our contractual obligations including notes payable, mineral lease payments, facilities lease payments and contractual service agreements, and the periods in which payments are due as of December 31, 2002:

Contractual Obligations	Total	Less Than 1 Year	1-3 Years	4-5 Years	After 5 Years
Notes Payable	$ 4,400,000*	$ 1,120,000	$ 280,000	$ 1,200,000	$ 1,800,000
Mineral Leases	1,135,021	147,467	452,868	392,055	142,631
Contractual Service Agreements	423,080	260,580	100,000	62,500	-
Total Contractual Obligations	$ 5,958,101	$ 1,528,047	$ 832,868	$ 1,654,555	$ 1,942,631

* *Before discount of $494,960.*

Current and Expected Liquidity. At December 31, 2002, we had cash and cash equivalents of $244,681, an amount sufficient to fund our basic operations through January 31, 2003. From December 31, 2002 through the date of this report, we received cash from product sales, collection of accounts receivable, and commitments for external funding in an amount sufficient to fund our operations through April 30, 2003. After that date, we will require additional financing to provide working capital to fund our day-to-day operations. We will also require additional financing to continue our development work on the titanium processing technology and the Tennessee mineral property.

In light of the decreasing price of, and limited market for, our common shares, our ability to continue to fund our operations primarily through sales of securities is limited, although we expect to generate some funds through offerings of our common stock and warrants to purchase our common stock, and additional exercises of outstanding warrants, during 2003. We also expect to generate limited revenues from the sales of nanoparticle products and fees generated from development and testing services provided to potential licensors of our titanium processing technology. As of March 7, 2003, we have no commitments to provide additional financing for periods after April 30, 2003, to purchase titanium dioxide nanoparticles or to license our titanium processing technology.

We also expect to generate revenues through the licensing of our titanium processing technology, specifically the pharmaceutical application of the technology (i.e. RenaZorb™) and the application of our technology for large-scale titanium pigment production. With respect to large-scale titanium pigment production, Altair has completed initial testing for a materials company and has 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 10-20 metric tons of titanium dioxide pigment per year. If the phase-two proposal is accepted in some form, Altair would expect to generate limited revenues in 2003 (but not sufficient to cover monthly operating expenses) 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 would be expected to generate significant revenues in the long-term, but significant up-front revenues from such an agreement are unlikely.

With respect to RenaZorb™, testing of this product using animals was initiated in late 2002 and is expected to be completed during the first quarter of 2003. Assuming that, consistent with the initial partial-results we have received, such tests demonstrate the therapeutic potential of RenaZorb™ in animal testing, we expect to be able to negotiate a license agreement with one or more pharmaceutical companies during the first six months of 2003. Altair is uncertain what the terms of such license agreement would be, but pharmaceutical license agreements often involve up front or staged payments, in addition to royalties once the drug is approved by the FDA and marketed. Based on our understanding of terms of license agreements under similar circumstances, we believe that up-front or early stage payments associated with such a license agreement may be large enough to provide liquidity for Altair throughout 2003, and even permit Altair to report one-time profitability during 2003. We can, however, provide no assurance that we will enter into such a license agreement or that such license agreement would involve any significant up-front payments. If we are unable to enter into a license agreement with respect to RenaZorb™ or another product during the first six months of 2003 (or otherwise consummate a significant licensing or sale transaction), we will be forced to significantly curtail our operations and expenses, and our ability to continue as a going concern will be uncertain.

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 titanium processing assets, the intellectual property (patents and patent applications) associated with it, and a building. At December 31, 2002, the carrying value of these assets was $8,475,732, or 94% 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 continuing technology rights protection.
- Stock-Based Compensation. We have two stock option plans which provide for the issuance of 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 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 No. 123, but we also issue warrants and options to non-employees that are recognized as expense when issued in accordance with the provisions of SFAS No. 123. We calculate compensation expense under SFAS No. 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.

Results of Operations.

Operating losses totaled $9,921,496 ($0.40 per share) for the 2002 fiscal year, $7,754,031 ($0.39 per share) for the 2001 fiscal year, and $5,914,474 ($0.34 per share) for the 2000 fiscal year. Principal factors contributing to the losses during these periods were the lack of substantial revenues coupled with the incurrence of operating expenses.

Fiscal Year 2002 vs. 2001

During 2002, we generated $134,925 of revenues through sales of titanium dioxide nanoparticles, lithium titanate nanoparticles and other materials. Titanium dioxide nanoparticle sales included $62,073 sold to a customer for use in commercial thermal spray applications. Revenues also included $90,300 earned under a services agreement entered into with a materials company in September 2002. Under the terms of the agreement, we are testing the materials company's mineral concentrates in the production of titanium dioxide pigments using our titanium processing technology. The testing is being conducted over a five-month period and will generate total revenues of approximately $100,000. Also included in revenues in 2002 was $28,270 earned from a consulting project involving use of the jig to recover titanium dioxide from pigment processing waste, and $40,972 of previously deferred revenues for which product shipments were made and received by the customer in 2002.

During 2002, we suffered from a shortage of working capital which forced us to reassess planned expenditures for our development projects. We elected to concentrate our resources on the development of the titanium processing technology and suspend development work on the Tennessee mineral property and jig. We are currently making only minimal expenditures on the Tennessee mineral property. As a result of this, expenditures for mineral exploration and development have decreased from $930,777 in 2001 to $598,977 in 2002. This reduced level of expenditures will continue until we have adequate working capital available to resume development. At present, we are unable to determine a date when this may occur.

During 2002, our research and development ("R&D") efforts were directed toward pharmaceuticals, the titanium pigment process, batteries, catalysts, thermal spray coatings and fuel cells. R&D expense increased from $559,454 in 2001 to $587,137 in 2002, primarily as a result of increased staff time being devoted to these R&D projects with a resulting decrease in time spent on construction projects and administrative and general activities.

Professional services, which consist principally of legal, consulting and audit expenses, increased from $593,088 in 2001 to $712,530 in 2002. Consulting expenses increased from $238,000 in 2001 to $347,000 in 2002, primarily as a result of our efforts to locate and secure additional financing. Legal fees increased from $197,000 in 2001 to $235,000 in 2002, primarily as a result of the preparation of regulatory filings and other documents associated with financing activities and costs associated with patent applications. These increases were partially offset by a decrease in audit expenses of $27,000.

During 2002, we reduced our general and administrative expenses as much as possible in order to conserve cash. As a result, these expenses decreased by $464,331 to $2,360,315 in 2002, compared to $2,824,646 in 2001. The major components of general and administrative expenses that decreased in 2002 were:

- Investor relations – these expenses decreased by $283,000 (from $336,000 to $53,000) due to a significant reduction in investor relations programs.
- Rents – Our purchase of the building that we previously rented at 204 Edison Way in Reno, Nevada, and the relocation of staff from rented office space to the purchased building resulted in a reduction of rents expense by $67,000 (from $274,000 to $207,000).
- Sample costs – these decreased by $64,000 (from $173,000 to $109,000) due to the purchase of raw materials in bulk quantities as opposed to smaller lots, and less labor being required in sample production.
- Bank charges – these decreased by $28,000 (from $34,000 to $6,000) due to a decrease in fees for a letter of credit associated with a term note. The letter of credit was terminated in 2001.
- Stock options expense – this decreased by $105,000 (from $105,000 to zero) due to a reduction in options granted.
- Other – expenses for such items as tools, operating supplies, laboratory supplies and temporary labor decreased by $138,000 (from $459,000 to $321,000) as a result of our efforts to reduce costs.

These decreases were partially offset by an increase in property taxes of $87,000 (from $1,000 to $88,000), and an increase in property and liability insurance expenses of $47,000 (from $96,000 to $143,000). In addition, salary expense increased by $84,000 (from $1,143,000 to $1,227,000) due to a payment in connection with an employment agreement.

In November 2002, we entered into a note amendment agreement with an investor who held a $2,000,000 term note issued by us in December 2001. In accordance with the terms of the note amendment agreement, we issued to the investor 1,500,000 common shares and a warrant for 750,000 common shares in return for a reduction in the principal balance of the note by $600,000 and changes to certain terms contained in the prior note. e then issued to the investor an amended term note in the amount of $1,400,000. Under generally accepted accounting principles, the transaction is recorded as an extinguishment of debt and the

issuance of a new note. Accordingly, costs associated with the issuance of the 1,500,000 common shares and warrant for 750,000 common shares, together with the write off of costs incurred in the issuance of the prior note, have been recorded as a loss on extinguishment of debt in the amount of $914,667.

During the second quarter of 2002, due to a shortage of cash, we elected to reduce expenditures on the Tennessee mineral property to a minimal amount. As a result of this, development activities have been delayed, including our intended use of the jig to enhance the recovery of heavy minerals on the property. Since we cannot determine when adequate funds will be available to further develop and utilize the jig, we have recorded an impairment of jig assets in the amount of $2,759,956. This impairment charge had the effect of reducing the jig assets' depreciable balance to zero, thereby terminating further depreciation charges. As a result, depreciation and amortization expense decreased by $140,500 to $997,708 in 2002 compared to $1,138,208 for 2001.

Interest expense decreased from $1,881,077 in 2001 to $1,151,388 in 2002 due principally to a reduction in the balance of our term note for much of the year 2002.

During most of 2001, we had a restricted cash balance associated with the term note of between $2,500,000 and $4,000,000 that was earning interest income. In December 2001, we terminated the term note, transferred the restricted cash to the holder of the note and issued a new term note in a lesser amount. As a result of this, cash balances available for investment were significantly reduced during 2002 and interest income declined from $148,980 in 2001 to $2,105 in 2002.

There are several recent pronouncements of the Financial Accounting Standards Board that have or may have an effect on our reported results of operations. See Note 2 of Notes to the Consolidated Financial Statements in Item 8 for a discussion of these pronouncements.

Fiscal Year 2001 vs. 2000

During 2001, we generated $42,816 of revenues through sales of titanium dioxide nanoparticles, lithium titanate nanoparticles and other materials. Titanium dioxide nanoparticle sales represented 70% of revenues during 2001 with the primary application for this product being thermal spray coatings. Sales revenues in 2001 included $16,985 of previously deferred revenues for which product shipments were made in 2001.

