

NANOPHASE TECHNOLOGIES CORPORATION

Form 10-Q

November 12, 2014

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**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**Form 10-Q**

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

**For the Quarterly Period Ended: September 30, 2014**

**or**

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

**For the transition period from \_\_\_\_\_ to \_\_\_\_\_**

**Commission File Number: 000-22333**

**Nanophase Technologies Corporation**

**(Exact name of registrant as specified in its charter)**

**Delaware** **36-3687863**  
**(State or other jurisdiction of** **(I.R.S. Employer**  
**incorporation or organization)** **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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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

Large accelerated filer  Accelerated filer   
Non-accelerated filer  Smaller Reporting Company

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

As of November 7, 2014, there were 28,481,496 shares outstanding of common stock, par value \$.01, of the registrant.

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QUARTER ENDED SEPTEMBER 30, 2014

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Table of Contents**PART I FINANCIAL INFORMATION****Item 1. Financial Statements****NANOPHASE TECHNOLOGIES CORPORATION****BALANCE SHEETS**

	(in thousands except share and per share data)	
	September 30, 2014 (Unaudited)	December 31, 2013
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 2,018	\$ 3,276
Investments		30
Trade accounts receivable, less allowance for doubtful accounts of \$6 on September 30, 2014 and December 31, 2013	1,326	52
Other receivables		1
Inventories, net	749	976
Prepaid expenses and other current assets	244	202
Total current assets	4,337	4,537
Equipment and leasehold improvements, net	2,267	2,464
Other assets, net	25	27
	\$ 6,629	\$ 7,028
<b>LIABILITIES AND STOCKHOLDERS EQUITY</b>		
<b>Current liabilities:</b>		
Current portion of capital lease obligations	\$ 18	\$ 31
Accounts payable	589	503
Accrued expenses	559	323
Total current liabilities	1,166	857
Long-term portion of capital lease obligations		10
Long-term deferred rent	624	633
Asset retirement obligations	165	160
Total long-term liabilities	789	803
<b>Stockholders equity:</b>		
Preferred stock, \$.01 par value, 24,088 shares authorized and no shares issued and outstanding		

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Common stock, \$.01 par value, 35,000,000 shares authorized; 28,481,496 shares issued and outstanding on September 30, 2014 and December 31, 2013	285	285
Additional paid-in capital	95,916	95,761
Accumulated deficit	(91,527)	(90,678)
Total stockholders' equity	4,674	5,368
	\$ 6,629	\$ 7,028

*See Notes to Financial Statements.*

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## NANOPHASE TECHNOLOGIES CORPORATION

## STATEMENTS OF OPERATIONS

(Unaudited)

(in thousands except share and per share data)

	Three months ended September 30, 2014		Three months ended September 30, 2013		Nine months ended September 30, 2014		Nine months ended September 30, 2013	
	2014	2013	2014	2013	2014	2013	2014	2013
<b>Revenue:</b>								
Product revenue, net	\$ 2,647	\$ 2,157	\$ 8,070	\$ 7,810				
Other revenue	7	7	46	16				
Net revenue	2,654	2,164	8,116	7,826				
<b>Operating expense:</b>								
Cost of revenue	1,858	1,648	5,581	5,555				
Gross profit	796	516	2,535	2,271				
Research and development expense	316	375	990	1,257				
Selling, general and administrative expense	828	773	2,391	2,591				
Loss from operations	(348)	(632)	(846)	(1,577)				
Interest income			1	1				
Interest expense	(1)	(2)	(4)	(11)				
Other, net		1		18				
Loss before provision for income taxes	(349)	(633)	(849)	(1,569)				
Provisions for income taxes								
Net loss	\$ (349)	\$ (633)	\$ (849)	\$ (1,569)				
Net loss per share basic and diluted	\$ (0.01)	\$ (0.02)	\$ (0.03)	\$ (0.06)				
Weighted average number of basic and diluted common shares outstanding	28,481,496	28,468,162	28,481,496	28,467,686				

*See Notes to Financial Statements.*



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## NANOPHASE TECHNOLOGIES CORPORATION

## STATEMENTS OF CASH FLOWS

(Unaudited)

(in thousands)

