NANOPHASE TECHNOLOGIES CORPORATION
Form 10-Q
May 09, 2006

Table of Contents

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-Q

x **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Quarterly Period Ended: March 31, 2006

Commission File Number: 0-22333

Nanophase Technologies Corporation

(Exact name of registrant as specified in its charter)

Delaware	**36-3687863**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

1319 Marquette Drive, Romeoville, Illinois 60446

(Address of principal executive offices, and zip code)

Registrant s telephone number, including area code: (630) 771-6708

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 ¨ No x

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12B-2 of the Exchange Act. (Check one):

Large accelerated filer ¨ Accelerated filer x Non-accelerated filer ¨

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ¨ No x

As of May 5, 2006, there were 18,004,264 shares outstanding of Common Stock, par value $.01, of the registrant.

Table of Contents

NANOPHASE TECHNOLOGIES CORPORATION

QUARTER ENDED MARCH 31, 2006

INDEX

Table of Contents

PART I - FINANCIAL INFORMATION

Item 1. Financial Statements

NANOPHASE TECHNOLOGIES CORPORATION

BALANCE SHEETS

(Unaudited)

	March 31, 2006	December 31, 2005
ASSETS		
Current assets:		
Cash and cash equivalents	$ 579,938	$ 340,860
Investments	7,050,805	8,168,092
Trade accounts receivable, less allowance for doubtful accounts of $23,533 on March 31, 2006 and December 31, 2005	1,257,949	1,180,117
Inventories, net	697,395	801,217
Prepaid expenses and other current assets	418,678	414,363
Total current assets	10,004,765	10,904,649
Equipment and leasehold improvements, net	7,023,392	6,587,787
Other assets, net	592,358	680,908
	$ 17,620,515	$ 18,173,344
LIABILITIES AND STOCKHOLDERS EQUITY		
Current liabilities:		
Current portion of long-term debts	$ 60,154	$ 200,254
Current portion of deferred other revenue	85,135	56,757
Accounts payable	1,131,385	285,076
Accrued expenses	1,159,529	1,152,127
Total current liabilities	2,436,203	1,694,214
Long-term debt, less current maturities and unamortized debt discount	1,293,967	1,265,875
Deferred other revenue, less current portion	264,865	293,243
	1,558,832	1,559,118
Contingent liabilities:		
Stockholders equity:		
Preferred stock, $.01 par value, 24,088 shares authorized and no shares issued and outstanding		
Common stock, $.01 par value, 25,000,000 shares authorized; 18,004,264 and 17,976,592 shares issued and outstanding on March 31, 2006 and December 31, 2005 respectively	180,043	179,766
Additional paid-in capital	72,556,332	72,307,887
Accumulated deficit	(59,110,895)	(57,567,641)
Total stockholders equity	13,625,480	14,920,012

	$ 17,620,515	$ 18,173,344

See Notes to Financial Statements

Table of Contents

NANOPHASE TECHNOLOGIES CORPORATION

STATEMENTS OF OPERATIONS

(Unaudited)

	Three months ended March 31, 2006	Three months ended March 31, 2005
Revenue:		
Product revenue	$ 1,918,046	$ 1,526,304
Other revenue	87,522	87,078
Total revenue	2,005,568	1,613,382
Operating expense:		
Cost of revenue	1,667,751	1,444,500
Research and development expense	547,146	494,439
Selling, general and administrative expense	1,387,454	1,143,144
Total operating expense	3,602,351	3,082,083
Loss from operations	(1,596,783)	(1,468,701)
Interest income	82,713	65,047
Interest expense	(31,224)	(11,899)
Other, net	2,040	13
Loss before provision for income taxes	(1,543,254)	(1,415,540)
Provision for income taxes		
Net loss	$ (1,543,254)	$ (1,415,540)
Net loss per share-basic and diluted	$ (0.09)	$ (0.08)
Weighted average number of common shares outstanding	17,993,237	17,907,063

See Notes to Financial Statements

4

Table of Contents

NANOPHASE TECHNOLOGIES CORPORATION

STATEMENTS OF CASH FLOWS

(Unaudited)

	Three months ended March 31, 2006	Three months ended March 31, 2005
Operating activities:		
Net loss	$ (1,543,254)	$ (1,415,540)
Adjustments to reconcile net loss to net cash (used in) operating activities:		
Depreciation and amortization	307,724	320,779
Amortization of debt discount	28,092	
Stock compensation expense	195,230	15,188
Allowance for excess inventory quantities	(245,464)	(329)
Equipment write-off	6,128	
Patent write-off	111,162	
Changes in assets and liabilities related to operations:		
Trade accounts receivable	(217,932)	(353,019)
Other receivable		1,549
Inventories	349,286	16,373
Prepaid expenses and other assets	(4,315)	45,944
Accounts payable	371,521	157,991
Accrued liabilities	6,128	(4,131)
Net cash (used in) operating activities	(635,694)	(1,215,195)
Investing activities:		
Acquisition of equipment and leasehold improvements	(279,475)	(182,415)
Acquisition of Patents	(30,653)	(23,974)
Payment of accounts payable incurred for the purchase of equipment and leasehold improvements	14,121	
Purchases of investments	(20,211,959)	(63,327,887)
Sales of investments	21,329,246	64,843,186
Net cash provided by investing activities	821,280	1,308,910
Financing activities:		
Principal payment on debt obligations, including capital leases		(5,505)
Proceeds from sale of common stock, net, and exercise of stock options	53,492	7,504
Net cash provided by financing activities	53,492	1,999
Increase in cash and cash equivalents	239,078	95,714
Cash and cash equivalents at beginning of period	340,860	475,185
Cash and cash equivalents at end of period	$ 579,938	$ 570,899
Supplemental cash flow information:		
Interest paid	$ 3,132	$ 11,899

Supplemental non-cash investing and financing activities:

Accounts receivable paid through offset of long-term debt	$	140,100	$	119,045
Accounts payable incurred for the purchase of equipment and leasehold improvements	$	460,667	$	72,066

See Notes to Financial Statements

5

Table of Contents

NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS

(Unaudited)

(1) Basis of Presentation

The accompanying unaudited interim financial statements of Nanophase Technologies Corporation (Nanophase or the Company) reflect all adjustments (consisting of normal recurring adjustments) which, in the opinion of management, are necessary for a fair presentation of the financial position and operating results of the Company for the interim periods presented. Operating results for the three months ended March 31, 2006 are not necessarily indicative of the results that may be expected for the year ended December 31, 2006.

These financial statements should be read in conjunction with the Company s audited financial statements and notes thereto for the year ended December 31, 2005, included in the Company s Annual Report on Form 10-K for the year ended December 31, 2005, as filed with the Securities and Exchange Commission.

(2) Description of Business

The Company was incorporated on November 30, 1989 for the purpose of developing nanocrystalline materials for commercial production and sale in domestic and international markets.

Nanophase Technologies is a nanocrystalline materials developer and commercial manufacturer with an integrated family of nanomaterial technologies. Nanophase produces engineered nanomaterials for use in a variety of diverse existing and developing markets: personal care, sunscreens, abrasion-resistant applications, antimicrobial products and a variety of polishing applications, including semiconductors and optics. New markets and applications are also being developed. The Company targets markets in which it feels practical solutions may be found using nanoengineered products. The Company works with leaders in these target markets to identify and supply their material and performance requirements.

The Company also recognizes regular other revenue from a technology license. This activity is not expected to drive the long-term growth of the business. License revenue is recognized as other revenue in the Company s Statement of Operations, as they do not represent revenue directly from the Company s Nanocrystalline materials.