Mineral exploration and development expenses decreased from $1,217,966 in 2000 to $930,777 in 2001. During 2000, we began construction of a mineral processing pilot plant at the Tennessee mineral property. In connection with such construction, we incurred $413,000 of costs for permitting, design and construction of the plant site and ancillary facilities, and $388,000 for design and fabrication of the processing equipment. During 2001, we incurred $188,000 of costs to complete construction of the pilot plant. This decline in construction costs from 2000 to 2001 was partially offset by the incurrence of operating costs at the plant.

Research and development expense decreased from $1,555,472 in 2000 to $559,454 in 2001. On January 1, 2001, we hired fourteen former BHP employees who had been involved in the development of the titanium processing technology that we acquired from BHP in November 1999. When we acquired the titanium processing technology, we entered into a services agreement with BHP under which we obtained the services of these fourteen individuals, and certain other BHP employees, for the period November 15, 1999 through December 31, 2000. In 2000, the cost associated with this services agreement was $1,368,000 and was charged to research and development expense. During 2001, of the $1,190,000 in total salaries and overheads, $354,000 was allocated to research and development expense, resulting in a decrease of $996,000 in research and development expense in 2001 from 2000.

Professional services increased from $366,275 in 2000 to $593,088 in 2001. In the first quarter of 2001, we hired new auditors to audit our financial statements. As a result of this, our audit fees increased from $26,000 in 2000 to $157,000 in 2001. We also experienced an increase in legal fees from $176,000 in 2000 to $198,000 in 2001, primarily as a result of preparation of regulatory filings and other documents associated

with financing activities. Consulting expenses increased from $164,000 in 2000 to $238,000 in 2001, also as a result of financing activities.

General and administrative expenses increased by $553,396 to $2,824,646 in 2001, compared to $2,271,250 in 2000. Salaries and overheads increased by $820,000 to $1,268,000 in 2001, compared to $448,000 in 2000, as a result of hiring the fourteen former BHP employees, the president of Altair Nanomaterials, a marketing manager and a general counsel. With respect to the titanium processing technology, we experienced an increase in expenses of $245,000 to $610,000 in 2001, compared to $365,000 for 2000, for operating supplies, small tools, maintenance, office supplies and production of product samples. Our general corporate expenses decreased by $508,000 to $738,000 in 2001, compared to $1,246,000 for 2000, principally due to a decrease in expense recognized for options granted to employees and service providers.

Depreciation and amortization expense decreased by $98,196 to $1,138,208 in 2001, compared to $1,236,404 for 2000, principally as a result of lengthening the amortization periods of certain patents. The amortization periods were extended to equal the patent lives.

On December 15, 2000, we and an investor entered into a Securities Purchase Agreement pursuant to which we issued to the investor the 2000 Note and a Warrant to purchase 350,000 common shares at an initial exercise price of $3.00 at any time on or before December 15, 2005 (the "Warrant"). The 2000 Note, Warrant and related rights were sold to the investor in exchange for $7,000,000 (less financing fees). Proceeds from the 2000 Note were allocated between the 2000 Note and the Warrant; the portion allocated to the Warrant resulted in a discount on the 2000 Note which was being accreted to interest expense over the term of the 2000 Note. Interest expense for 2001 was $1,881,077, compared to interest expense of $215,216 in 2000. The increase results from interest expense of $805,000 on the 2000 Note, amortization of the Warrant discount of $403,000, amortization of debt issue costs of $100,000 and interest related to the issuance of common shares as payment of principal and interest on the 2000 Note of $301,000. In addition to this, interest expense of $240,000 was incurred related to the estimated fair value of warrants issued to the investor in exchange for the waiver of penalties that would have accrued due to late effectiveness of the registration statement associated with the 2000 Note and modification to the 2000 Note terms involving the redemption of exchange amounts. At the same time, interest income increased in 2001 over 2000 due to interest earned on the proceeds received from the 2000 Note.

The purchase price for the titanium processing technology that we acquired from BHP was stated in Australian dollars and was payable in installments through August 2000. During 2000, the United States dollar strengthened against the Australian dollar resulting in a gain on foreign exchange of $864,000.

Carrying Value of Assets

We have recorded our investments in the titanium processing technology and titanium processing assets at actual cost. We depreciate such assets using the straight-line method over their estimated useful life. The asset carrying value is the actual cost less accumulated depreciation. We assess the carrying values of these assets on a quarterly basis by comparing the projected undiscounted cash flows to be generated by the assets to the carrying costs of the assets. In order to determine the projected cash flows related to these assets, we use the information and feedback obtained from prospective customers together with general information as to product markets, competitive forces and our production capability to arrive at assumptions with respect to sales volumes and pricing. We next estimate costs of sales based on engineering analysis and actual experience. Operating margins are then calculated based on these assumptions and compared to the carrying cost of the assets. Delays in revenue generation may make the recoverability of our assets less likely.

When we acquired the titanium processing technology and titanium processing assets from BHP, the core technology for producing titanium dioxide nanoparticles was completely developed, a pilot plant was under construction, and we believed the titanium processing technology and titanium processing assets had near-term commercial value. We expected to complete the pilot plant as a processing facility and begin generating sales

revenues through nanoparticle product sales in 2000. We completed construction of the processing facility, made a single small sale of nanoparticles in 2000, sold $42,816 of nanoparticles in 2001 and sold $134,925 of nanoparticles in 2002, $62,073 of which were sold for use in commercial thermal spray applications. In 2002, we also earned $90,300 under a services agreement entered into with a materials company. We are testing the materials company's mineral concentrates in the production of titanium dioxide pigments using our titanium processing technology. If the testing indicates that our technology has certain advantages with respect to cost, product quality and/or processing efficiencies, we expect to license it for use in the manufacture of titanium dioxide pigments. During 2002, we also initiated R&D work utilizing nanoparticles in the development of pharmaceuticals. We subsequently developed RenaZorb™ for the treatment of hyperphosphatemia in kidney dialysis patients. Testing of this product using animals was begun in late 2002 and we are currently seeking business relationships with pharmaceutical companies that can conduct additional testing and development, seek necessary FDA approvals and take the other steps necessary to bring the new product to market. If testing is successful, we expect to license RenaZorb™ to a pharmaceutical manufacturer. We presently estimate that cash flows from future nanoparticle sales and fees from licensing the titanium processing technology and RenaZorb™ will be in excess of the carrying value of the assets. However, the delay in sales, combined with cash outlays for construction and operation, has affected our current cash position and financing plans as more fully described in "Liquidity and Capital Resources" above.

As discussed above in "Results of Operations – Fiscal Year 2002 vs. 2001", a cash shortage during 2002 required that we delay development of the Tennessee mineral property and jig. Since we could not determine when adequate funds would be available to further develop and utilize the jig, we recorded an impairment of jig assets in the amount of $2,759,956. This impairment charge had the effect of reducing the jig assets' carrying cost to zero.

Item 8. *Financial Statements and Supplementary Data.*

Supplementary Data. The following Supplementary Financial Information for the fiscal quarters ended March 31, June 30, September 30 and December 31 in each of the years 2001 and 2002 were derived from our unaudited quarterly consolidated financial statements filed by us with the SEC in our Quarterly Reports on Form 10-Q with respect to such periods (except for 4th quarter data which was determined by comparing annual financial data with 3rd quarter financial data).

Supplementary Financial Information by Quarter, 2002 and 2001
(Unaudited)

	Quarter Ended March 31	Quarter Ended June 30	Quarter Ended September 30	Quarter Ended December 31
Year Ended December 31, 2002:				
Sales	$ 48,937	$ 4,734	$ 45,089	$ 154,735
Gross Margin	$ 18,762	$ 3,583	$ 28,387	$ 109,180
Net loss	$ 1,679,531	$ 4,588,254	$ 1,531,005	$ 2,122,706
Loss per common share: (1)				
Basic and Diluted	$ 0.07	$ 0.19	$ 0.06	$ 0.08
Year Ended December 31, 2001:				
Sales	None	None	None	$ 42,816
Gross Margin	None	None	None	$ 18,175
Net loss	$ 1,903,774	$ 2,335,304	$ 1,600,556	$ 1,914,397
Loss per common share: (1)				
Basic and Diluted	$ 0.10	$ 0.12	$ 0.08	$ 0.09

(1) Loss per common share is computed independently for each of the quarters presented. Therefore, the sum of the quarterly loss per common share amounts does not necessarily equal the total for the year.

Financial Statements. The financial statements required by this Item appear on pages 46 through 64 of this Form 10-K.

Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.*

None.

PART III

Item 10. *Directors and Executive Officers of the Registrant*

The information required by this Item is incorporated by reference to the section entitled "Election of Directors" in the Company's definitive proxy statement to be filed with the Commission.

Item 11. *Executive Compensation*

The information required by this Item is incorporated by reference to the section entitled "Executive Compensation" in the Company's definitive proxy statement to be filed with the Commission.

Item 12. *Security Ownership of Certain Beneficial Owners and Management*

The information required by this Item is incorporated by reference to the section entitled "Security Ownership of Certain Beneficial Owners and Management" in the Company's definitive proxy statement to be filed with the Commission.

Item 13. *Certain Relationships and Related Transactions*

The information required by this Item is incorporated by reference to the section entitled "Certain Relationships and Related Transactions" in the Company's definitive proxy statement to be filed with the Commission.

Item 14. *Controls and Procedures*

a) Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-14(c) promulgated under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), within 90 days of the filing date of this report. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures are effective in alerting them on a timely basis to material information relating to our Company (including its consolidated subsidiaries) required to be included in our reports filed or submitted under the Exchange Act.

b) There have been no significant changes (including corrective actions with regard to significant deficiencies or material weaknesses) in our internal controls or in other factors that could significantly affect these controls subsequent to the date of the evaluation referenced in paragraph (a) above.