	Nine months ended September 30,	
	2014	2013
<b>Operating activities:</b>		
Net loss	\$ (849)	\$ (1,569)
Adjustment to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	556	674
Gain on disposal of equipment		(18)
Stock compensation expense	150	192
Allowance for excess inventory quantities		47
Changes in assets and liabilities related to operations:		
Trade accounts receivable	(1,274)	43
Other accounts receivable	1	26
Inventories	227	102
Prepaid expenses and other assets	(42)	14
Accounts payable	109	(169)
Accrued expenses	232	67
Net cash used in operating activities	(890)	(591)
<b>Investing activities:</b>		
Proceeds from disposal of equipment		18
Acquisition of equipment and leasehold improvements	(352)	(178)
Payment of accounts payable incurred for the purchase of equipment and leasehold improvements	(23)	(20)
Net cash used in investing activities	(375)	(180)
<b>Financing activities:</b>		
Principal payments on capital leases	(23)	(49)
Proceeds from sale of short term investment	30	
Proceeds from exercise of stock options		3
Net cash provided by (used in) financing activities	7	(46)
Decrease in cash and cash equivalents	(1,258)	(817)
Cash and cash equivalents at beginning of period	3,276	4,124
Cash and cash equivalents at end of period	\$ 2,018	\$ 3,307



**Supplemental cash flow information:**

Interest paid	\$	4	\$	11
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**Supplemental non-cash investing activities:**

Accounts payable incurred for the purchase of equipment and leasehold improvements	\$		\$	92
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*See Notes to Financial Statements.*

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**NANOPHASE TECHNOLOGIES CORPORATION**

**NOTES TO FINANCIAL STATEMENTS**

**(Unaudited)**

**(in thousands, except share and per share data or as otherwise noted herein)**

**(1) Basis of Presentation**

The accompanying unaudited interim financial statements of Nanophase Technologies Corporation ( Nanophase or the Company , including we , our or us ) 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 and nine months ended September 30, 2014 are not necessarily indicative of the results that may be expected for the year ending December 31, 2014.

These financial statements should be read in conjunction with our audited financial statements and notes thereto for the year ended December 31, 2013, included in our Annual Report on Form 10-K for the year ended December 31, 2013, as filed with the Securities and Exchange Commission.

**(2) Description of Business**

Nanophase is a nanomaterials and applications developer and commercial manufacturer with an integrated family of nanomaterial and related technologies. We produce engineered nano and sub-micron materials for use in a variety of diverse existing and developing markets: personal care including sunscreens, architectural coatings, industrial coating applications, abrasion-resistant additives, plastics additives, medical diagnostics, energy and a variety of surface finishing technologies (polishing) applications. We target markets in which we believe practical solutions may be found using our products. We work closely with current and potential customers in these target markets to identify their material and performance requirements and market our materials to various end-use applications manufacturers. Recently developed technologies have made certain new products possible and opened potential new markets. Although our primary strategic focus has been the North American market, we currently sell material to customers overseas and have been working to expand our reach in foreign markets.

The Company was incorporated in Illinois on November 25, 1989, and became a Delaware corporation in November 1997. Our common stock trades on the OTCQB marketplace under the symbol NANX.

While product sales comprise the majority of our revenue, we also recognize revenue from other sources from time to time. These activities are not expected to drive the long-term growth of the business. For this reason we classify such revenue as other revenue in our Statement of Operations, as it does not represent revenue directly from our nanocrystalline materials.

The presentation of certain prior year disclosures has been modified to conform to current year presentation, as financial data is now presented in thousands of dollars rather than in dollars.

**(3) Financial Instruments**

We follow the Financial Accounting Standards Board ( FASB ) Accounting Standards Codification ( ASC ) Topic 820, *Fair Value Measurements and Disclosures*, which defines fair value, establishes a framework for measuring fair

value, and expands disclosures about fair value measurements. The fair value framework requires the categorization of assets and liabilities into three levels based upon the assumptions (inputs) used to price the assets or liabilities. Level 1 provides the most reliable measure of fair value, whereas Level 3 generally requires significant management judgment.

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Our financial instruments include cash and cash equivalents, accounts receivable, accounts payable and accrued expenses, along with the promissory note with no related borrowings described in Note 4, below. The fair values of all financial instruments were not materially different from their carrying values.