Table of Contents

(3) Inventories

Inventories consist of the following:

	March 31, 2006	December 31, 2005
Raw materials	$ 135,949	$ 498,144
Finished goods	907,322	894,413
	1,043,271	1,392,557
Allowance for excess inventory quantities	(345,876)	(591,340)
	$ 697,395	$ 801,217

(4) Share-Based Compensation

Prior to January 1, 2006, the Company accounted for its stock option plan under the recognition and measurement provisions of APB Opinion No. 25, Accounting for Stock Issued to Employees and related Interpretations, as permitted by FASB Statement No. 123, Accounting for Stock-Based Compensation. No stock option-based employee compensation cost was recognized in the Statement of Operations for the three months ended March 31, 2005, as all options granted under those plans had an exercise price equal to the market value of the underlying common stock on date of grant. Effective January 1, 2006, the Company adopted the fair value recognition provisions of FASB Statement No. 123(R), Shared-Based Payment, using the modified-prospective-transition method. Under that transition method, compensation cost recognized for the three months ended March 31, 2006 includes: (a) compensation cost for all share-based payments granted prior to, but not yet vested on January 1, 2006, based on the grant date fair value estimated in accordance with the original provisions of Statement 123, and (b) compensation cost for all share-based payments granted subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of Statement 123(R). Results for the prior period have not been restated.

As a result of adopting Statement 123(R) on January 1, 2006 the Company s loss before provision for income taxes and net loss for the quarter ended March 31, 2006 was $115,305 lower than if it had continued to account for share-based compensation under Opinion 25. Basic and diluted earnings per share for the quarter ended March 31, 2006 would have been ($.08), if the Company had not adopted Statement 123(R), compared to reported basic and diluted earnings per share of ($.09).

Compensation expense is recognized only for share-based payments expected to vest. The Company estimates forfeitures at the date of grant based on the Company s historical experience and future expectations. Prior to the adoption of SFAS 123(R), the effect of forfeitures on the pro forma expense was recognized based on estimated forfeitures.

As of March 31, 2006, there was approximately $409,000 of total unrecognized compensation cost related to nonvested share-based compensation arrangements granted under the Company s stock option plans. That cost is expected to be recognized over a weighted-average period of 6.68 years.

The following table illustrates the effect on net income and earning per share if the Company had applied the fair value recognition provisions of SFAS No. 123 to options granted under the Company s stock option plan presented on March 31, 2005. For purposes of this pro forma disclosure, the value of the options is estimated using a Black-Scholes option-pricing formula and amortize to expense over the option vesting periods.

Table of Contents

	March 31, 2005
Net Loss:	
As reported	($ 1,415,540)
Deduct total stock-based employee compensation expense determined under fair value based method for all awards	(117,893)
Pro forma net loss	($ 1,533,433)
Loss per share:	
Basic - As reported	(0.08)
Basic Pro forma	(0.09)
Diluted - As reported	(0.08)
Diluted Pro forma	(0.09)

Employees Stock Options and Stock Grants

During the three months ended March 31, 2006, 21,186 shares of Common Stock were issued pursuant to option exercises compared to 17,370 shares in the same period in 2005. No options were granted to employees for the three months ended March 31, 2006 and 2005.

The following table summarizes the Company s option activity for Nanophase Technologies Corporation employees and directors during the three months ended March 31, 2006:

Options	Shares	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding on January 1, 2006	1,740,347	$ 5.92		
Granted				
Exercised	(21,186)	$ 2.52		
Forfeited or expired	(4,080)	$ 5.25		
Outstanding on March 31, 2006	1,715,081	$ 5.96	4.96	$ 3,652,634
Exercisable on March 31, 2006	1,541,248	$ 5.98	4.51	$ 3,307,870

Table of Contents

The aggregate intrinsic value in the table above is before income taxes, based on Nanophase s closing stock price of $7.71 on the last business day for the period ended March 31, 2006.

During the three months ended March 31, 2006, the total intrinsic value of Nanophase stock options exercised was $57,015.

Restricted Stock

On January 3, 2006, the Company was to grant each outside director 1,081 shares of deferred common stock totaling 6,486 shares under the Company s 2005 Non-Employee Director Restricted Stock Plan. However, each outside director elected to defer receipt of the restricted stock until the termination of their services to the Company. The deferral of restricted stock is being accounted for under the Company s Non-Employee Director Deferred Compensation Plan. The fair value of the awards granted was $36,000 for the restricted share rights and is included in stock-based compensation expense for the period ending March 31, 2006 compared to $0 for the same period in 2005.

On September 27, 2005, the Company granted 33,333 shares of restricted stock rights at market value consisting of 16,666 restricted share rights and 16,667 performance share rights, respectively. The restricted share rights vest in lump sum or cliff vest on September 27, 2008, provided the grantee has not terminated service prior to the vesting date. The performance share rights also vest in lump sum or cliff vest on January 30, 2009 provided a certain performance goal or milestone is achieved on or before January 30, 2009 and the grantee has not terminated service prior to January 30, 2009. The fair value of the awards granted was $7,571 for the restricted share rights and $10,529 for the performance share rights totaling $18,100 in stock-based compensation expense for the period ending March 31, 2006.

On October 11, 2004, the Company granted 33,333 shares of restricted stock rights at market value consisting of 16,666 restricted share rights and 16,667 performance share rights, respectively. The restricted share rights vest in lump sum or cliff vest on October 30, 2007, provided the grantee has not terminated service prior to the vesting date. The performance share rights also vest in lump sum or cliff vest upon achievement of certain performance goals or milestones on or before October 30, 2007, provided the grantee has not terminated service prior to the vesting date. The fair value of the awards granted was $6,850 and $7,473 for the restricted share rights and $18,975 and $7,715 for the performance share rights totaling $25,825 and $15,188 in stock-based compensation expense for the period ending March 31, 2006 and 2005, respectively.

(5) Significant Customers and Contingencies

Revenue from three customers constituted approximately 80%, 6% and 6%, respectively, of the Company s total revenue for the three months ended March 31, 2006. Amounts included in accounts receivable on March 31, 2006 relating to these three customers were approximately $711,000, $124,000 and $113,000, respectively. Revenue from these three customers constituted approximately 87%, 0% and 0% respectively, of the Company s total revenue for the three months ended March 31, 2005. Amounts included in accounts receivable on March 31, 2005 relating to these three customers were approximately $641,000, $0 and $0, respectively.

The Company currently has supply agreements with BASF Corporation (BASF), the Company s largest customer, and Rohm and Haas Electronic Materials CMP, Inc. (RHEM), that have contingencies outlined in them which could potentially result in the license of technology and/or the sale of production equipment, providing capacity sufficient to meet the customer s production needs, from the Company to the customer, if triggered by the Company s failure to meet certain performance requirements and/or certain financial condition covenants. The financial condition covenants in the Company s supply agreement with its largest customer, as amended, triggers a technology transfer (license or, optionally, an equipment sale) in the event (a) that earnings of the Company for a twelve month period ending with its most recently published quarterly financial statements are less than zero and

Table of Contents

its cash, cash equivalents and investments are less than $2,000,000, (b) of an acceleration of any debt maturity having a principal amount of more than $10,000,000, or (c) of the Company s insolvency, as further defined within the agreement. In the event of an equipment sale, upon incurring a triggering event, the equipment would be sold to the customer at 115% of the equipment s net book value.

The Company believes that it has sufficient cash and investment balances to avoid the first triggering event through 2006. If a triggering event were to occur and BASF elected to proceed with the license and related sale mentioned above, the Company would receive royalty payments from this customer for products sold using the Company s technology; however, the Company would lose both significant revenue and the ability to generate significant revenue to replace that which was lost in the near term. Replacement of necessary equipment that could be purchased and removed by the customer pursuant to this triggering event could take in excess of twelve months. Any additional capital outlays required to rebuild capacity would probably be greater than the proceeds from the purchase of the assets as dictated by the Company s agreement with the customer. Such an event would also result in the loss of many of the Company s key staff and line employees due to economic realities. The Company believes that its employees are a critical component of its success and could be difficult to replace and train quickly. Given the occurrence of such an event, the Company might not be able to hire and retain skilled employees given the stigma relating to such an event and its impact on the Company.