Item 15. *Exhibits, Financial Statement Schedules and Reports on Form 8-K*

(a) Documents Filed

1. *Financial Statements.* The following Consolidated Financial Statements of the Company and Auditor's Report are filed as part of this Annual Report on Form 10-K:
   - Independent Auditors' Report of Deloitte & Touche LLP
   - Consolidated Balance Sheets, December 31, 2002 and 2001
   - Consolidated Statements of Operations for Each of the Three Years in the Period Ended December 31, 2002 and for the Period from April 9, 1973 (Date of Inception) to December 31, 2002
   - Consolidated Statements of Shareholders' Equity from April 9, 1973 (Date of Inception) to December 31, 2002
   - Consolidated Statements of Cash Flows for Each of the Three Years in the Period Ended December 31, 2002 and for the Period from April 9, 1973 (Date of Inception) to December 31, 2002
   - Notes to Consolidated Financial Statements
2. *Financial Statement Schedule.* Not applicable.
3. *Exhibit List*

Exhibit No.	Description	Incorporated by Reference/ Filed Herewith
3.1	Articles of Continuance	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on July 18, 2002.
3.2	Bylaw No. 1	Incorporated by reference to the Current Report on Form 8-K filed with the SEC on July 18, 2002.
4.1	Form of Common Stock Certificate	Incorporated by reference to Registration Statement on Form 10-SB filed with the Commission on November 25, 1996, File No. 1-12497.
4.2	Amended and Restated Shareholder Rights Plan dated October 15, 1999, between the Company and Equity Transfer Services, Inc.	Incorporated by reference to the Company's Current Report on Form 8-K filed with the Commission on November 19, 1999, File No. 1-12497.
10.1	Employment Agreement between Altair International Inc. and William P. Long dated January 1, 1998	Incorporated by reference to the Company's Annual Report on Form 10-K filed with the Commission on March 31, 1998, as amended by Amendment No. 1 to Annual Report on Form 10-K/A filed on May 15, 1998.
10.2	Employment Agreement between Fine Gold Recovery Systems Inc. and C. Patrick Costin dated August 15, 1994	Incorporated by reference to Registration Statement on Form 10-SB filed with the Commission on November 25, 1996.
10.3	Altair International Inc. Stock Option Plan adopted by shareholders on May 10, 1996	Incorporated by reference to the Company's Registration Statement on Form S-8 filed with the Commission on July 11, 1997.
10.4	1998 Altair International Inc. Stock Option Plan adopted by Shareholders on June 11, 1998	Incorporated by reference to the Company's Definitive Proxy Statement on Form 14A filed with the Commission on May 12, 1998.
10.5	2002 Employee Wage Stock Purchase Plan	Incorporated by reference to the Company's Registration Statement on Form S-8, File No. 333-99099, filed with the Commission on September 3, 2002.
10.6	Form of Mineral Lease	Incorporated by reference to the Company's Annual Report on Form 10-K filed with the Commission on March 31, 1998, as amended by Amendment No. 1 to Annual Report on Form 10-K/A filed on May 15, 1998.

10.7	Purchase and Sale Agreement dated August 8, 2002 between the Company and BHP Minerals International Inc. (re Edison Way property)	Incorporated by reference to the Company's Amendment No. 1 to Registration Statement on Form S-2, File No. 333-102592, filed with the Commission on February 7, 2003.
10.8	Installment Note dated August 8, 2002 (re Edison Way property)	Incorporated by reference to the Company's Amendment No. 1 to Registration Statement on Form S-2, File No. 333-102592, filed with the Commission on February 7, 2003.
10.9	Trust Deed dated August 8, 2002 (re Edison Way property)	Incorporated by reference to the Company's Amendment No. 1 to Registration Statement on Form S-2, File No. 333-102592, filed with the Commission on February 7, 2003.
10.10	Note Amendment Agreement dated November 21, 2002	Incorporated by reference to the Company's Current Report on Form 8-K filed with the Commission on November 27, 2002.
10.11	Second Amended and Restated Secured Term Note dated November 21, 2002	Incorporated by reference to the Company's Amendment No. 1 to Current Report on Form 8-K filed with the Commission on December 4, 2002, File No. 1-12497.
10.12	Stock Pledge Agreement dated December 15, 2000 (Mineral Recovery Systems common stock).	Incorporated by reference to the Company's Current Report on Form 8-K filed with the Commission on December 26, 2000.
10.13	Stock Pledge Agreement dated December 15, 2000 (Altair Technologies common stock).	Incorporated by reference to the Company's Current Report on Form 8-K filed with the Commission on December 26, 2000.
10.14	First Amendment to Stock Pledge Agreement	Incorporated by reference to the Company's Current Report on Form 8-K filed with the SEC on January 4, 2002.
23.1	Consent of Deloitte & Touche LLP	Filed herewith.
24	Powers of Attorney	Included in the Signature Page hereof.
99.1	Certification of Chief Executive Officer	Filed herewith
99.2	Certification of Chief Financial Officer	Filed herewith

(b) Reports on Form 8-K

We filed a Current Report on Form 8-K on November 27, 2002 in which we (i) reported the partial prepayment and amendment of the $2,000,000 Secured Term Note dated December 28, 2001 and related transactions, (ii) filed, among other exhibits, an amended and restated note, and (iii) in order to satisfy certain requirements related to our listing on the Nasdaq SmallCap Market, provided a proforma balance sheet as of October 31, 2002 showing shareholders' equity in excess of $5 million.

We filed a Current Report on Form 8-K/A on December 4, 2002 in order to file a second amended and restated note which superceded and replaced the first amended and restated note filed with the Form 8-K on November 27, 2002. The second amended and restated note contained a new provision regarding conversion rights of the holder, and a covenant by us to submit the second amended and restated note for approval by shareholders at the next annual meeting.

(c) Exhibits

Exhibits to this Report are attached following page 67 hereof.

(d) Financial Statement Schedule

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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, on March 14, 2003.

ALTAIR NANOTECHNOLOGIES INC.

By: /s/ WILLIAM P. LONG

William P. Long
Chief Executive Officer

Date: March 14, 2003

POWER OF ATTORNEY AND ADDITIONAL SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, this Form 10-K has been signed by the following persons in the capacities and on the dates indicated. Each person whose signature to this Form 10-K appears below hereby constitutes and appoints William P. Long and Edward Dickinson, and each of them, as his true and lawful attorney-in-fact and agent, with full power of substitution, to sign on his behalf individually and in the capacity stated below and to perform any acts necessary to be done in order to file all amendments and post-effective amendments to this Form 10-K, and any and all instruments or documents filed as part of or in connection with this Form 10-K or the amendments thereto and each of the undersigned does hereby ratify and confirm all that said attorney-in-fact and agent, or his substitutes, shall do or cause to be done by virtue hereof.

Signature	Title	Date
/s/ WILLIAM P. LONG William P. Long	Chief Executive Officer and Director (Principal Executive Officer)	March 14, 2003
/s/ EDWARD DICKINSON Edward Dickinson	Chief Financial Officer, Secretary and Director (Principal Financial and Accounting Officer)	March 14, 2003
/s/ JAMES I. GOLLA James I. Golla	Director	March 14, 2003
/s/ GEORGE HARTMAN George Hartman	Director	March 14, 2003
/s/ ROBERT SHELDON Robert Sheldon	Director	March 14, 2003

CERTIFICATIONS

I, William P. Long, certify that:

1. I have reviewed this annual report on Form 10-K of Altair Nanotechnologies Inc.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

   a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

   b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

   c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ WILLIAM P. LONG

William P. Long, Chief Executive Officer
March 17, 2003

I, Edward Dickinson, certify that:

1. I have reviewed this annual report on Form 10-K of Altair Nanotechnologies Inc.;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

   a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;

   b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this annual report (the "Evaluation Date"); and

   c) presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this annual report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

/s/ EDWARD DICKINSON

Edward Dickinson, Chief Financial Officer
March 17, 2003

INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Shareholders of
Altair Nanotechnologies, Inc.
Reno, Nevada

We have audited the accompanying consolidated balance sheets of Altair Nanotechnologies Inc. (an exploration stage company) and subsidiaries (collectively referred to as the "Company") as of December 31, 2002 and 2001, and the related consolidated statements of operations, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2002, and for the period from April 9, 1973 (date of inception) to December 31, 2002. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. The Company's consolidated financial statements for the period from April 9, 1973 (date of inception) to December 31, 1997 were audited by other auditors whose report, dated February 17, 2000, expressed an unqualified opinion on those statements. The financial statements for the period from April 9, 1973 (date of inception) through December 31, 1997 reflect a net loss of $7,350,462 of the related totals. The other auditors' report has been furnished to us and our opinion, insofar as it relates to the amounts included for such prior periods, is based solely on the report of such other auditors.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits and the report of other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audit and the report of other auditors, such consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2002 and 2001, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2002, and for the period from April 9, 1973 (date of inception) to December 31, 2002, in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. The Company is an exploration stage enterprise engaged principally in the business of developing and commercializing ceramic oxide nanoparticle products. As discussed in Note 1 to the consolidated financial statements, the Company's operating losses raise substantial doubt about its ability to continue as a going concern. Management's plans concerning these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of these uncertainties. In addition, because the Company is still in the exploration stage, there have been no adjustments to record potential impairments on long-term assets that are currently being developed.

DELOITTE & TOUCHE LLP

Salt Lake City, Utah
March 11, 2003

CONSOLIDATED BALANCE SHEETS
DECEMBER 31, 2002 AND 2001
(Expressed in United States Dollars)

ASSETS	2002	2001
CURRENT ASSETS:		
Cash and cash equivalents	$ 244,681	$ 599,884
Accounts receivable, net	132,859	4,154
Other current assets	22,598	29,497
Total current assets	400,138	633,535
PROPERTY, PLANT AND EQUIPMENT, Net	7,349,818	5,987,950
PATENTS AND RELATED EXPENDITURES, Net	1,146,249	3,739,864
OTHER ASSETS	18,200	491,894
TOTAL ASSETS	$ 8,914,405	$ 10,853,243
LIABILITIES AND SHAREHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Trade accounts payable	$ 455,246	$ 373,690
Accrued liabilities	149,257	154,715
Loans payable - related parties	-	143,000
Capital lease obligations - current portion	-	2,312
Deferred revenue	-	40,972
Total current liabilities	604,503	714,689
NOTES PAYABLE, Long-term portion	3,905,040	1,462,060
COMMITMENTS AND CONTINGENCIES (Notes 1, 3, 6, 7, 8, 9, 10 and 11)		
SHAREHOLDERS' EQUITY:		
Common stock, no par value, unlimited shares authorized; 30,244,348 and 22,694,142 shares issued and outstanding at December 31, 2002 and 2001	43,787,850	38,089,320
Deficit accumulated during the development stage	(39,382,988)	(29,412,826)
Total shareholders' equity	4,404,862	8,676,494
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$ 8,914,405	$ 10,853,243

See notes to the consolidated financial statements.