**(4) Investments**

Investments on December 31, 2013 were comprised of certificates of deposit in the amount of \$30, pledged as collateral for our rent and restricted as to withdrawal or usage under our facility lease agreement. During July 2014 we entered into a new bank-issued letter of credit and related promissory note for up to \$30 in borrowings to support our obligations under our facility lease agreement. We then sold our certificates of deposit. No borrowings have been incurred under this promissory note. Should any borrowings occur in the future, the interest rate would be the prime rate plus 1%, with the bank having the right to set off or apply unpaid balances against our checking account if we fail to meet our obligations under any borrowings under the note. It is our intention to renew this note annually, for as long as we need to pursuant to the terms of our facility lease agreement. Because there were no amounts outstanding on the note at any time during the period, we have recorded no related liability on our balance sheet.

**(5) Inventories**

Inventories consist of the following:

	<b>September 30, 2014</b>	<b>December 31, 2013</b>
Raw materials	\$ 185	\$ 132
Finished goods	616	896
	801	1,028
Allowance for excess inventory quantities	(52)	(52)
	<b>\$ 749</b>	<b>\$ 976</b>

**(6) Share-Based Compensation**

We follow FASB ASC Topic 718, *Share-Based Payments*, in which compensation expense is recognized only for share-based payments expected to vest. We recognized compensation expense related to stock options of \$45 and \$155 for the three and nine month periods ended September 30, 2014, respectively, compared to \$54 and \$193 for the same periods in 2013.

As of September 30, 2014, there was approximately \$306 of total unrecognized compensation cost related to nonvested share-based compensation arrangements granted under our stock option plans. That cost is expected to be recognized over a remaining weighted-average period of 2.0 years.

**Stock Options and Stock Grants**

During the nine months ended September 30, 2014, no stock options were exercised. During the nine months ended September 30, 2013, 10,000 shares of common stock were issued pursuant to stock option exercises with proceeds of \$3 realized. During the nine months ended September 30, 2014, 568,000 stock options were granted compared to

553,000 during the same period in 2013. During the nine months ended September 30, 2014, 22,000 stock options were forfeited compared to 112,799 stock options forfeited during the same period in 2013.

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Prior to 2011, we granted outside directors stock appreciation rights (SARs). The change in fair value of the awards granted during prior years is included in non-cash compensation expense for the three and nine months ended September 30, 2014 and 2013. The SARs granted vested immediately and are payable upon the directors' removal or resignation from the position of director. These awards are accounted for as liability awards, included in accrued expenses as of September 30, 2014 and 2013, and adjusted to fair value each reporting period. The fair value of the liability on September 30, 2014 was \$3 compared to \$8 on December 31, 2013.

As of September 30, 2014, we did not have any unvested restricted stock or performance shares outstanding.

The following table illustrates the various assumptions used to calculate the Black-Scholes option pricing model for stock options granted during the periods presented:

	September 30, 2014	September 30, 2013
For the three months ended		
Weighted-average risk-free interest rates:		
Dividend yield:		
Weighted-average expected life of the option:		
Weighted-average expected stock price volatility:		
Weighted-average fair value of the options granted:		
For the nine months ended		
Weighted-average risk-free interest rates:	2.01%	1.5%
Dividend yield:		
Weighted-average expected life of the option:	7 Years	7 Years
Weighted-average expected stock price volatility:	95%	92%
Weighted-average fair value of the options granted:	\$0.42	\$0.33

**(7) Significant Customers and Contingencies**

Sales to three customers constituted approximately 71%, 10% and 5%, respectively, of our total revenue for the three months ended September 30, 2014, and 73%, 7% and 6%, respectively, of our total revenue for the nine months ended September 30, 2014. Amounts included in accounts receivable on September 30, 2014 relating to these three customers were approximately \$747, \$270 and \$128, respectively. Revenue from these three customers constituted approximately 74%, 0% and 5%, respectively, of the Company's total revenue for the three months ended September 30, 2013 and 72%, 4% and 7%, respectively, for the nine months ended September 30, 2013. Amounts included in accounts receivable on September 30, 2013 relating to these three customers were approximately \$624, \$0 and \$111, respectively. The loss of one of these significant customers or the failure to attract new customers could have a material adverse effect on our business, results of operations and financial condition.