(6) Business Segmentation and Geographical Distribution

Revenue from international sources approximated $204,000 and $111,000 for the three months ended March 31, 2006 and 2005, respectively. As part of its revenue from international sources, the Company recognized approximately $125,000 in product revenue from several German companies and $75,000 in other revenue from a technology license fee from its Japanese licensee for the three months ended March 31, 2006. Revenue from these same international sources approximated $14,000 and $81,000 (which included some purchased supplies) for the same period in 2005.

The Company s operations comprise a single business segment and all of the Company s long-lived assets are located within the United States.

(7) Administrative Actions

On February 23, 2004, an unidentified party filed a Petition to Request a Reexamination of US Patent No. 6,669,823 B1 in the U.S. Patent and Trademark Office, or USPTO. US Patent No. 6,669,823 B1 relates to certain parts of one of the Company s nanoparticle manufacturing processes, NanoArc Synthesis. The Company subsequently received notice that the USPTO had granted the Request for Reexamination. The reexamination process is provided for by law and requires the USPTO to consider the scope and validity of the patent based on substantial new questions of patentability raised by a third party or the USPTO. On September 7, 2005, the Company s representatives conducted an interview with the Examiner assigned to the Reexamination at the USPTO, resulting in the Examiner preparing an interview summary indicating that the Examiner agreed all the issued claims were patentable. A response, including further remarks about the interview and two new claims, was submitted shortly thereafter. However, prior to the USPTO issuing a formal notice confirming patentability, the same unidentified party referenced above filed a second Petition to Request Reexamination of the patent. Although the second Petition was denied, an amendment to all patent claims was made. The same unidentified party has now filed a third Request for Reexamination, which the USPTO granted. It is not feasible to predict whether the Company ultimately will succeed in maintaining all the claims of this patent during reexamination. If the patent claims in this patent ultimately are narrowed substantially by the USPTO, the patent coverage afforded to certain parts of the Company s NanoArc Synthesis nanoparticle manufacturing process could be impaired, which could impede the extent of Nanophase s legal protection of the invention that is subject to this patent and potentially harm its business and operating results.

Item 2. Management s Discussion and Analysis of Financial Condition and Results of Operations

Overview

Nanophase Technologies is a nanocrystalline materials developer and commercial manufacturer with an integrated family of nanomaterial technologies. Nanophase produces engineered nanomaterials for use in a variety of diverse markets: sunscreens, personal care, abrasion-resistant applications, antimicrobial products and a variety of polishing applications, including semiconductors and optics. The Company targets markets in which it feels practical solutions may be found using nanoengineered products. The Company works closely with leaders in these target markets to identify their material and performance requirements. Newer developed technologies have made certain new products possible and opened potential new markets. With the commercialization of the Company s NanoArc synthesis and new dispersion technologies in 2002, and the expansion of these capabilities in 2003 and 2004, Nanophase is focusing on penetrating the chemical-mechanical-planarization (CMP) and fine polishing markets. CMP is the process of polishing various types of integrated circuits or chips to be used in various commercial electronics applications. Management believes that the Company s inroads in the CMP and fine polishing markets would have been very difficult without the Company being able to produce its materials to exacting specifications verified by in-house and customer-based testing. Management expects growth in end-user (customers of Nanophase s customers) adoption in 2006 and revenue growth to continue in 2006 in both of these areas. Additionally, the Company feels that its exclusive relationship with Altana Chemie (Altana), a global ingredients supplier to various coatings industries, will lead to growth in several of its abrasion-resistant applications in the marketplace. Management expects this relationship to continue to develop in 2006. In May of 2005, BASF announced the introduction of a new coated sunscreen material. This material incorporated a new coating developed by Nanophase which, management believes, should help to expand sales in the European and Asian markets beginning in 2006.

On November 3, 2005, BYK-Chemie USA, a subsidiary of Altana and a customer of Nanophase, lent $1,597,420 to Nanophase pursuant to the terms of a Promissory Note received effective October 27, 2005. This loan was for the purchase and installation of additional dispersion capacity and an additional NanoArc synthesis reactor to allow both for quicker material and application development, which should help to speed market penetration, and the ability to fulfill orders on a commercial scale for additional materials in varying media.

From its inception in November 1989 through December 31, 1996, the Company was in the development stage. During that period, the Company primarily focused on the development of its manufacturing processes in order to transition from laboratory-scale to commercial-scale production. As a result, the Company developed an operating capacity to produce significant quantities of its nanocrystalline materials for commercial sale. The Company was also engaged in the development of commercial applications and formulations and the recruiting of marketing, technical and administrative personnel. Since January 1, 1997, the Company has been engaged in commercial production and sales of its nanocrystalline materials, and the Company no longer considers itself in the development stage. From inception through March 31, 2006, the Company was primarily capitalized through the private offering of approximately $32.0 million of equity securities prior to its initial public offering, its initial public offering of $28.8 million of common stock in November of 1997, its private offering of $6.2 million of common stock in May of 2002, its private offering of $1.95 million of common stock in September of 2003, its equity investment of $9.2 million in March 2004 and its private offering of $1.95 million of common stock in September of 2004 (through the conversion of warrants that were attached to its September 2003 offering), each net of issuance costs. The Company has incurred cumulative losses of $59.1 million from inception through March 31, 2006.

Table of Contents

Results of Operations

Total revenue increased to $2,005,568 for the three months ended March 31, 2006, compared to $1,613,382 for the same period in 2005. A substantial majority of the Company s revenue for the three months ended March 31, 2006 is from the Company s largest customer. See Note 5 to the Financial Statements for additional information regarding the revenue the Company derived from this customer in the first quarter of 2006. Product revenue increased to $1,918,046 for the three months ended March 31, 2006, compared to $1,526,304 for the same period in 2005. The increase in product revenue was primarily attributed to increased sales of sunscreen and personal care materials to BASF, the Company s largest customer, increased sales of CMP materials to Rohm and Haas Electronic Materials CMP, Inc. (RHEM, formerly known as Rodel, Inc.) and a new customer for application in medical devices. The Company and its largest customer currently have a technology agreement in place that has led to the joint development of the second generation of sunscreen nanomaterials for other potential personal care applications. Management anticipates the launch of one or more new sunscreen or personal care applications in the near future, with related revenue to begin building in 2006.

Other revenue increased to $87,522 for the three months ended March 31, 2006, compared to $87,078 for the same period in 2005. This increase was primarily attributed to increased shipping revenue partially offset by decreases in purchased supplies.

The majority of the total revenue generated during the period ended March 31, 2006 was from the Company s largest customer in the healthcare (sunscreens) market as described above.

Cost of revenue generally includes costs associated with commercial production and customer development arrangements. Cost of revenue increased to $1,667,751 for the three months ended March 31, 2006, compared to $1,444,500 for the same period in 2005. The increase in cost of revenue was generally attributed to increased revenue volume and the Company s continued efficiencies in reducing its variable manufacturing costs on nanomaterials. Improvements to gross margins were primarily due to increased revenue volume, favorable product mix and the completion of a series of process improvements that increased PVS reactor output by 38% in conjunction with a re-engineering program that had reduced the expected operational labor cost by 24% on high volume PVS-produced nanomaterials. Nanophase expects to maintain an aggressive schedule for new nanomaterial development, primarily using its NanoArc synthesis and dispersion technologies, for targeted applications and new markets throughout 2006. At current revenue levels the Company has generated a modest positive gross margin. The Company s margins have been impeded by not having enough revenue to absorb the manufacturing overhead that is required to work with current customers and the new ones the Company expects to have. Management believes that the current fixed manufacturing cost structure is sufficient to support significantly higher levels of production and resultant product revenue. The extent to which the Company s margins remain positive, as a percentage of total revenue, will be dependent upon revenue mix, revenue volume and the Company s ability to continue to cut costs. As product revenue volume increases, this will result in more of the Company s fixed manufacturing costs being absorbed, leading to increased margins. The Company expects to continue reducing its variable product manufacturing costs in 2006 but may or may not continue to operate at a positive gross margin in 2006, dependent upon the factors discussed above.