CONSOLIDATED STATEMENTS OF OPERATIONS
FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2002 AND FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2002

(Expressed in United States Dollars)

	Year Ended December 31,			Period April 9, 1973 (Date of Inception) to December 31,
	2002	2001	2000	2002
SALES	$ 253,495	$ 42,816	$ -	$ 296,311
COST OF SALES	93,583	18,175	-	111,758
GROSS MARGIN	159,912	24,641	-	184,553
OPERATING EXPENSES:				
Mineral exploration and development	598,977	930,777	1,217,966	6,517,642
Research and development	587,137	559,454	1,555,472	3,716,096
Professional services	712,530	593,088	366,275	3,276,442
General and administrative expenses	2,360,315	2,824,646	2,271,250	14,207,797
Depreciation and amortization	997,708	1,138,208	1,236,404	5,515,122
Asset impairment	2,759,956	-	-	2,759,956
Total operating expenses	8,016,623	6,046,173	6,647,367	35,993,055
LOSS FROM OPERATIONS	7,856,711	6,021,532	6,647,367	35,808,502
OTHER EXPENSE (INCOME):				
Interest expense	1,151,388	1,881,077	215,216	4,535,339
Interest income	(2,105)	(148,980)	(83,440)	(815,945)
Loss (gain) on foreign exchange	835	402	(864,669)	(557,942)
Loss on extinguishment of debt	914,667	-	-	914,667
Gain on forgiveness of debt	-	-	-	(795,972)
Loss on redemption of convertible debentures	-	-	-	193,256
Total other expense (income), net	2,064,785	1,732,499	(732,893)	3,473,403
NET LOSS	9,921,496	7,754,031	5,914,474	39,281,905
PREFERENTIAL WARRANT DIVIDEND	48,666	52,417	-	101,083
NET LOSS APPLICABLE TO SHAREHOLDERS	$ 9,970,162	$ 7,806,448	$ 5,914,474	$ 39,382,988
LOSS PER COMMON SHARE - Basic and diluted	$ 0.40	$ 0.39	$ 0.34	$ 4.82
WEIGHTED AVERAGE SHARES - Basic and diluted	24,975,837	20,063,473	17,371,214	8,164,811

See notes to the consolidated financial statements.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2002

(Expressed in United States Dollars)

	Common Stock		Stock Subscription	Deficit Accumulated During the Development	
	Shares	Amount	Receivable	Stage	Total
APRIL 9, 1973 (DATE OF INCEPTION) .	-	$ -	$ -	$ -	$ -
Common stock issued	101,668	387,073	-	-	387,073
Net loss	-	-	-	(361,572)	(361,572)
BALANCE, DECEMBER 31, 1984 . . .	101,668	387,073	-	(361,572)	25,501
Common stock issued	40,000	240,770	-	-	240,770
Common stock issued for management fees	1,280	7,004	-	-	7,004
Net loss	-	-	-	(78,606)	(78,606)
BALANCE, DECEMBER 31, 1985 . . .	142,948	634,847	-	(440,178)	194,669
Common stock issued for property	3,333	18,058	-	-	18,058
Acquisition of subsidiary	780,000	44,551	-	-	44,551
Common stock issued for underwriter bonus	4,000	1	-	-	1
Net loss	-	-	-	(210,667)	(210,667)
BALANCE, DECEMBER 31, 1986 . . .	930,281	697,457	-	(650,845)	46,612
Common stock issued for property	6,667	8,027	-	-	8,027
Flow through shares	298,650	463,301	-	-	463,301
Common stock issued for rights offering .	257,822	253,947	-	-	253,947
Net loss	-	-	-	(696,642)	(696,642)
BALANCE, DECEMBER 31, 1987 . . .	1,493,420	1,422,732	-	(1,347,487)	75,245
Common stock issued for services	16,667	14,592	-	-	14,592
Common stock issued	16,667	14,592	-	-	14,592
Common stock issued in settlement of debt	233,333	51,073	-	-	51,073
Net loss	-	-	-	(149,316)	(149,316)
BALANCE, DECEMBER 31, 1988 . . .	1,760,087	1,502,989	-	(1,496,803)	6,186
Common stock issued	127,500	75,058	-	-	75,058
Common stock issued in settlement of lawsuit	41,667	22,800	-	-	22,800
Net loss	-	-	-	(151,372)	(151,372)
BALANCE, DECEMBER 31, 1989 . . .	1,929,254	1,600,847	-	(1,648,175)	(47,328)

(Continued)

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2002

(Expressed in United States Dollars)

	Common Stock		Stock Subscription	Deficit Accumulated During the Development	
	Shares	Amount	Receivable	Stage	Total
BALANCE, DECEMBER 31, 1989	1,929,254	$ 1,600,847	$ -	$ (1,648,175)	$ (47,328)
Common stock issued	133,333	218,882	-	-	218,882
Exercise of stock options	33,333	18,240	-	-	18,240
Common stock issued for property	11,666	11,674	-	-	11,674
Common stock issued for services	13,333	21,888	-	-	21,888
Net loss	-	-	-	(230,125)	(230,125)
BALANCE, DECEMBER 31, 1990	2,120,919	1,871,531	-	(1,878,300)	(6,769)
Common stock issued	266,667	196,994	-	-	196,994
Common stock issued for property	28,333	17,146	-	-	17,146
Net loss	-	-	-	(258,209)	(258,209)
BALANCE, DECEMBER 31, 1991	2,415,919	2,085,671	-	(2,136,509)	(50,838)
Common stock issued	1,086,753	443,237	-	-	443,237
Common stock issued for property	115,000	49,249	-	-	49,249
Common stock issued for settlement of debt	55,177	24,155	-	-	24,155
Net loss	-	-	-	(353,665)	(353,665)
BALANCE, DECEMBER 31, 1992	3,672,849	2,602,312	-	(2,490,174)	112,138
Common stock issued	48,000	36,393	-	-	36,393
Common stock issued for property	46,667	55,012	-	-	55,012
Net loss	-	-	-	(193,323)	(193,323)
BALANCE, DECEMBER 31, 1993	3,767,516	2,693,717	-	(2,683,497)	10,220
Common stock issued	600,000	131,329	-	-	131,329
Common stock issued for shares of subsidiary	750,000	257,187	-	-	257,187
Common stock issued for royalties	83,333	33,641	-	-	33,641
Net loss	-	-	-	(227,860)	(227,860)
BALANCE, DECEMBER 31, 1994	5,200,849	3,115,874	-	(2,911,357)	204,517
Common stock issued	2,700,000	875,529	-	-	875,529
Exercise of stock options	247,000	53,553	-	-	53,553
Exercise of stock warrants	350,000	171,458	-	-	171,458
Net loss	-	-	-	(424,109)	(424,109)
BALANCE, DECEMBER 31, 1995	8,497,849	4,216,414	-	(3,335,466)	880,948

(Continued)

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2002

(Expressed in United States Dollars)

	Common Stock		Stock Subscription	Deficit Accumulated During the Development	
	Shares	Amount	Receivable	Stage	Total
BALANCE, DECEMBER 31, 1995	8,497,849	$ 4,216,414	$ -	$ (3,335,466)	$ 880,948
Common stock issued	554,027	1,637,307	-	-	1,637,307
Exercise of stock options	702,000	526,850	-	-	526,850
Exercise of stock warrants	3,012,463	2,471,219	-	-	2,471,219
Stock options issued to non-employees	-	285,503	-	-	285,503
Common stock issued for acquisition of TMI	1,919,957	2,521,469	-	-	2,521,469
Net loss	-	-	-	(1,032,903)	(1,032,903)
BALANCE, DECEMBER 31, 1996	14,686,296	11,658,762	-	(4,368,369)	7,290,393
Exercise of stock options	362,500	1,530,406	-	-	1,530,406
Stock options issued to non-employees	-	528,555	-	-	528,555
Stock options issued to employees	-	62,800	-	-	62,800
Exercise of stock warrants	443,949	1,038,788	-	-	1,038,788
Net loss	-	-	-	(2,982,093)	(2,982,093)
BALANCE, DECEMBER 31, 1997	15,492,745	14,819,311	-	(7,350,462)	7,468,849
Stock options issued to non-employees	-	841,944	-	-	841,944
Stock options issued to employees	-	15,420	-	-	15,420
Common stock cancelled	(723,065)	-	-	-	-
Common stock issued for convertible debenture	387,735	3,061,444	-	-	3,061,444
Exercise of stock options	17,500	113,664	-	-	113,664
Net loss	-	-	-	(4,651,576)	(4,651,576)
BALANCE, DECEMBER 31, 1998	15,174,915	18,851,783	-	(12,002,038)	6,849,745
Stock options issued to non-employees	-	765,386	-	-	765,386
Common stock issued	300,000	1,862,500	-	-	1,862,500
Net loss	-	-	-	(3,689,866)	(3,689,866)
BALANCE, DECEMBER 31, 1999	15,474,915	21,479,669	-	(15,691,904)	5,787,765
Stock options issued to non-employees	-	424,063	-	-	424,063
Stock subscription receivable	-	-	(561,300)	-	(561,300)
Stock warrants issued	-	1,245,050	-	-	1,245,050
Exercise of stock options	71,300	335,778	-	-	335,778
Common stock issued	3,779,273	8,904,029	-	-	8,904,029
Net loss	-	-	-	(5,914,474)	(5,914,474)
BALANCE, DECEMBER 31, 2000	19,325,488	32,388,589	(561,300)	(21,606,378)	10,220,911

(Continued)

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2002

(Expressed in United States Dollars)