We currently have exclusive supply agreements with BASF Corporation ( "BASF" ), our largest customer, that have contingencies outlined which could potentially result in the license of technology and/or the sale of production equipment from the Company to the customer intended to provide capacity sufficient to meet the customer's production needs. This outcome may occur if we fail to meet certain performance requirements, certain other obligations and/or certain financial covenants. The most restrictive financial covenants in one of our supply agreements with BASF trigger a technology transfer right (license and equipment sale at BASF's option) in the event (a) that earnings for the twelve month period ending with our most recently published quarterly financial statements are less than zero and our

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cash, cash equivalents and certain investments are less than \$1 million, or (b) of an acceleration of any debt maturity having a principal amount of more than \$10 million. Our supply agreements with BASF also trigger a technology transfer right in the event of our insolvency, as further defined within the agreements. In the event of an equipment sale, upon incurring a triggering event, the equipment would be sold to the customer at either 115% of the equipment's net book value or the greater of 30% of the original book value of such equipment, and any associated upgrades to it, or 115% of the equipment's net book value, depending on the contract and related equipment.

We believe that we have sufficient cash (See Liquidity and Capital Resources in Management's Discussion and Analysis in Part I, Item 2 of this Form 10-Q for a further discussion) to operate our business throughout 2014. If a triggering event were to occur and BASF elected to proceed with the license and related equipment sale mentioned above, we would receive royalty payments from this customer for products sold using our technology; however, 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 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 our agreement with the customer. Similar consequences would occur if we were determined to have materially breached certain other provisions of the supply agreement with BASF. Any such event would also likely 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 could be difficult to replace them quickly. Given the occurrence of any such event, we might not be able to hire and retain skilled employees given the stigma relating to such an event and its impact on us. Finally, any shortfall in capital needed to operate the business as management intends, including with respect to avoiding this triggering event as described above, may result in a curtailment of certain activities or anticipated investments.

## **(8) Business Segmentation and Geographical Distribution**

Revenue from international sources approximated \$376 and \$885 for the three and nine months ended September 30, 2014, respectively, compared to \$278 and \$735 for the same periods in 2013. All of this revenue was product revenue.

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

## **Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations Overview**

Nanophase is an advanced materials and applications developer and commercial manufacturer with an integrated family of materials technologies. We produce engineered nano and sub-micron materials for use in a variety of diverse markets: personal care including sunscreens, architectural coatings, industrial coating applications, abrasion-resistant additives, plastics additives, medical diagnostics, energy, and a variety of surface finishing technologies (polishing) applications, including optics. We target markets in which we feel practical solutions may be found using our products. We work closely with current and potential customers in these target markets to identify their material and performance requirements and market our materials to various end-use applications manufacturers. Recently developed technologies have made certain new products possible and opened potential new markets. For example, we have applied our skills at producing precisely defined nanomaterials to now create and sell larger, sub-micron material products. Our focus is on customer need where we believe we have an advantage, as opposed to finding uses for one particular technology. We expect growth in end-user (manufacturing customers, including customers of our customers) adoption in 2014 and beyond. Our initiatives in targeted market areas are progressing at differing rates of



speed, but we have been broadly

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moving through testing and development cycles, and in a number of cases believe we are approaching first revenue or next stage revenue with particular customers in the industries referenced above. For example, we recently developed new solutions in the surface finishing technologies (polishing) and energy-management areas, with commercial order flow accelerating in the former and significant commercial testing happening in the latter. We expect that we will both work more deeply with current customers and attract additional customers, which should help us achieve growth in these markets in 2014 and beyond.

**Results of Operations**

Total revenue increased to \$2,654,000 for the three months ended September 30, 2014, compared to \$2,164,000 for the same period in 2013. Total revenue also increased to \$8,116,000 for the nine months ended September 30, 2014, compared to \$7,826,000 for the same period in 2013. Product revenue, the primary component of our total revenue, increased to \$2,647,000 for the three months ended September 30, 2014, compared to \$2,157,000 for the same period in 2013. Orders from our largest customer in personal care and sunscreen applications were higher in 2014, and we received an additional order from our customer in medical diagnostics. Product revenue increased to \$8,070,000 for the nine months ended September 30, 2014, compared to \$7,810,000 for the same period in 2013. Increased order flows from our surface finishing technologies solutions (polishing), and increased order flows from our largest customer in personal care and sunscreen applications as well as medical diagnostics offset decreased orders from one large coatings customer which had a product ramp during 2013 that was not repeated during 2014, and another with reduced revenue and more aggressive supply chain management in 2014.