Research and development expense, which includes all expenses relating to the technology and advanced engineering groups, primarily consists of costs associated with the Company s development or acquisition of new product applications and coating formulations and the cost of enhancing the Company s manufacturing processes. The May 2005 roll-out of BASF s new sunscreen was an example of this work. In another example, the Company has been and continues to be engaged in research to enhance its ability to disperse its material in a variety of organic and inorganic media for use as coatings and polishing materials. Much of this work has led to new potential products for use by Altana. Now that the Company has demonstrated the capability to produce pilot quantities of mixed-metal oxides in a single crystal phase, the Company does not expect development of further variations on these materials to present material technological challenges. Many of these materials exhibit performance characteristics that can enable them to serve in various catalytic applications. This development has been driven largely by customer demand. Management is now working on several related commercial applications. The Company expects that this technique should not be difficult to scale to large quantity commercial volumes once application viability and firm demand are established. The Company also has an ongoing advanced engineering effort that is primarily focused on the development of new nanomaterials as well as the refinement of existing nanomaterials. The Company is not certain when or if any significant revenue will be generated from the production of the materials described above. Research and development expense increased to $547,146 for the three months ended March 31, 2006, compared to $494,439 for the same period in 2005. The increase in research and development expense was largely attributed to stock compensation expense (non-cash), outside testing and salary expenses. These increases were partially offset by decreased materials and supplies expense. The Company does not expect research and development expense to increase significantly in 2006.

Selling, general and administrative expense increased to $1,387,454 for the three month period ended March 31, 2006, compared to $1,143,144 for the same period in 2005. The net increase was primarily attributed to increases in patent abandonment, stock compensation expense (non-cash) and legal fees. These increases were partially offset by decreases in audit fees, directors and officers insurance and consulting fees.

Interest income increased to $82,713 for the three month period ended March 31, 2006, compared to $65,047 for the same period in 2005. This increase was primarily due to increased investment yields.

Liquidity and Capital Resources

The Company s cash, cash equivalents and investments amounted to $7,630,743 on March 31, 2006, compared to $8,508,952 on December 31, 2005. The net cash used in the Company s operating activities was $635,694 for the three months ended March 31, 2006, compared to $1,215,195 for the same period in 2005. Net cash provided by investing activities, which is due to maturities of securities and to a lesser extent capital expenditures offset partially by purchases of securities, amounted to $821,280 for the three months ended March 31, 2006 compared to $1,308,910 for the same period in 2005. Capital expenditures amounted to $279,475 and $182,415 for the three months ended March 31, 2006 and 2005, respectively. During the second quarter in 2005 the Company completed implementation of a PVS process innovation started in late 2003, within the current capital budget, that has increased PVS reactor output by approximately 38% in conjunction with a re-engineering program that had reduced the expected operational labor cost by 24% on high volume PVS-produced nanomaterials. The Company expects that this innovation should result in the need for less future capital as the Company s PVS reactor-produced business grows. Currently, all sunscreen and personal care nanomaterials are manufactured via the PVS process. Net cash provided by financing activities is due to the issuance of shares of common stock pursuant to the exercise of options amounting, in total, to $53,492 for the three months ended March 31, 2006 compared to $1,999 for the same period in 2005.

On November 3, 2005, BYK-Chemie USA, a customer of Nanophase, lent $1,597,420 to Nanophase pursuant to the terms of a Promissory Note received effective October 27, 2005. The proceeds of the Promissory Note are to be used to buy, install and commission certain equipment which is then to be used for fulfillment of orders by BYK-Chemie USA and other uses. The outstanding principal balance of the Promissory Note is payable in three equal installments on January 30, 2009, April 30, 2009 and December 31, 2009. Interest accrues and is payable on a quarterly basis one year after the equipment referenced above is installed at the rate of 100 basis points over the average daily London Inter-Bank Offered Rate for the preceding quarter.

On March 23, 2004, the Company sold, in a private placement to Altana Chemie AG (Altana), 1,256,281 shares of common stock at $7.96 per share and received gross proceeds of $10.0 million. On September 8, 2003, the Company secured equity funding through a private placement offering with Grace Brothers, Ltd., its largest investor. The Company issued 453,001 shares of additional common stock at

Table of Contents

$4.415 per share and received gross proceeds of $2.0 million. Grace Brothers, Ltd. also had the right to purchase an additional 453,001 shares for an additional $2.0 million pursuant to the terms of a warrant issued in such private placement. In accordance with the terms of such private placement, on June 7, 2004, the Company filed a registration statement for such 453,001 shares and the additional 453,001 shares issuable upon exercise of the warrant which registration statement was declared effective on August 13, 2004. On September 2, 2004, Grace Brothers, Ltd. exercised its warrant rights to acquire 453,001 newly issued shares of common stock and the Company received $2.0 million in gross proceeds. On May 29, 2002, the Company secured equity funding through a private placement offering. The Company issued 1.37 million shares of additional common stock at $5.00 per share and received gross proceeds of $6.85 million. Net proceeds were approximately $6.2 million after commissions, legal, accounting and other costs. The Company intends to use the remaining proceeds from the foregoing offerings to fund expected growth in new markets as well as to provide for expanded working capital needs expected to arise as sales volume grows and pay existing debts.

The Company s supply agreement with its largest customer contains several financial covenants which could potentially impact the Company s liquidity. The most restrictive financial covenants under this agreement require the Company to maintain a minimum of $2.0 million in cash, cash equivalents and investments and that the Company not have the acceleration of any debt maturity having a principal amount of more than $10,000,000, in order to avoid triggering a transfer of technology and equipment to the Company s largest customer. The Company had approximately $7.6 million in cash, cash equivalents and investments and debt net of unamortized debt discount of less than $1.4 million on March 31, 2006. This supply agreement and its covenants are more fully described in Note 5 to the Company s Financial Statements. See Risk Factors We may need to raise additional capital in the future .

In November 2000, the Company executed a three-year promissory note, held by the Company s largest customer, in the amount of $1,293,895 for the construction of additional production capabilities at the Company s Romeoville, Illinois facility. The outstanding balance of this note was $60,154 on March 31, 2006. The note bears interest at 8.45% per annum and is collateralized by certain powder coating, packaging, lab and related equipment. In May 2005, an amendment to this promissory note was executed for the purpose of extending the date when any unpaid balance will be due upon demand from June 1, 2005 to June 1, 2007. Management expects this debt to be fully paid in the second quarter in 2006.

The Company believes that cash from operations, the proceeds of the $1,597,420 loan from BYK-Chemie USA (subject to the restrictions on the use of such proceeds set forth in the Promissory Note evidencing such loan), and cash, cash equivalents and investments on hand and interest income thereon, will be adequate to fund the Company s operating plans through 2006. The Company s actual future capital requirements in 2006 and beyond will depend, however, on many factors, including customer acceptance of the Company s current and potential nanocrystalline materials and product applications, continued progress in the Company s research and development activities and product testing programs, the magnitude of these activities and programs, and the costs necessary to increase and expand the Company s manufacturing capabilities and to market and sell the Company s materials and product applications. Other important issues that will drive future capital requirements will be the development of new markets and new customers as well as the potential for significant unplanned growth with the Company s existing customers. The Company expects that capital spending relating to currently known capital needs in 2006 will be approximately $2,000,000, but could be even greater due to the factors discussed above.