	Common Stock		Stock Subscription	Deficit Accumulated During the Development	
	Shares	Amount	Receivable	Stage	Total
BALANCE, DECEMBER 31, 2000	19,325,488	$ 32,388,589	$ (561,300)	$ (21,606,378)	$ 10,220,911
Stock options issued to non-employees	-	158,089	-	-	158,089
Stock subscription receivable	-	-	561,300	-	561,300
Stock warrants issued	-	776,469	-	-	776,469
Preferential warrant dividend	-	52,417	-	(52,417)	-
Shares issued for settlement of debt	824,800	1,220,423	-	-	1,220,423
Exercise of stock options	65,000	130,000	-	-	130,000
Common stock expired	(266,170)	-	-	-	-
Exercise of warrants	713,333	713,333	-	-	713,333
Common stock issued	2,031,691	2,650,000	-	-	2,650,000
Net loss	-	-	-	(7,754,031)	(7,754,031)
BALANCE, DECEMBER 31, 2001	22,694,142	38,089,320	-	(29,412,826)	8,676,494
Stock options issued to non-employees	-	27,601	-	-	27,601
Shares issued under Employee Stock Purchase Plan	161,550	92,183	-	-	92,183
Stock warrants issued	-	347,773	-	-	347,773
Preferential warrant dividend	-	48,666	-	(48,666)	-
Shares issued for settlement of debt	1,500,090	975,000	-	-	975,000
Shares issued for interest	299,304	292,208	-	-	292,208
Shares issued for services	400,000	279,500	-	-	279,500
Exercise of warrants	286,169	300,477	-	-	300,477
Common stock issued	4,903,093	3,335,122	-	-	3,335,122
Net loss	-	-	-	(9,921,496)	(9,921,496)
BALANCE, DECEMBER 31, 2002	30,244,348	$ 43,787,850	$ -	$ (39,382,988)	$ 4,404,862

See notes to consolidated financial statements. *(Concluded)*

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2002 AND FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2002

(Expressed in United States Dollars)

	Year Ended December 31,			Period April 9, 1973 (Date of Inception) to December 31,
	2002	2001	2000	2002
CASH FLOWS FROM EXPLORATION ACTIVITIES:				
Net loss	$ (9,921,496)	$ (7,754,031)	$ (5,914,474)	$ (39,281,905)
Adjustments to reconcile net loss to net cash used in exploration activities:				
Depreciation and amortization	997,708	1,138,208	1,236,404	5,515,122
Shares issued for services	203,500	-	-	303,426
Shares issued for interest	292,208	819,755	-	1,116,035
Issuance of stock options to non-employee	27,601	158,089	424,063	3,031,141
Issuance of stock options to employees	-	-	-	78,220
Issuance of stock warrants	108,556	396,123	420,182	924,861
Amortization of discount on note payable	384,616	403,021	12,052	799,689
Amortization of debt issuance costs	404,567	100,000	-	504,567
Asset impairment	2,759,956	-	-	2,759,956
Loss on extinguishment of debt	914,667	-	-	914,667
Loss on redemption of convertible debenture	-	-	-	193,256
Gain on forgiveness of debt	-	-	-	(795,972)
Loss on disposal of fixed assets	-	-	-	1,945
Loss (gain) on foreign currency translation	-	402	(864,669)	(559,179)
Deferred financing costs written off	-	-	-	515,842
Changes in assets and liabilities (net of effects of acquisition):				
Restricted cash	-	4,000,000	(4,000,000)	-
Accounts receivable	(128,705)	(4,154)	-	(132,859)
Other current assets	6,899	18,170	990,579	1,712,000
Other assets	(2,000)	886	(169,606)	(170,720)
Accounts payable	81,556	369,763	(75,161)	340,747
Accrued liabilities	(5,458)	-	-	(5,458)
Deferred revenue	(40,972)	(16,985)	57,957	-
Net cash used in exploration activities	(3,916,797)	(370,753)	(7,882,673)	(22,234,619)
CASH FLOWS FROM INVESTING ACTIVITIES:				
Asset acquisition	-	-	-	(2,422,417)
Purchase of property and equipment	(2,525,916)	(158,296)	(226,612)	(3,661,425)
Disposal (purchase) of patents and related expenditures	-	5,933	-	(1,882,187)
Net cash used in investing activities	(2,525,916)	(152,363)	(226,612)	(7,966,029)

(Continued)

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR EACH OF THE THREE YEARS IN THE PERIOD ENDED DECEMBER 31, 2002 AND FOR THE PERIOD FROM APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2002

(Expressed in United States Dollars)

	Year Ended December 31,			Period April 9, 1973 (Date of Inception) to December 31,
	2002	2001	2000	2002
CASH FLOWS FROM FINANCING ACTIVITIES:				
Issuance of common shares for cash, net of issuance costs	$ 3,335,122	$ 2,650,000	$ 8,904,029	$ 21,508,781
Collection of stock subscription receivable	-	561,300	-	561,300
Issuance of shares under Employee Stock Purchase Plan	92,183	-	-	92,183
Issuance of convertible debenture	-	-	-	5,000,000
Proceeds from exercise of stock options	-	130,000	335,778	2,708,491
Proceeds from exercise of warrants	300,477	713,333	-	4,917,805
Issuance of related party notes	6,243	168,000	-	174,243
Issuance of notes payable	2,505,040	-	7,000,000	9,505,040
Payment of notes payable	-	(4,385,599)	(6,498,931)	(11,120,816)
Payment of related party notes	(149,243)	(25,000)	-	(174,243)
Payment on capital lease	(2,312)	(24,763)	-	(27,075)
Purchase of call options	-	-	(449,442)	(449,442)
Redemption of convertible debentures	-	-	-	(2,250,938)
Net cash (used in) provided by financing activities	6,087,510	(212,729)	9,291,434	30,445,329
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(355,203)	(735,845)	1,182,149	244,681
CASH AND CASH EQUIVALENTS, Beginning of period	599,884	1,335,729	153,580	None
CASH AND CASH EQUIVALENTS, End of period	$ 244,681	$ 599,884	$ 1,335,729	$ 244,681

	Year Ended December 31,		
	2002	2001	2000
SUPPLEMENTAL DISCLOSURES:			
Cash paid for interest	$ -	$ 386,557	$ 85,929
Cash paid for income taxes	$ -	$ -	$ -

(Continued)

CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2002, 2001, AND 2000,
AND FOR THE PERIOD APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2002
(Expressed in United States Dollars)

SUPPLEMENTAL SCHEDULE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:

For the year ended December 31, 2002:

- We issued 50,000 common shares in payment of financing fees associated with the Doral 18, LLC 2001 Note. The common shares had a fair value of $76,000 which was recorded as debt issuance cost on the balance sheet.
- In connection with the extinguishment of the Doral 18, LLC 2001 Note, we issued 1,500,000 shares of our common stock to reduce our note payable balance by $600,000. We also issued to Doral 18, LLC a warrant for 750,000 common shares that had a fair value of $239,217, as determined by the Black-Scholes pricing model. As a result of this transaction, we recorded a loss on extinguishment of debt of $914,667.
- We entered into a note payable with BHP with a face amount of $3,000,000. There is no interest due on the note for the first 36 months. As a result, we imputed the interest and reduced the face amount of the note payable by $566,763. The imputed interest expense for the period was $71,803.
- We repriced warrants, held by a shareholder, for 582,500 common shares. The repriced warrants have an incremental fair value of $48,666 and have been accounted for as a preferential warrant dividend.

For the year ended December 31, 2001:

- In connection with amendments to the Doral 18, LLC 2000 Note, we issued warrants for 300,000 shares of common stock. The warrants had an estimated fair value of $346,354 of which $239,562 has been amortized into interest expense during the year ended December 31, 2002. The remaining amount will be recognized over the life of the note.
- We cancelled call options on 228,456 shares of our common stock to pay $97,743 of principal and $244,941 of interest on the Doral 18, LLC 2000 Note. In addition, the cancellation of the call options resulted in an additional interest expense of $210,568.
- In accordance with the terms of our Doral 18, LLC 2000 Note, we paid $644,804 of principal and $273,731 of interest through the issuance of 824,800 shares of our common stock. In addition, the conversion of the note resulted in an additional interest expense of $301,888.
- We repriced warrants, held by a shareholder, for 713,333 common shares. The repriced warrants have an incremental fair value of $52,417 and have been accounted for as a preferential warrant dividend.
- In connection with the 2001 Note issued to Doral 18, LLC, we issued warrants for 200,000 common shares. The warrants had an estimated fair value of $74,733. We also repriced existing warrants for 650,000 common shares from $3.00 per share to $1.50 per share. The repriced warrants have an incremental fair value of $199,222.

For the year ended December 31, 2000:

- We entered into a capital lease obligation of $46,395 for laboratory equipment.
- We issued 1,003,626 shares of common stock as part of a repricing agreement.
- We recorded a stock subscription receivable for 165,000 shares of common stock with an investor.
- In conjunction with the Doral 18, LLC note, we issued warrants to purchase 350,000 common shares at $3.00 per share. The warrants had an estimated fair value of $824,900.
- We cancelled call options on 19,222 shares of our common stock to pay $18,221 of interest on the 2000 Note.

See notes to consolidated financial statements. *(Concluded)*

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2002, 2001, AND 2000, AND FOR THE PERIOD APRIL 9, 1973 (DATE OF INCEPTION) TO DECEMBER 31, 2002

(Expressed in United States Dollars)

1. DESCRIPTION OF BUSINESS AND BASIS OF PRESENTATION

Description of Business - Altair Nanotechnologies Inc. is incorporated in Canada and is engaged in the business of (1) developing and commercializing ceramic oxide nanoparticle products, (2) exploring and developing mineral properties in the United States, and (3) developing mineral processing equipment (a centrifugal jig) for use in the recovery of fine and heavy mineral particles. During 2002, we experienced a shortage of working capital. As a result, we concentrated our limited resources on the development of nanoparticle products, reduced our expenditures on the mineral properties to a minimal level and stopped development of the centrifugal jig. Our authorized capital stock is comprised of an unlimited number of common shares with no par value.