A substantial majority of our revenue for the three and nine month periods ended September 30, 2014 and 2013 was from our largest customer in personal care and sunscreen applications. Revenue from our top three customers was approximately 71%, 10% and 5%, respectively, during the three months ended September 30, 2014, and 73%, 7% and 6%, respectively, for the nine months ended September 30, 2014. Revenue from these three customers constituted approximately 74%, 0% and 5%, respectively, of our total revenue for the three months ended September 30, 2013 and 72%, 4%, and 7%, respectively, for the nine months ended September 30, 2013.

Other revenue was \$7,000 and \$46,000 for the three and nine months ended September 30, 2014, compared to \$7,000 and \$16,000 for the same periods in 2013. The increase for the nine months ended September 30, 2014 was primarily due to a specific fee-based development project that was completed during the second quarter of 2014. We do not anticipate this to be recurring.

Cost of revenue generally includes costs associated with commercial production. Cost of revenue increased to \$1,858,000 for the three months ended September 30, 2014, compared to \$1,648,000 for the same period in 2013, primarily due to increased revenue volume, and net of efficiencies. Cost of revenue increased to \$5,581,000 for the nine months ended September 30, 2014, compared to \$5,555,000 for the same period in 2013, primarily due to increased revenue volume year over year, and net efficiencies. We expect to continue new nanomaterial development, primarily using our NanoArc<sup>®</sup> synthesis and dispersion technologies, for targeted applications and new markets during 2014 and beyond. At current revenue levels we have generated a positive gross margin, though margins have been impeded by not having enough revenue to efficiently absorb manufacturing overhead that is required to work with current customers and expected future customers. We believe that our current fixed manufacturing cost structure is sufficient to support significantly higher levels of production. The extent to which margins grow, as a percentage of total revenue, will be dependent upon revenue mix, revenue volume, our ability to continue to cut costs and pass commodity market-driven raw materials increases on to customers. As product revenue volume increases, this should result in our fixed manufacturing costs being more efficiently absorbed, leading to increased margins. We expect to continue to focus on reducing controllable variable product manufacturing costs, with potential variability related to the commodity metals markets, but may or may not continue to realize absolute dollar gross margin growth through

2014 and beyond, dependent upon the factors discussed above.

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Research and development expense, which includes all expenses relating to the technology and advanced engineering groups, primarily consists of costs associated with the development or acquisition of new product applications and coating formulations and the cost of enhancing our manufacturing processes. As an example, we have been, and continue to be, engaged in research to enhance our ability to disperse material in a variety of organic and inorganic media for use as coatings and polishing materials, including window cleaning and polishing products. Much of this work has led to several new products and additional potential new products.

Having demonstrated the capability to produce pilot quantities of mixed-metal oxides in a single crystal phase, we do 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. We are now working on several related commercial opportunities using the same materials. We expect that this technique should enable us to scale to large quantity commercial volumes once application viability and firm demand are established. We also have an ongoing advanced engineering effort that is primarily focused on the development of new nanomaterials as well as the refinement of existing nanomaterials, as dictated by our customer-driven marketing strategy. We are not certain when or if any significant revenue will be generated from the production of the materials described above.

Research and development expense decreased to \$316,000 and \$989,000 for the three and nine months ended September 30, 2014, respectively, compared to \$375,000 and \$1,257,000 for the same periods in 2013. The decreases were primarily attributed to reduced product development costs (salaries and materials), as we transferred projects from development into commercial operations. We expect research and development expense to increase slightly from the current rate during the remainder of 2014.

Selling, general and administrative expense was \$828,000 and \$2,391,000 for the three and nine months ended September 30, 2014, respectively, compared to \$773,000 and \$2,591,000 for the same periods in 2013. The net changes were primarily attributed to decreased salary and personnel costs, offset by increases in consulting fees and marketing and selling expenses, all related to our stronger focus on a few, well-qualified initiatives and the advancement of development projects into commercial applications. We expect total expense in this area to increase slightly, but not significantly, during the remainder of 2014 as we continue commercial activities in recently launched initiatives, and to remain below total 2013 spending in this area.