Should events arise that make it appropriate for the Company to seek additional financing, it should be noted that additional financing may not be available on acceptable terms or at all, and any such additional financing could be dilutive to the Company s stockholders. Such a financing could be necessitated by such things as the loss of existing customers; currently unknown capital requirements in light of the factors described above; new regulatory requirements that are outside the Company s control; the need to meet previously discussed cash requirements to avoid a triggering event; or various other circumstances coming to pass that are currently not anticipated by the Company.

On March 31, 2006, the Company had a net operating loss carryforward of approximately $59.1 million for income tax purposes. Because the Company may have experienced ownership changes within the meaning of the U.S. Internal Revenue Code in connection with its various prior equity offerings, future utilization of this carryforward may be subject to certain limitations as defined by the Internal Revenue Code. If not utilized, the carryforward expires at various dates between 2006 and 2025. As a result of the annual limitation and uncertainty as to the amount of future taxable income that will be earned prior to the expiration of the carryforward, the Company has concluded that it is likely that some portion of this carryforward will expire before ultimately becoming available to reduce income tax liabilities. On March 31, 2006, the Company also had a foreign tax credit carryforward of $156,000, which could be used as an offsetting tax credit to reduce U.S. income taxes. The foreign tax credit will expire in 2014, if not utilized before that date.

Safe Harbor Provision

Nanophase Technologies Corporation wants to provide investors with more meaningful and useful information. As a result, this Quarterly Report on Form 10-Q (the Form 10-Q) contains and incorporates by reference certain forward-looking statements , as defined in Section 21E of the Securities Exchange Act of 1934, as amended. These statements reflect the Company s current expectations of the future results of its operations, performance and achievements. Forward-looking statements are covered under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. The Company has tried, wherever possible, to identify these statements by using words such as anticipates , believes , estimates , expects , plans , intends and similar expressions. These statements reflect management s current beliefs and are based on information now available to it. Accordingly, these statements are subject to certain risks, uncertainties and contingencies that could cause the Company s actual results, performance or achievements in 2006 and beyond to differ materially from those expressed in, or implied by, such statements. These risks, uncertainties and factors include, without limitation: a decision by a customer to cancel a purchase order or supply agreement in light of the Company s dependence on a limited number of key customers; uncertain demand for, and acceptance of, the Company s nanocrystalline materials; the Company s limited manufacturing capacity and product mix flexibility in light of customer demand; the Company s limited marketing experience; changes in development and distribution relationships; the impact of competitive products and technologies; the Company s dependence on patents and protection of proprietary information; the resolution of litigation in which the Company may become involved; and other risks set forth under the caption Risk Factors below. Readers of this Quarterly Report on Form 10-Q should not place undue reliance on any forward-looking statements. Except as required by federal securities laws, the Company undertakes no obligation to update or revise these forward-looking statements to reflect new events or uncertainties.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The only financial instruments that the Company holds are investments of a short-term duration. Management does not believe that the Company currently has material market risk relating to its investments.

Item 4. Controls and Procedures

As of the end of the period covered by this report, the Company conducted an evaluation, under the supervision and with the participation of the principal executive officer and principal financial officer, of the Company s disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (the Exchange Act). Based on this evaluation, the principal executive officer and principal financial officer concluded that the Company s disclosure controls and procedures are effective to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms. There was no change in the Company s internal control over financial reporting during the Company s most recently completed fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company s internal control over financial reporting.

PART II OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors

The following risks, uncertainties, and other factors could have a material adverse affect on our business, financial condition, operating results and growth prospects.

We have a limited operating history and may not be able to address difficulties encountered by early stage companies in new and rapidly evolving markets.

We have only a limited operating history. We were formed in November 1989 and began our commercial nanocrystalline materials operations in January 1997. We have not yet generated a significant amount of revenue from our nanocrystalline materials operations. Because of our limited operating history and the early stage of development of our rapidly evolving market, we have limited insight into trends that may emerge and adversely affect our business and cannot be certain that our business strategy will be successful or that it will successfully address these risks. In addition, our efforts to address any of these risks may distract personnel or divert resources from other more important initiatives, such as attracting and retaining customers and responding to competitive market conditions.

We have a history of losses that may continue in the future.

We have incurred net losses in each year since our inception with net losses of $5.83 million in 2003, $6.45 million in 2004 and $5.38 million in 2005. As of March 31, 2006, we had an accumulated deficit of approximately $59.1 million and presently expect to continue to incur losses on an annual basis through at least the end of 2006. We believe that our business depends, among other things, on our ability to significantly increase revenue. If revenue fails to grow at anticipated rates or if operating expenses increase without a commensurate increase in revenue, or if we fail to adjust operating expense levels accordingly, then the imbalance between revenue and operating expenses will negatively impact our cash balances and our ability to achieve profitability in future periods.

We depend on a small number of customers for a high percentage of our sales, and the loss of orders from a significant customer could cause a decline in revenue and/or increases in the level of losses incurred.

Sales to our customers are executed pursuant to purchase orders and annual supply contracts; however, customers can cease doing business with us at any time with limited advance notice. We expect a significant portion of our future sales to remain concentrated within a limited number of strategic customers. We may not be able to retain our strategic customers, such customers may cancel or reschedule orders, or in the event of canceled orders, such orders may not be replaced by other sales or by sales that are on as favorable terms. In addition, sales to any particular customer may fluctuate significantly from quarter to quarter, which could affect our ability to achieve anticipated revenues on a quarterly basis.

Table of Contents

Revenue from BASF Corporation, Rohm and Haas Electronic Materials CMP, Inc. (formerly known as Rodel) and C.I. Kasei, a division of Itochu Corporation, accounted for approximately 83% of total revenue for the year ended December 31, 2005, and revenue to the same three customers accounted for approximately 89% of total revenue in 2004. For the years ended December 31, 2005 and 2004, BASF accounted for 66% and 70% of our total revenue, respectively. BASF and Rohm and Haas Electronic Materials CMP, Inc. represented a significant majority of total revenue for the three months ended March 31, 2006, as described in Note 5 to the Financial Statements. If we were to lose, or receive significantly decreased orders from, any of these two customers, then our results of operations would be materially harmed. While our agreements with our two largest customers are long-term agreements, they may be terminated by the customer with reasonable notice and do not provide any guarantees that these customers will continue to buy our products. In addition, while our agreements with our two largest customers contain minimum order requirements, the only repercussion under the agreements for missing the minimum order requirement is that we would be freed from the exclusivity obligations under these contracts.

We have been consistently expanding both our marketing and business development efforts and our production efficiency in order to address the issues of our dependence upon a limited amount of customers, enhancement of gross profit and operating cash flows, and the achievement of profitability. We currently have customers that may grow to the point where they generate significant revenues and margins as relationships expand. Given the special nature of our products, and the fact that markets for them are not yet fully developed, it is difficult to accurately predict when additional large customers will materialize. Going forward, the Company s margins, as a percentage of revenue, will be dependent upon revenue mix, revenue volume and the Company s ability to continue to cut costs. The extent of the growth in revenue volume and the related gross profit that this revenue generates, will be the main drivers in generating positive operating cash flows and, ultimately, net income.

Any downturn in the markets served by us would harm our business.