Principles of Consolidation - The consolidated financial statements include the accounts of Altair Nanotechnologies Inc. and its subsidiaries which include (1) Mineral Recovery Systems, Inc. (MRS), (2) Fine Gold Recovery Systems, Inc. (FGRS), (3) Altair Nanomaterials, Inc. (ANI), and (4) Tennessee Valley Titanium, Inc. (TVT), (collectively referred to as the "Company"), all of which are 100% owned. Intercompany transactions and balances have been eliminated in consolidation.

Basis of Presentation - The accompanying consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. As shown in the consolidated financial statements for the years ended December 31, 2002, 2001, and 2000, we incurred net losses of $9,921,496, $7,754,031, and $5,914,474, respectively, and since the date of inception have incurred cumulative losses of $39,281,905. At December 31, 2002 and 2001, we had stockholder's equity of $4,404,862 and $8,676,494, respectively. At December 31, 2002, current liabilities exceeded current assets by $204,365. These factors, among others, raise substantial doubt about the Company's ability to continue as a going concern.

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 ceramic oxide nanoparticle products. 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.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of Estimates - The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents - Cash and cash equivalents are highly liquid investments with an original maturity of three months or less. Cash equivalents are recorded at cost, which approximates fair value.

Accounts Receivable - Accounts receivable consists of amounts due from customers for sales of products and services, net of an allowance for losses of $3,203 and $0 at December 31, 2002 and 2001, respectively.

Property, Plant, and Equipment - Property, plant, and equipment are stated at cost less accumulated depreciation. Depreciation is recorded using the straight-line method over the following useful lives:

Furniture and office equipment	3 - 7 years
Vehicles	5 years
Pigment production equipment	5 - 10 years
Building	30 years

Patents and Related Expenditures - Patents related to the pigment production technology are carried at cost and amortized on a straight-line basis over their estimated useful lives, which range from 14 to 20 years.

Exploration - Expenditures incurred in the search for mineral deposits and the determination of the commercial viability of such deposits are charged to expense as incurred.

Research and Development Expenditures - Research and development expenditures are charged to expense as incurred.

Debt Issuance Costs - Debt issuance costs are recorded at cost and amortized over the life of the note payable. Debt issuance costs were $0 and $475,694 at December 31, 2002 and 2001, respectively.

Foreign Currency Translation - Asset and liability accounts, which are originally recorded in the appropriate local currencies, are translated into U.S. dollars at year-end exchange rates. Revenue and expense accounts are translated at the average exchange rates for the period. Transaction gains and losses are included in the accompanying consolidated statements of operations. Substantially all of our assets are located in the United States of America.

Stock-Based Compensation - We have elected to follow the accounting provisions of Accounting Principles Board (APB) Opinion No. 25, *Accounting for Stock Issued to Employees*, and to furnish the pro forma disclosures required under Statement of Financial Accounting Standards (SFAS) No. 123, *Accounting for Stock-Based Compensation.*

To estimate compensation expense that would be recognized under SFAS 123, we have used the modified Black-Scholes option pricing model. If we had accounted for our stock options using the accounting method prescribed by SFAS 123, our net loss and loss per share would be as follows:

	2002	2001	2000
Net loss (both basic and diluted):			
As reported	$ 9,921,496	$ 7,754,031	$ 5,914,474
Deduct: stock-based employee compensation expense included in reported net income, net of related tax effects	-	-	-
Add: stock-based employee compensation exense determined under value based method for all awards, net of related tax effects	235,823	1,474,690	3,723,135
Pro forma net loss	10,157,319	9,228,721	9,637,609
Loss per common share (both basic and diluted):			
As reported	0.40	0.39	0.34
Pro forma	0.41	0.46	0.56

In calculating pro forma compensation, the fair value of each stock option is estimated on the date of grant using the Black-Scholes option-pricing model and the following weighted average assumptions:

	2002	2001	2000
Dividend yield	None	None	None
Expected volatility	67 %	81 %	93 %
Risk-free interest rate	2.19 %	4.76 %	6.40 %
Expected life (years)	1.8	5.0	4.6

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.

Revenue Recognition - Revenue is recognized at the time the purchaser has accepted delivery of the product. For the year ended December 31, 2002, we sold titanium dioxide and lithium titanate nanoparticles, and other materials, to customers totaling $134,925. Of that amount, $62,073 of titanium dioxide nanoparticles was sold to a customer for use in commercial products held for sale. Revenue also includes $90,300 earned under a services agreement with a materials company where we are testing the company's mineral concentrates in the production of titanium dioxide pigments using our titanium processing technology. Revenue also includes $28,270 earned from a consulting project involving use of the jig to recover titanium dioxide from pigment processing waste and $40,972 of previously deferred revenues for which product was shipped and the purchaser accepted delivery during 2002.

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 debentures does not affect the calculation of net loss per share on a fully diluted basis because the effect of including the additional common stock equivalents would be antidilutive.

Recent Accounting Pronouncements - In June 2001, the Financial Accounting Standards Board ("FASB") issued SFAS No. 142, *Goodwill and Other Intangible Assets*. SFAS No. 142 establishes accounting and reporting standards for goodwill and intangible assets, requiring annual impairment testing for goodwill and intangible assets, and the elimination of periodic amortization of goodwill and certain intangibles. We adopted SFAS No. 142 on January 1, 2002. There was no impact on our consolidated financial statements.

In June 2001, the FASB issued SFAS No. 143, *Accounting for Asset Retirement Obligations*, which requires asset retirement obligations to be recognized when they are incurred and displayed as liabilities. SFAS No. 143 is effective for the year ending December 31, 2003. Management is currently evaluating the impact of this pronouncement on the consolidated financial statements.

In August 2001, the FASB issued SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. SFAS No. 144 addresses accounting and reporting for the impairment or disposal of long-lived assets, including the disposal of a segment of business. We adopted SFAS No. 144 on January 1, 2002. During the quarter ended June 30, 2002, changes in circumstances regarding the development and use of the jig indicated that an impairment adjustment for the jig was required. See Note 3 for information regarding the adjustments we have recorded for asset impairment.

In April 2002, the FASB issued SFAS No. 145, *Rescission of FASB Statements No. 4, 44 and 64, Amendment of FASB Statement No. 13 and Technical Corrections*. SFAS No. 145 rescinds several statements, including SFAS No. 4, *Reporting Gains and Losses from Extinguishment of Debt*. The statement also makes several technical corrections to other existing authoritative pronouncements. We adopted SFAS No. 145 effective July 1, 2002 and, as a result, the loss on extinguishment of debt is reflected in the accompanying consolidated financial statements as other expense rather than an extraordinary loss. In addition, the gain on forgiveness of debt and the loss on redemption of convertible debentures that were previously reflected as extraordinary items have been reclassified to other expense (income).

In June 2002, the FASB issued SFAS No. 146, *Accounting for Costs Associated with Exit or Disposal Activities*, which requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred and nullifies Emerging Issues Task Force (EITF) Issue 94-3. We adopted SFAS No. 146 effective July 1, 2002 and it had no material impact on our consolidated financial statements.

In December 2002, the FASB issued SFAS No. 148, *Accounting for Stock-Based Compensation–Transition and Disclosure*. SFAS No. 148 amends SFAS No. 123, *Accounting for Stock-Based Compensation*, to provide alternative methods of transition to SFAS No. 123's fair value method of accounting for stock-based employee compensation. SFAS No. 148 also amends the disclosure provisions of SFAS No. 123 and APB Opinion No. 28, *Interim Financial Reporting*, to require disclosure in the summary of significant accounting policies of the effects of an entity's accounting policy with respect to stock-based employee compensation on reported net income and earnings per share in annual and interim financial statements. Adoption of this statement by the Company will be effective January 1, 2003; however, the Company has adopted the disclosure provisions of SFAS No. 148. Management is currently evaluating this pronouncement and its potential impact on the consolidated financial statements.

In November 2002, the FASB issued Financial Accounting Standards Board Interpretation No. ("FIN") 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*, which requires the guarantor to recognize as a liability the fair value of the obligation at the inception of the guarantee. The disclosure requirements in FIN 45 are effective for financial statements of interim or annual periods ending after December 15, 2002. Management believes we have no guarantees that are required to be disclosed in the financial statements. The recognition provisions are to be applied on a prospective basis to guarantees issued after December 31, 2002. The adoption of the recognition provisions of FIN 45 is not expected to have a material impact on our consolidated financial statements.

Comprehensive Income - The only component of comprehensive income in 2002, 2001, and 2000 was net loss.

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.

Other Expense (Income) Items - As a result of a 1994 merger with TransMar, Inc. (TMI), FGRS assumed all of TMI's liabilities. During 1999, 1998, and 1996, FGRS extinguished certain of TMI's liabilities at less than the recorded amounts of such debt. The gain on forgiveness of debt totaled $67,442, $25,805, and $702,725 in 1999, 1998, and 1996, respectively.

During 1998, we redeemed convertible debentures of $2,250,000, incurring a redemption loss of $193,256.

These items were previously shown as extraordinary items but were reclassified as other expense (income) in conjunction with the adoption of SFAS No. 145 during the current year.

Deferred Revenue - We entered into a sales contract on October 6, 2000 with a customer for titanium dioxide nanoparticles under which the total contract amount was prepaid. During 2002, $40,972 of products was delivered under the contract and recognized as sales revenues.

Fair Value of Financial Instruments - Our financial instruments, when valued using market interest rates, would not be materially different from the amounts presented in the consolidated financial statements.

Reclassifications - Certain reclassifications have been made to the prior period amounts to conform to classifications adopted in the current year.

3. ASSET IMPAIRMENT

During the quarter ended June 30, 2002, we made the determination that certain assets of the Company were impaired. Due to a shortage of cash, we made the decision to reduce expenditures associated with exploring and developing the Tennessee mineral property to a minimal amount. As a result, development activities have been delayed, including our intended use of the jig to enhance the recovery of heavy minerals on this property. Although we have utilized the jig to perform tests for fine particle recovery at a third party's facility and we continue to seek manufacturers and distributors for marketing the jig under licensing and/or distributorship

agreements, we cannot determine when and if the jig will generate substantial revenues and profits. This, in combination with our lack of funds to further develop the jig for commercial use, caused us to believe that the jig assets were impaired. Since we cannot determine when adequate funds will be available to further develop and utilize the jig, we have recorded an impairment charge related to the jig assets in the amount of $2,759,956, which represents the remaining net book value of the jig patents and related expenditures of $2,366,155 and the jigs included in property, plant, and equipment of $393,801.