Interest income relates to bank yields on excess funds, while interest expense relates to capital leases. Neither was significant during the reported periods.

## **Inflation**

We believe inflation has not had a material effect on our operations or financial position. However, supplier price increases and wage and benefit inflation, both of which represent a significant component of our costs of operations, may have a material effect on our operations and financial position in 2014 and beyond if we are unable to pass through any applicable increases under our present contracts or through to our markets in general.

## **Liquidity and Capital Resources**

Our cash, cash equivalents and short-term investments amounted to \$2,018,000 on September 30, 2014, compared to \$3,306,000 on December 31, 2013 and \$3,337,000 on September 30, 2013. The net cash used in our operating activities was \$890,000 for the nine months ended September 30, 2014, compared to \$591,000 for the same period in 2013, primarily due to trade accounts receivable-driven net working capital fluctuation of approximately \$0.8 million during the first nine months of 2014. Net cash



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used in investing activities amounted to \$375,000 for the nine months ended September 30, 2014, compared to \$180,000 for the same period in 2013. Capital expenditures, including those under capital leases, amounted to \$352,000 and \$178,000 for the nine months ended September 30, 2014 and 2013, respectively. Net cash provided by financing activities was \$7,000 for the nine months ended September 30, 2014 compared to a use of \$46,000 for the same period in 2013, as we paid off a capital lease during 2013. We also sold a \$30,000 certificate of deposit during the three months ended September 30, 2014.

Our supply agreements with our largest customer, BASF, contain certain financial covenants which could potentially impact our liquidity. The most restrictive financial covenants under these agreements require that we maintain a minimum of \$1 million in cash, cash equivalents and certain investments, and that we not have the acceleration of any debt maturity having a principal amount of more than \$10 million, in order to avoid triggering the customer's potential right to transfer certain technology and equipment to that customer at a contractually defined price. We had approximately \$2.0 million in cash and short-term investments on September 30, 2014, with no debt. This supply agreement and its covenants are more fully described in Note 7 to our Financial Statements in Part I, Item 1 of this Form 10-Q.

We believe that cash from operations and cash, cash equivalents and investments on hand will be adequate to fund our operating plans through the remainder of 2014 and into 2015. Our actual future capital requirements during the remainder of 2014 and into 2015 and beyond will depend, however, on many factors, including customer acceptance of our current and potential nanomaterials and product applications, continued progress in research and development activities and product testing programs, the magnitude of these activities and programs, and the costs necessary to increase and expand our manufacturing capabilities and to market and sell our 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 existing customers. Depending on the success of certain projects, we expect that capital spending relating to currently known capital needs for the remainder of 2014 will be between \$100,000 and \$150,000, as we intend to purchase additional capital equipment to facilitate further growth in surface finishing technologies (polishing). If those projects are delayed or ultimately prove unsuccessful, we would expect our capital requirements to be lower.

Should events arise that make it appropriate for us to seek additional financing, such additional financing may not be available on acceptable terms or even at all, and any such additional financing could be dilutive to our shareholders. Such 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 our control; the need to meet previously discussed cash requirements to avoid a triggering event under our BASF agreement; or various other circumstances coming to pass that we currently do not anticipate. The failure to have access to sufficient capital to fund our business plans may result in a curtailment or other change in those plans.

On September 30, 2014, we had a net operating loss carryforward of approximately \$79 million for income tax purposes. Because we may have experienced ownership changes within the meaning of the U.S. Internal Revenue Code in connection with our 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 remaining carryforward will expire at various dates between January 1, 2018 and December 31, 2033. 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, we have concluded that it is likely that some portion of this carryforward will expire before ultimately becoming available to reduce income tax liabilities. During 2011, the state of Illinois suspended the utilization of NOL carryforwards for four years, extending their duration by an equivalent number of years.



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### **Off-Balance Sheet Arrangements**

We have not created, and are not party to, any special-purpose or off-balance sheet entities for the purposes of raising capital, incurring debt or operating our business. We do not have any off-balance sheet arrangements or relationships with entities that are not consolidated into our financial statements that are reasonably likely to materially affect our liquidity or the availability of capital resources.