A majority of our products are incorporated into products such as sunscreens, polishing slurries, personal care, and to a lesser extent, medical diagnostics, abrasion-resistant coatings for flooring, and other products. These markets have from time to time experienced cyclical, depressed business conditions, often in connection with, or in anticipation of, a decline in general economic conditions. These industry downturns have resulted in reduced product demand and declining average selling prices. Our business would be harmed by any future downturns in the markets that we serve.

Our products often have long adoption cycles, which could make it difficult to achieve market acceptance and makes it difficult to forecast revenues.

Due to their often novel characteristics and the unfamiliarity with them that exists in the marketplace, our nanocrystalline materials often require longer adoption cycles than existing materials technologies. Our nanomaterials have to receive appropriate attention within any potential customer s organization, then they must be tested to prove a performance advantage over existing materials, typically on a systems-cost basis. Once we have proven initial commercial viability, pilot scale production runs must be completed by the customer, followed by further testing. Once production-level commercial viability is established, then our nanomaterials can be introduced, often to a downstream marketplace that needs to be familiarized with them. If we are unable to convince our potential customers of the performance advantages and economic value of our nanocrystalline materials over existing and competing materials and technologies, we will be unable to generate significant sales. Our long adoption cycle makes it difficult to predict when sales will occur.

We depend on collaborative development relationships with our customers and do not have a substantial direct sales force or an established distribution network apart from the distribution networks of our strategic partners. If we are unable to initiate or sustain such collaborative relationships or if the terms of these relationships limit the distribution of our products or if our strategic partners are unable distribute our products efficiently, then we may be unable to independently develop, manufacture or market our current and future nanocrystalline materials or applications.

Table of Contents

We have established, and will continue to pursue, strategic relationships with many of our customers and do not have a substantial direct sales force or an established distribution network (other than distribution arrangements for research samples). Through these relationships, we seek to develop new applications for our nanocrystalline materials and share development and manufacturing resources. We also seek to coordinate the development, manufacture and marketing of our nanocrystalline products. Future success will depend, in part, on our continued relationships with these customers and our ability to enter into similar strategic relationships with other customers. Our customers may not continue in these collaborative development relationships, may not devote sufficient resources to the development or sale of our materials or may enter into strategic development relationships with our competitors. These customers may also require a share of control of these collaborative programs. Some of our agreements with these customers limit our ability to license our technology to others and/or limit our ability to engage in certain product development or marketing activities. These relationships generally can be terminated unilaterally by customers.

Additionally and except for our research quantities distribution agreement with Alfa Aesar, these customers generally require exclusive distribution arrangements within the field of application covered by our agreement with these customers, and the very nature of these strategic relationships limits the distribution of our products to the distribution networks available to our strategic relationship partners. In addition, the development agreements with some of our larger customers contain provisions that require us to license our intellectual property to these customers on disadvantaged terms and/or transfer equipment to these customers in the event that we materially breach these agreements or fail to satisfy certain financial covenants. For example, see Risk Factors We may need to raise additional capital in the future.

If we are unable to initiate or sustain such collaborative relationships or if the terms of these relationships materially limit our access to distribution channels for our products, then we may be unable to independently develop, manufacture or market our current and future nanocrystalline materials or applications.

If commodity metal prices increased at such a rate that we are unable to recover lost margins on a timely basis or that our products became uncompetitive in their current marketplaces, our financial and liquidity position and results of operations would be substantially harmed.

Many of our significant raw materials come from commodity metal markets that may be subject to rapid price increases. While we generally pass commodity price increases on to our customers, it is possible that, given our limited customer base and the limited control we have over it, commodity metal prices could increase at such a rate that could hinder our ability to recover lost margins from our customers on a timely basis. It is also possible that such drastic cost increases could render some of our materials uncompetitive in their current marketplaces when considered relative to other materials on a cost benefit basis. If either of these potential results occurred, our financial and liquidity position and results of operations would be substantially harmed.

If a catastrophe strikes either of our manufacturing facilities or if we were to lose our lease for either facility due to non-renewal or other unforeseen events, we may be unable to manufacture our materials to meet customers demands.

Our manufacturing facilities are located in Romeoville and Burr Ridge, Illinois. These facilities and some of our manufacturing and testing equipment would be difficult to replace in a timely manner. Therefore, any material disruption at one of our facilities due to a natural or man-made disaster or a loss of lease due to non-renewal or other unforeseen events could have a material adverse effect on our ability to manufacture products to meet customers demands. While we maintain customary property insurance, this insurance may not adequately compensate us for all losses that we may incur and would not compensate us for any interruption in our business.

Table of Contents

If we are unable to expand our production capabilities to meet unexpected demand, we may be unable to manage our growth and our business would suffer.

Our success will depend, in part, on our ability to manufacture nanocrystalline materials in significant quantities, with consistent quality and in an efficient and timely manner. We expect to continue to expand our current facilities or obtain additional facilities in the future in order to respond to unexpected demand for existing materials or for new materials that we do not currently make in quantity. Such unplanned demand, if it resulted in rapid expansion, could create a situation where growth could become difficult to manage, which could cause us to lose potential revenue.

Protection of our intellectual property is limited and uncertain.

Our intellectual property is important to our business. We seek to protect our intellectual property through patent, trademark, trade secret protection and confidentiality or license agreements with our employees, customers, suppliers and others. Our means of protecting our intellectual property rights in the United States or abroad may not be adequate and others, including our competitors, may use our proprietary technology without our consent. We may not receive the necessary patent protection for any applications pending with the U.S. Patent and Trademark Office (USPTO) and any of the patents that we currently own or license may not be sufficient to keep competitors from using our materials or processes. In addition, patents that we currently own or license may not be held valid if subsequently challenged by others and others may claim rights in the patents and other proprietary technology that we own or license. Additionally, others may have already developed or may subsequently develop similar products or technologies without violating any of our proprietary rights. If we fail to obtain patent protection or preserve our trade secrets, we may be unable to effectively compete against others offering similar products and services. In addition, if we fail to operate without infringing the proprietary rights of others or lose any license to technology that we currently have or will acquire in the future, we may be unable to continue making the products that we currently make.

Moreover, at times, attempts may be made to challenge the prior issuance of our patents. For example, the USPTO has granted a third-party request for re-examination with respect to one patent relating to one of our nanoparticle manufacturing processes. On September 7, 2005, our representatives conducted an interview with the Examiner assigned to the re-examination at the USPTO, resulting in the Examiner preparing an interview summary indicating that the Examiner agreed that all the issued claims were patentable. However, prior to the USPTO issuing a formal notice confirming patentability, the same third party filed a second request for re-examination of the patent (which second request, the USPTO has since denied). Nonetheless, a second interview was conducted, resulting in an amendment to all patent claims. While we will continue to vigorously defend our patent position, we may not be successful in maintaining the scope of the claims of this patent during re-examination. If our patent claims are narrowed substantially by the USPTO, the patent coverage afforded our nanoparticle manufacturing process could be impaired. While we would not expect such impairment to affect the value of our manufacturing trade secrets that have not been disclosed in the patent, it could impede the extent of our legal protection of the invention that is subject to this patent and potentially harm our business and operating results.

Furthermore, litigation may be necessary to enforce our intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity. Such litigation could result in substantial costs and diversion of resources and could harm our business, operating results and financial condition. In addition, if others assert that our technology infringes their intellectual property rights, resolving the dispute could divert our management team and financial resources.

In the future, we may license certain of our intellectual property, such as trademarks or copyrighted material, to third parties. While we would attempt to ensure that any licensees maintain the quality and value of our brand, these licenses might diminish this quality and value.