We also assessed the carrying value of the titanium processing technology and titanium processing assets during the quarter ended June 30, 2002 by analyzing future estimated cash flows associated with these assets over the succeeding ten-year period. These assets have begun generating sales revenues, we have entered into development contracts and non-disclosure agreements with companies interested in joint development and/or testing of certain nanomaterials products, and we are in discussions regarding licensing of our technology to others. In our future estimated cash flow analysis, we examined product markets, assessed our opportunities for market entry and sales based on current sales and/or customer interest, including samples supplied and development agreements signed, and estimated the costs, including capital costs, associated with the generation of revenues. At the same time, we took into consideration recent developments with respect to licensing our technology to others and pharmaceutical applications that have significant revenue potential, and estimated future cash flows associated with these activities. Based on our future estimated cash flow analysis, we believe that the titanium processing technology and titanium processing assets are not impaired as of December 31, 2002.

4. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following as of December 31, 2002 and December 31, 2001:

	2002	2001
Furniture and office equipment	$ 82,113	$ 75,833
Vehicles	125,031	125,031
Pigment production equipment	7,162,641	6,974,548
Building	2,335,978	-
Centrifugal jig equipment	-	649,065
Jig testing equipment	-	45,128
Total	9,705,763	7,869,605
Less accumulated depreciation	(2,355,945)	(1,881,655)
Total property, plant and equipment	$ 7,349,818	$ 5,987,950

Depreciation expense for the years ended December 31, 2002, 2001, and 2000 totaled $770,250, $772,268, and $751,846, respectively.

5. PATENTS AND RELATED EXPENDITURES

Patents and related expenditures consisted of the following at December 31, 2002 and December 31, 2001:

	2002	2001
Pigment production patent applications	$ 1,517,736	$ 1,517,736
Centrifugal jig patents	-	4,210,987
Royalty agreement	-	424,881
Mineral recovery technology rights	-	243,000
	1,517,736	6,396,604
Less accumulated amortization	(371,487)	(2,656,740)
Total patents and related expenditures	$ 1,146,249	$ 3,739,864

Patents and related expenditures are being amortized over their useful lives with a weighted average amortization period of approximately 16.5 years. Amortization expense was $227,458 for the year ended December 31, 2002, which represented the amortization relating to the identified intangible assets still required to be amortized under SFAS No. 142. This amount included $141,779 of amortization expense related to the jig patents which was recorded prior to an adjustment for asset impairment at June 30, 2002. For each of the next five years, amortization expense relating to intangibles will be $85,680 per year. Amortization expense was $365,940 and $484,558 for the years ended December 31, 2001 and 2000, respectively.

6. NOTES PAYABLE

Notes payable consisted of the following at December 31, 2002 and 2001:

	2002	2001
Note payable to BHP Minerals International, Inc.	$ 2,505,040	$ -
Note payable to Doral 18, LLC	1,400,000	1,867,857
Less current portion	-	-
Less discount resulting from allocation of debt proceeds to warrant	-	(405,797)
Long-term portion of notes payable	$ 3,905,040	$ 1,462,060

On December 15, 2000, pursuant to a securities purchase agreement, we sold to Doral 18, LLC ("Doral") a $7 million 10% Asset-Backed Exchangeable Term Note (the 2000 Note) and detachable warrants to purchase 350,000 common shares at $3.00 per share. Net proceeds of $4 million from the 2000 Note were placed in a restricted bank account to secure a letter of credit and were scheduled to be released as principal payments were made. Under the 2000 Note, we were required to make monthly payments in the principal amount of $291,667 plus accrued interest and we had the right to redeem the monthly payment amounts in cash at any time. If we elected not to redeem the monthly payment amount in cash, on each due date, the holder of the 2000 Note automatically received the right to exchange (immediately or at any later date during the term) the monthly payment amount into common shares at a specified exchange price. The 2000 Note was due and payable in full on December 15, 2003.

During 2001, we made cash principal payments of $1,894,394, interest payments of $286,557, and incurred additional interest expense of $100,000 related to fees to extend the registration statement associated with the 2000 Note. Doral also converted $644,804 of principal and $273,731 of interest payable on the 2000 Note into 824,800 shares of common stock.

On December 28, 2001, a Termination and Issuance Agreement was signed with Doral. The 2000 Note was exchanged for a new note ("2001 Note") having a face amount of $2,000,000. In addition, the letter of credit discussed above was terminated and $2,500,733 of restricted cash securing the letter of credit was paid to Doral. The 2001 Note had an interest rate of 11% per annum with interest payments due monthly. If interest was not paid, Doral automatically received the right to exchange (immediately or at any later date during the term) the monthly interest payment amount into common stock at a specified exchange price. The principal amount of the 2001 Note was due and payable on March 31, 2003.

During the first quarter of 2002, a total of $53,644 of monthly interest payment amounts were exchanged by Doral for 59,599 common shares. The conversion of these shares resulted in additional interest expense of $16,095. On April 2, 2002, we entered an agreement with Doral whereby Doral agreed to waive, for the period March 27, 2002 through September 27, 2002, a provision of the 2001 Note that required us to maintain a cash and cash equivalents balance of $250,000 any time our common shares closed at less than $1.00 per share for three consecutive trading days. In addition, Doral agreed to amend, for the period March 27, 2002 through September 27, 2002, a provision of the 2001 Note which required us to have a cash and cash equivalents

balance of at least $250,000 at the end of every quarter. Such amount was reduced to $125,000. In return, we prepaid a total of $110,904 of interest on the 2001 Note for the period March 27, 2002 through September 27, 2002 by issuing Doral 143,791 common shares. The conversion of these shares resulted in additional interest expense of $35,762.

On September 23, 2002, we entered an agreement with Doral whereby Doral agreed to waive, for the period September 28, 2002 through January 1, 2003, a provision of the 2001 Note that required us to maintain a cash and cash equivalents balance of $250,000 any time our common shares closed at less than $1.00 per share for three consecutive trading days. In addition, Doral agreed to amend, for the period September 28, 2002 through January 1, 2003, a provision of the 2001 Note which required us to have a cash and cash equivalents balance of at least $250,000 at the end of every quarter. Such amount was reduced to $125,000. In return, we prepaid a total of $57,260 of interest on the 2001 Note for the period September 28, 2002 through January 1, 2003 by issuing Doral 95,914 common shares. The conversion of these shares resulted in additional interest expense of $18,543.

On November 21, 2002, a Second Amended and Restated Secured Term Note ("2002 Note") was signed with Doral. At closing, we issued to Doral 1,500,000 common shares in exchange for a reduction of the principal amount outstanding from $2,000,000 to $1,400,000. We also issued to Doral a warrant for 750,000 common shares in exchange for Doral's agreement to (i) extend the due date of the 2002 Note to March 31, 2004, (ii) eliminate the requirement that we maintain a cash and cash equivalents balance of $250,000 any time our common shares close at less than $1.00 per share for three consecutive trading days, and (iii) eliminate the requirement that we have a cash and cash equivalents balance of at least $250,000 at the end of every quarter. The warrant is exercisable at $1.00 per share and expires on the earlier of November 21, 2007 or the 180th day following the date the closing price equals or exceeds $3.00 for 5 consecutive days. The fair value of the warrants, as determined by the Black-Scholes pricing model, is $239,217. The 2002 Note has an interest rate of 11% with the interest payable monthly in cash. The principal amount may be prepaid at any time with a 5% prepayment penalty. Under the terms of the 2002 Note, a conversion right with respect to $280,000 of principal accrues on each of March 1, 2003, June 1, 2003, September 1, 2003, December 1, 2003 and March 1, 2004. If the amount that would be subject to a conversion right is prepaid prior to the date of accrual, such conversion right does not accrue. Once a conversion right has accrued, the principal amount subject to that conversion right cannot be prepaid unless all principal amounts not subject to a conversion right have been prepaid in full. Each conversion right gives Doral the right to convert the subject principal amount into common shares at a conversion price equal to the lesser of (a) $1.00 per share and (b) 70% of the average of the closing price of our common shares for the five trading days ending on the trading day immediately preceding the date on which that conversion right accrued. Because this is a contingent embedded beneficial conversion feature, no amounts have been allocated to the beneficial conversion feature until the contingency is resolved.

In accordance with EITF 96-19, *Debtor's Accounting for a Modification or Exchange of Debt Instruments*, the exchange of the notes discussed above was considered to result in a substantially different debt instrument. Accordingly, the note was recorded at its face amount of $1,400,000. The new warrants issued, recorded at a fair value of $239,217, the unamortized debt discount and debt issuance costs associated with the 2001 Note and the debt issuance costs associated with the 2002 Note were included in the calculation of loss on extinguishment of debt.

The 2002 Note is secured by a pledge of the equipment, intellectual property and common stock of ANI, and by a pledge of the leasehold interest in mineral deposits and common stock of MRS.

On August 8, 2002, we entered into a purchase and sale agreement with BHP Minerals International, Inc. ("BHP") wherein we purchased the land, building and fixtures in Reno, Nevada where our titanium processing assets are located. In connection with this transaction, BHP also agreed to terminate our obligation to pay royalties associated with the sale or use of the titanium processing technology. In return, we issued to BHP a

note in the amount of $3,000,000, at an interest rate of 7%, secured by the property we acquired. Interest 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, 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.

7. STOCK OPTIONS AND WARRANTS

Stock Options - We have stock option plans administered by the Board of Directors that provide for the granting of options to employees, officers, directors and other service providers of the Company. Options granted under the plans generally are granted with an exercise price equal to the market value of a common share at the date of grant, have five-year terms and typically vest over periods ranging from immediately to three years from the date of grant.