As more fully described in Note 4 to our Financial Statements, in Part I, Item 1 of this Form 10-Q. During July 2014 we entered into a new bank-issued letter of credit and promissory note for up to \$30,000 supporting our obligations under our facility lease agreement. No borrowings have been incurred under this promissory note.

### **Safe Harbor Provision**

We want 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 (the "Exchange Act"). These statements reflect our current expectations of the future results of our operations, performance and achievements. Forward-looking statements are covered under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. We have 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 our actual results, performance or achievements in future reporting periods to differ materially from those expressed in, or implied by, such statements. These risks, uncertainties and factors include, without limitation: our ability to become profitable despite the losses we have incurred since our incorporation; our dependence on our principal customers and the terms of our supply agreements with BASF which could trigger a requirement to transfer technology and/or sell equipment to that customer; our potential inability to obtain working capital when needed on acceptable terms or at all; our ability to obtain materials at costs we can pass through to our customers, including Rare Earth elements, specifically cerium oxide; uncertain demand for, and acceptance of, our nanocrystalline materials; our limited manufacturing capacity and product mix flexibility in light of customer demand; our limited marketing experience; changes in development and distribution relationships; the impact of competitive products and technologies; our dependence on patents and protection of proprietary information; the resolution of litigation or other legal proceedings in which we may become involved; our ability to maintain an appropriate electronic trading venue for our securities; and the impact of any potential new governmental regulations that could be difficult to respond to or costly to comply with. In addition, our forward-looking statements could be affected by general industry and market conditions and growth rates. 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, we undertake 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**

Not required for a smaller reporting company.



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**Item 4. Controls and Procedures**

**Disclosure controls**

We are responsible for establishing and maintaining disclosure controls and procedures that are designed to ensure that information required to be disclosed by us in the reports filed by us under the Exchange Act is: (a) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms; and (b) accumulated and communicated to our management, including our principal executive and principal financial officers, to allow timely decisions regarding required disclosures. It should be noted that in designing and evaluating our disclosure controls and procedures, we recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and that our management necessarily was required to apply its judgment regarding the design of our disclosure controls and procedures. As of the end of the period covered by this report, we conducted an evaluation, under the supervision (and with the participation) of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rules 13a-15(e) and 15d-15(e) of the Exchange Act. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at reaching that level of reasonable assurance.

**Internal control over financial reporting**

The Company's management, including the CEO and CFO, confirm that there was no change in the Company's internal control over financial reporting during the period covered by this report 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**

We are not a party to any pending legal proceedings or claims that we believe will result in a material adverse effect on our business, financial condition, or operating results.

**Item 1A. Risk Factors**

In addition to the information set forth in this Quarterly Report on Form 10-Q and before deciding to invest in, or retain, shares of our common stock, you also should carefully review and consider the information contained in our other reports and periodic filings that we make with the Securities and Exchange Commission, including, without limitation, the information contained under the caption Part I, Item 1A Risk Factors, in our Annual Report on Form 10-K for the year ended December 31, 2013. Those risk factors could materially affect our business, financial condition and results of operations. Additional risks and uncertainties that we do not currently know about, we currently believe are immaterial or we have not predicted may also harm our business operations or adversely affect us. If any of these risks or uncertainties actually occurs, our business, financial condition, results of operations, cash flows or stock price could be materially adversely affected. There have been no material changes from the risk factors previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2013.

**Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**

None.

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**Item 3. Defaults Upon Senior Securities**

None.

**Item 4. Mine Safety Disclosures**

Not applicable.

**Item 5. Other Information**

None.

**Item 6. Exhibits**

- Exhibit 31.1 Certification of Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-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.
- Exhibit 101 The following materials from Nanophase Technologies Corporation's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, formatted in XBRL (Extensible Business Reporting Language): (1) the Balance Sheets, (2) the Statements of Operations, (3) the Statements of Cash Flows, and (4) the Notes to Unaudited Financial Statements.

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**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: November 12, 2014

By: /s/ JESS A. JANKOWSKI  
Jess A. Jankowski  
President and Chief Executive Officer

Date: November 12, 2014

By: /s/ FRANK J. CESARIO  
Frank J. Cesario  
Chief Financial Officer