Table of Contents

We may be subject to claims that one or more of the business methods used by us infringe upon patents held by others. The defense of any claims of infringement made against us by third parties could involve significant legal costs and require our management to divert time and other resources from our business operations. Either of these consequences of an infringement claim could have a material adverse effect on our operating results. If we are unsuccessful in defending any claims of infringement, we may be forced to obtain licenses or pay royalties to continue to use our technology. We may not be able to obtain any necessary licenses on commercially reasonable terms or at all. If we fail to obtain necessary licenses or other rights, or if these licenses are costly, our operating results may suffer either from reductions in revenue through our inability to serve clients or from increases in costs to license third-party technology.

Our industry is experiencing rapid changes in technology. If we are unable to keep pace with these changes, our business will not grow.

Rapid changes have occurred, and are likely to continue to occur, in the development of advanced materials and processes. Our success will depend, in large part, upon our ability to keep pace with advanced materials technologies, industry standards and market trends and to develop and introduce new and improved products on a timely basis. We expect to commit substantial resources to develop our technologies and product applications and, in the future, to expand our commercial manufacturing capacity as volume grows. Our development efforts may be rendered obsolete by the research efforts and technological advances of others and other advanced materials may prove more advantageous than those we produce.

Our market is highly competitive, and if we are unable to compete effectively, then our business will not grow.

The advanced materials industry is new, rapidly evolving and intensely competitive, and we expect competition to intensify in the future. The market for materials having the characteristics and potential uses of our nanocrystalline materials is the subject of intensive research and development efforts by both governmental entities and private enterprises around the world. We believe that the level of competition will increase further as more product applications with significant commercial potential are developed. The nanocrystalline product applications that we are developing will compete directly with products incorporating both conventional and advanced materials and technologies. While we are not currently aware of the existence of commercially available competitive products with the same attributes as those we offer, other companies may develop and introduce new or competitive products. Our competitors may succeed in developing or marketing materials, technologies and better or less expensive products than the ones we offer. In addition, many of our potential competitors have substantially greater financial and technical resources, and greater manufacturing and marketing capabilities than we do. If we fail to improve our current and potential nanocrystalline product applications at an acceptable price, or otherwise compete with producers of conventional materials, we will lose market share and revenue to our competitors.

We may need to raise additional capital in the future. If we are unable to obtain adequate funds, we may be required to delay, scale-back or eliminate some of our manufacturing and marketing operations or we may need to obtain funds through arrangements on less favorable terms or we may be required to transfer equipment to our largest customer.

We expect to expend significant resources on research, development and product testing, and in expanding current capacity or capability for new business. In addition, we may incur significant costs in preparing, filing, prosecuting, maintaining and enforcing our patents and other proprietary rights. If necessary, we may seek funding through public or private financing and through contracts with government or other companies. Additional financing may not be available on acceptable terms or at all. If we are unable to obtain adequate funds, we may be required to delay, scale-back or eliminate some of

Table of Contents

our manufacturing and marketing operations or we may need to obtain funds through arrangements on less favorable terms. If we obtain funding on unfavorable terms, we may be required to relinquish rights to some of our intellectual property.

To raise additional funds in the future, we would likely sell our equity or debt securities or enter into loan agreements. To the extent that we issue debt securities or enter into loan agreements, we may become subject to financial, operational and other covenants that we must observe. In the event that we were to breach any of these covenants, then the amounts due under such loans or debt securities could become immediately payable by us, which could significantly harm us. To the extent that we sell additional shares of our equity securities, our stockholders may face economic dilution and dilution of their percentage of ownership.

We currently have a supply agreement with BASF that contains provisions which could potentially result in a mandatory license of technology and sale of production equipment to BASF providing capacity sufficient to meet BASF s production needs. The license and related sale would be triggered only in the event that we breach certain of our obligations under the supply agreement or one of the following occurs:

- our earnings for a twelve month period ending with our most recently published quarterly financial statements are less than zero and our cash, cash equivalents and investments are less than $2,000,000, or

- the acceleration of any debt maturity having a principal amount of more than $10,000,000, or we become insolvent as defined in the supply agreement.

In the event of a triggering event where we are required to sell to BASF production equipment providing capacity sufficient to meet BASF s production needs, the equipment would be sold at 115% of the equipment s net book value.

We believe that we have sufficient cash balances to avoid the first triggering event through 2006. If a triggering event were to occur and BASF elected to proceed with the license and related sale mentioned above, we would lose both significant revenue and the ability to generate significant revenue to replace that which was lost in the near term. Replacement of necessary equipment that would be purchased and removed by BASF pursuant to this triggering event could take six months to a year. Any additional capital outlays required to rebuild capacity would probably be greater than the proceeds from the purchase of the assets pursuant to our agreement with BASF. This shortfall might put us in a position where it would be difficult to secure additional funding given what would then be an already tenuous cash position. Such an event would also result in the loss of many of our key staff and line employees due to economic realities. We believe that our employees are a critical component of our success and would be difficult to quickly replace and train. Given the occurrence of such an event, we might not be able to hire and retrain skilled employees given the stigma relating to such an event and its impact on us. We might elect to effectively reduce our size and staffing to a point where we could remain a going concern in the near term.

We depend on key personnel, and their unplanned departure could harm our business.

Our success will depend, in large part, upon our ability to attract and retain highly qualified research and development, management, manufacturing, marketing and sales personnel on favorable terms. Due to the specialized nature of our business, we may have difficulty locating, hiring and retaining qualified personnel on favorable terms. If we were to lose the services of any of our key executive officers or other key personnel, or if we are unable to attract and retain other skilled and experienced personnel on acceptable terms in the future, or if we are unable to implement a succession plan to prepare qualified individuals to assume key roles upon any loss of our key personnel, then our business, results of operations and financial condition would be materially harmed. In addition, we do not currently have key-man life insurance policies covering all of our executive officers or key employees, nor do we presently have any plans to purchase such policies.

Table of Contents

We face potential product liability risks which could result in significant costs that exceed our insurance coverage, damage our reputation and harm our business.

We may be subject to product liability claims in the event that any of our nanocrystalline product applications are alleged to be defective or cause harmful effects to humans or physical environments. Because our nanocrystalline materials are used in other companies products, to the extent our customers become subject to suits relating to their products, such as cosmetic, skin-care and personal-care products, these claims may also be asserted against us. We may incur significant costs including payment of significant damages, in defending or settling product liability claims. We currently maintain insurance coverage in the amount of $10 million for product liability claims, which may prove not to be sufficient. Even if a suit is without merit and regardless of the outcome, claims can divert management time and attention, injure our reputation and adversely affect demand for our nanocrystalline materials.

We are subject to governmental regulations. The costs of compliance and liability for noncompliance with governmental regulations could have a material adverse effect on our business, results of operations and financial condition.

Current and future laws and regulations may require us to make substantial expenditures for preventive or remedial action. Our operations, business or assets may be materially and adversely affected by governmental interpretation and enforcement of current or future environmental, health and safety laws and regulations. In addition, our coating operations pose a risk of accidental contamination or injury. The damages in the event of an accident or the costs to prevent or remediate a related event could exceed both the amount of our liability insurance and our resources or otherwise have a material adverse effect on our business, results of operations and financial condition.

In addition, both of our facilities and all of our operations are subject to the plant and laboratory safety requirements of various occupational safety and health laws. We believe we have complied in all material respects with regard to governmental regulations applicable to us. However, we may have to incur significant costs in defending or settling future claims of alleged violations of governmental regulations and these regulations may materially restrict or impede our operations in the future. In addition, our efforts to comply with or contest any regulatory actions may distract personnel or divert resources from other more important initiatives.

The manufacture and use of certain products that contain our nanocrystalline materials are subject to extensive governmental regulation, including regulations promulgated by the U.S. Food and Drug Administration, the U.S. Environmental Protection Agency and the U.S. Occupational Safety and Health Administration. As a result, we are required to adhere to the requirements of the regulations of governmental authorities in the United States and other countries. These regulations could increase our cost of doing business and may render some potential markets prohibitively expensive.