Stock option activity for the years ended December 31, 2002, 2001 and 2000 is summarized as follows:

	2002		2001		2000	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Outstanding at beginning of year	3,666,700	$ 4.38	2,958,700	$ 5.37	3,060,000	$ 5.92
Granted during the year	975,000	0.94	1,368,000	2.12	420,000	3.86
Cancelled/Expired	(580,000)	1.93	(595,000)	4.14	(450,000)	7.80
Exercised	-	-	(65,000)	2.00	(71,300)	4.71
Outstanding at end of year	4,061,700	$ 3.83	3,666,700	$ 4.38	2,958,700	$ 5.37
Options exercisable at year end	3,410,700	$ 4.26	2,999,700	$ 4.84	2,153,700	$ 5.45
Weighted average fair value of options granted during year		$ 0.64		$ 1.70		$ 3.24

The following table summarizes information about stock options outstanding at December 31, 2002:

	Stock Options Outstanding			Stock Options Exercisable	
Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
$0.70 to $ 1.30	1,030,000	4.4	$ 1.05	710,000	$ 1.05
$2.00 to $ 3.06	1,143,000	2.9	2.16	822,000	2.22
$4.00 to $ 6.85	1,178,700	1.6	5.27	1,168,700	5.28
$7.15 to $ 10.00	710,000	0.8	8.17	710,000	8.17
	4,061,700	2.5	$ 3.83	3,410,700	$ 4.26

We have elected to follow the measurement provisions of APB Opinion No. 25, under which no recognition of expense is required in accounting for stock options granted to employees for which the exercise price equals or exceeds the fair market value of the stock at the grant date. Generally, stock options are granted at an option price at or greater than fair market value on the date of grant. We recorded compensation expense of $27,601, $158,089, and $424,063 for stock options granted to non-employees for the years ended December 31, 2002, 2001, and 2000, respectively.

Warrants - Warrant activity for the years ended December 31, 2002, 2001, and 2000 is summarized as follows:

	2002		2001		2000	
	Warrants	Weighted Average Exercise Price	Warrants	Weighted Average Exercise Price	Warrants	Weighted Average Exercise Price
Outstanding at beginning of year	4,612,007	$ 2.92	1,883,672	$ 5.18	150,000	$ 8.50
Granted during the year	5,069,333	1.41	3,441,668	1.24	1,733,672	4.89
Expired	(225,000)	9.00	-	-	-	-
Exercised	(286,169)	1.05	(713,333)	1.00	-	-
Outstanding at end of year	9,170,171	$ 1.92	4,612,007	$ 2.92	1,883,672	$ 5.18

The warrants were issued in conjunction with debt offerings, issuance of common stock, and payment for outside services. To estimate expense related to the issuance of warrants, we have used the modified Black-Scholes option pricing model. The warrants expire on various dates ranging from January 2003 to November 2007. Most warrants contain provisions whereby the expiration date is accelerated if our Common Shares close at or above specified prices ranging from $2.50 to $12.00 per share.

8. OTHER TRANSACTIONS

On March 31, 2000, we entered into a common stock purchase agreement with a private equity fund pursuant to which the equity fund purchased 1,251,303 Common Shares of Altair for an aggregate purchase price of $6,000,000; however, the number of shares received by the equity fund in exchange for $6,000,000 was subject to repricing adjustments if the lowest average closing price for any ten days during each of four 30-day repricing periods did not meet a certain threshold. Prior to December 15, 2000, the equity fund repriced 750,782 of the initial shares it purchased under the common stock purchase agreement and received an additional 1,003,626 Common Shares.

Pursuant to an assignment and agreement dated December 15, 2000, the equity fund referred to in the preceding paragraph transferred all of its remaining rights under the common stock purchase agreement, including its right to reprice the remaining 500,521 of the initial 1,251,303 shares, to Doral 18, LLC (Doral). Pursuant to this purchase agreement, Doral exercised its right to reprice approximately 70,928 of the initial shares and received 247,678 Common Shares. In exchange for approximately $1,650,000, we bought from Doral and terminated all remaining rights under the common stock purchase agreement, including all remaining repricing rights. In conjunction with this buyout, Doral granted us a call option to purchase 247,678 Common Shares for a nominal exercise price. Between December 15, 2000 and December 28, 2001, we paid $97,743 of principal and $244,941 of interest on the $7 million 10% Asset-Backed Exchangeable Term Note through the cancellation of call options on the 247,678 Common Shares.

In 2001, we received payment of $561,300 from an investor on a stock subscription receivable.

On March 26, 2001, 266,170 shares of common stock held in escrow as part of the 1999 TransMar, Inc. merger agreement were cancelled because the assets acquired from TransMar, Inc. did not generate the cash flow required by the escrow agreement.

On October 18, 2001, we reduced the exercise price of 255,000 outstanding warrants to $1.00 per share for a period of 45 days and we reduced the exercise price of 458,333 outstanding warrants to $1.00 per share through December 14, 2001. As a result of these repricings, we recorded a preferential warrant dividend of $52,417 as of the repricing date. The warrants had been previously issued with exercise prices ranging from $4.00 to $8.00.

On April 16, 2002, we reduced the exercise price of 582,500 outstanding warrants to $1.05 per share for the period April 26, 2002 through June 30, 2002. The warrants had been previously issued with exercise prices ranging from $3.50 to $5.00. As a result of these repricings, we recorded a preferential warrant dividend of $48,666 as of the repricing date. A total of 286,169 warrants were exercised prior to the expiration date.

On August 6, 2002, we adopted an Employee Stock Purchase Plan ("ESPP") which allows employees to purchase common shares at the fair market value through payroll deductions. Through December 31, 2002, a total of 161,550 common shares were issued under the ESPP at prices ranging from $0.38 to $0.78 per share.

9. LEASES

Operating Leases - We lease certain premises and equipment under operating leases, all of which are on a month-to-month basis.

Lease expense for the years ended December 31, 2002, 2001, and 2000 totaled $207,265, $304,330 and $283,964, respectively.

Mineral Leases - Our subsidiary, MRS, has entered into various mineral leases for a 100% interest in approximately 8,700 acres of land in the state of Tennessee, United States with minimum annual advance royalty payments as follows:

Year ending December 31:	
2003	$ 147,467
2004	223,236
2005	229,632
2006	229,632
2007	162,423
Thereafter	142,631

The mineral leases are subject to a production royalty; however, MRS will receive a credit against production royalties for all advance royalties paid. The lessors can only terminate the leases upon failure of MRS to make the minimum payments as required by the leases. The Company has incurred royalties of $129,691, $87,593, and $101,559 for the years ended December 31, 2002, 2001, and 2000, respectively. As of December 31, 2002, we owed $124,959 of royalty payments to lessors.

10. INCOME TAXES

Because of the net operating losses and a valuation allowance on deferred tax assets, there was no provision for income taxes recorded in the accompanying consolidated financial statements for the three years in the period ended December 31, 2002.

A reconciliation of the federal statutory income tax rate and our effective income tax rates is as follows:

	Year Ended December 31,		
	2002	2001	2000
Federal statutory income taxes (benefit)	$ (3,489,557)	$ (2,713,911)	$ (2,010,921)
Meals and entertainment	3,470	601	1,824
Valuation allowance	3,486,087	2,713,310	2,009,097
Total	$ -	$ -	$ -

The components of the deferred tax assets consisted of the following as of December 31, 2002 and 2001:

	2002	2001
Deferred tax assets:		
Net operating loss carryforward	$ 10,502,652	$ 6,238,645
Unrealized loss	172,557	80,359
Total deferred tax assets	10,675,209	6,319,004
Deferred tax liabilities:		
Basis difference in assets	(1,748,777)	(879,780)
Allowance for bad debts	(1,121)	-
Valuation allowance	(8,925,311)	(5,439,224)
Total deferred tax assets	$ -	$ -

The net operating loss carryforwards total $30,007,577 as of December 31, 2002 and will expire at various dates beginning in 2002 through 2021.

11. COMMITMENTS AND CONTINGENCIES

Litigation - We are currently not aware of any investigations, claims, or lawsuits which we believe could have a material adverse effect on our consolidated financial position or on our consolidated results of operations.

12. RELATED PARTY TRANSACTIONS

During the year ended December 31, 2002, officers made loans to us of $6,243 and we repaid loans from officers of $149,243. These were short-term, unsecured, non-interest bearing loans payable on demand, the proceeds of which were used to meet working capital needs. As of December 31, 2001, we had related party loans outstanding of $143,000. There were no related party loans outstanding at December 31, 2002.

13. BUSINESS SEGMENT INFORMATION

In accordance with SFAS No. 131, *Disclosure about Segments of an Enterprise and Related Information*, management views the Company as being three business segments: Titanium Pigment Processing Technology, Tennessee Mineral Property, and the Jig.

Reportable segment data reconciled to the consolidated financial statements as of and for the fiscal years ended December 31, 2002, 2001, and 2000 is as follows:

	Net Sales	Net Loss	Assets
2002:			
Titanium Pigment Processing Technology	$ 225,225	$ 2,456,771	$ 6,274,732
Tennessee Mineral Property	-	598,977	18,200
The Jig	28,270	2,929,010	10,270
Unallocated	-	2,786,600	2,611,203
Consolidated total	$ 253,495	$ 8,771,358	$ 8,914,405
2001:			
Titanium Pigment Processing Technology	$ 45,816	$ 2,783,647	$ 6,752,399
Tennessee Mineral Property	-	930,777	16,200
The Jig	-	300,913	2,929,930
Unallocated	-	2,006,195	1,154,714
Consolidated total	$ 45,816	$ 6,021,532	$10,853,243
2000:			
Titanium Pigment Processing Technology	$ -	$ 2,908,436	$ 7,260,506
Tennessee Mineral Property	-	1,217,966	-
The Jig	-	366,370	3,385,967
Unallocated	-	2,154,595	6,005,297
Consolidated total	$ -	$ 6,647,367	$16,651,770

Board of Directors

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Altair Nanotechnologies Inc.

George E. Hartman
President,
Hartman & Company, Inc.
and Chief Executive Officer,
PlanPlus Inc.

Edward H. Dickinson
Chief Financial Officer and Secretary,
Altair Nanotechnologies Inc.

Robert F. Sheldon
Retired President,
Newmont Exploration of Canada, Ltd.

James I. Golla
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