We have implemented anti-takeover provisions which could discourage or prevent a takeover, even if an acquisition could be beneficial to our stockholders.

In October 1998, we entered into a Rights Agreement, commonly referred to as a poison pill. The provisions of this agreement and some of the provisions of our certificate of incorporation, our bylaws and Delaware law could, together or separately:

- discourage potential acquisition proposals;
- delay or prevent a change in control; and

Table of Contents

limit the price that investors might be willing to pay in the future for shares of our common stock.

In particular, our board of directors is authorized to issue up to 24,088 shares of preferred stock (less any outstanding shares of preferred stock) with rights and privileges that might be senior to our common stock, without the consent of the holders of the common stock, including up to 2,500 shares of Series A Junior Participating Preferred Stock issuable under the 1998 Rights Agreement.

In addition, Section 203 of the Delaware General Corporations Law relating to business combinations with related stockholders and the terms of our stock option plans relating to changes of control may discourage, delay or prevent a change in control of our company.

Future sales of our common stock by existing stockholders could negatively affect the market price of our stock and make it more difficult for us to sell stock in the future.

Sales of our common stock in the public market, or the perception that such sales could occur, could result in a decline in the market price of our common stock and make it more difficult for us to complete future equity financings. A substantial number of shares of our common stock and shares of common stock subject to outstanding warrants and options may be resold pursuant to currently effective registration statements. As of April 28, 2006 there are:

- 15,841,981 shares of common stock that have been issued in registered offerings, upon the exercise of options under our equity incentive plan or in private placements and are freely tradable in the public markets,
- 1,541,248 shares of common stock that may be issued on the exercise of stock options outstanding and exercisable under our equity incentive plan;
- 906,002 shares of common stock that were issued pursuant to our September 8, 2003 private placement and the related warrant which was exercised on September 2, 2004. The resale of these shares has been registered pursuant to a Registration Statement on Form S-3 which was declared effective by the Securities and Exchange Commission on August 13, 2004; and
- 1,256,281 shares of common stock that were issued pursuant to our March 23, 2004 private placement and may be registered for resale after March 23, 2006 pursuant the terms of the Registration Rights Agreement executed in connection with this private placement.

We cannot estimate the number of shares of common stock that may actually be resold in the public market because this will depend on the market price for our common stock, the individual circumstances of the sellers, and other factors. If stockholders sell large portions of their holdings in a relatively short time, for liquidity or other reasons, the market price of our common stock could decline significantly.

Bradford T. Whitmore has significant influence on all matters requiring stockholder approval because he beneficially owns a large percentage of our common stock, and he may vote the common stock in ways with which our other stockholders disagree.

As of April 28, 2006, Bradford T. Whitmore, together with his affiliates, Grace Brothers, Ltd. and Grace Investments, Ltd., beneficially owned approximately 19.8% of the outstanding shares of our common stock. As a result, he has significant influence on matters submitted to our stockholders for approval, including proposals regarding:

- any merger, consolidation or sale of all or substantially all of our assets;

the election of members of our board of directors; and

any amendment to our certificate of incorporation.

The ownership position of Mr. Whitmore could delay, deter or prevent a change of control or adversely affect the price that investors might be willing to pay in the future for shares of our common stock. Mr. Whitmore s interests may be significantly different from the interests of our other stockholders and he may vote the common stock he beneficially owns in ways with which our other stockholders disagree. Investors in the Company should also note that R. Janet Whitmore, one of our directors, is the sister of Mr. Whitmore.

We have been involved in litigation. If we are involved in similar litigation in the future, the expense of defending such litigation and the potential costs of judgments against us and the costs of maintaining insurance coverage could have a material adverse effect on our financial performance.

We have been involved in three securities class action lawsuits, one of which was a consolidation of several related lawsuits. While all of these lawsuits have been settled and dismissed with all settlements funded by our directors and officers liability insurance, we may be the target of additional securities lawsuits in the future. If we are involved in similar litigation in the future, the expense of defending such litigation, the potential costs of judgments against us, the costs of maintaining insurance coverage and the diversion of management s attention could have a material adverse effect on our financial performance.

Our stock price is volatile.

The stock markets in general, and the stock prices of technology-based companies in particular, have experienced extreme volatility that often has been unrelated to the operating performance of any specific public company. The market price of our common stock has fluctuated in the past and is likely to fluctuate in the future as well. Our future financial performance and stock price may be subject to significant volatility, particularly on a quarterly basis. Shortfalls in our revenues in any given period relative to the levels expected by investors could immediately, significantly and adversely affect the trading price of our common stock.

Dilutive Effect of Private Placements.

On September 8, 2003 we sold 453,001 shares of our common stock to Grace Brothers, Ltd. at a purchase price of $4.415 per share together with a warrant to purchase a like number of shares of common stock during the next twelve months also at a price of $4.415 per share. This warrant was exercised on September 2, 2004 to acquire 453,001 newly issued shares of common stock. The share price for the common stock was determined based on the fifteen-day market closing average for our stock ending September 5, 2003. On September 8, 2003 and September 2, 2004 the closing sale price of our common stock as reported on NASDAQ, was $5.50 and $5.49 respectively, per share. On March 23, 2004 we sold 1,256,281 shares of our common stock to Altana at a purchase price of $7.96 per share. On March 23, 2004 the closing sale price of our common stock, as reported on NASDAQ, was $8.26 per share. Each of these issuances of stock at below the then-current market price had a dilutive effect on existing common stockholders.

We have never paid dividends.

We currently intend to retain earnings, if any, to support our growth strategy. We do not anticipate paying dividends on our stock in the foreseeable future.

Table of Contents

Item 5. Other Information

None.

Item 6. Exhibits and Reports on Form 8-K

A. Exhibits.

Exhibit 31.1	Certification of Chief Executive Officer pursuant to Rules 13a-14(a) under the Exchange Act.
Exhibit 31.2	Certification of Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Exchange Act.
Exhibit 32	Certification of the Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350.

B. Reports on Form 8-K.

On January 9, 2006, the Company furnished a Current Report on Form 8-K reporting under Items 8.01 and 9.01 that on January 3, 2006 the Company granted shares of common stock to non-employee members of the Company s board of directors under the Company s 2005 Non-Employee Director Restricted Stock Plan. Such shares are vested immediately but subject to certain transfer restrictions. Pursuant to a non-material amendment to such plan, all of the non-employee directors have elected to defer receipt of such shares which deferral will be accounted for under Company s Non-Employee Director Deferred Compensation Plan. The deferred shares become payable upon such directors termination of service as a director of the Company.

On January 18, 2006, the Company furnished a Current Report on Form 8-K reporting under Items 2.02 and 9.01 that on January 10, 2006 it issued a press release announcing preliminary financial results for the quarter ended December 31, 2005.

On March 9, 2006, the Company furnished a Current Report on Form 8-K reporting under Items 1.01 and 9.01 that on March 3, 2006 the Company entered into a Supply Agreement with Roche Diagnostics GmbH pursuant to which the Company will supply certain nanoparticles for a medical diagnostics application through 2014.

On March 9, 2006, the Company furnished a Current Report on Form 8-K reporting under Items 2.02 and 9.01 that on March 9, 2006 it issued a press release announcing financial results for the annual fiscal period ended December 31, 2005.

Table of Contents

SIGNATURES

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

NANOPHASE TECHNOLOGIES CORPORATION

Date: May 9, 2006

By: /s/ JOSEPH E. CROSS
Joseph E. Cross
President, Chief Executive Officer

(principal executive officer) and a Director

Date: May 9, 2006

By: /s/ JESS JANKOWSKI
Jess Jankowski
Chief Financial Officer

(principal financial and chief accounting officer)

26