NANOPHASE TECHNOLOGIES CORPORATION
Form 10-K/A
March 17, 2005

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K/A

AMENDMENT NO. 1

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

For the fiscal year ended December 31, 2004	**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	**(I.R.S. Employer**
incorporation or organization)	**Identification No.)**

1319 Marquette Drive, Romeoville, Illinois 60446

(Address of principal executive offices) (zip code)

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

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

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

Common Stock, par value $.01 per share

Preferred Stock Purchase Rights

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. Yes x No ¨

Indicate by check mark whether the registrant is an accelerated filer (as defined in Exchange Act Rule 12B-2). Yes x No ¨

The aggregate market value of the registrant s voting stock held by non-affiliates of the registrant based upon the last reported sale price of the registrant s common stock on June 30, 2004 was $93,918,685 as of such date.

The number of shares outstanding of the registrant s common stock, par value $.01, as of March 14, 2005 was 17,912,852.

DOCUMENTS INCORPORATED BY REFERENCE

None.

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Explanatory Note

On March 15, 2005, Nanophase Technologies Corporation filed its Annual Report on Form 10-K for the fiscal year ended December 31, 2004. This Amendment No. 1 has been filed only to correct the following errors of omission:

1. To change the date and add the following required wording to the Report of Independent Registered Public Accounting Firm : Furthermore, in our opinion, Nanophase Technologies Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

2. To change a date and correct certain text included within the Consent of Independent Registered Public Accounting Firm filed as Exhibit 23.1 to the Form 10-K.

In accordance with Rule 12b-15 under the Securities Exchange Act of 1934, as amended, the Company has included the complete text of Item 15 of the Form 10-K with this Amendment No. 1.

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PART IV

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

(a) The following documents are filed as part of this Form 10-K:

1. The following financial statements of the Company, with the report of independent auditors, are filed as part of this Form 10-K:

Report of McGladrey & Pullen, LLP, Independent Registered Public Accounting Firm

Balance Sheets as of December 31, 2004 and 2003

Statements of Operations for the Years Ended December 31, 2004, 2003 and 2002

Statements of Stockholders Equity for the Years Ended December 31, 2004, 2003 and 2002

Statements of Cash Flows for the Years Ended December 31, 2004, 2003 and 2002

Notes to Financial Statements

2. The following exhibits are filed with this Form 10-K or incorporated by reference as set forth below.

Exhibit Number	
2	Plan and Agreement of Merger dated as of November 25, 1997 by and between the Company and its Illinois predecessor, incorporated by reference to Exhibit 2 to the Company s Annual Report on Form 10-K for the year ended December 31, 1997 (the 1997 10-K).
3.1	Certificate of Incorporation of the Company, incorporated by reference to Exhibit 3.1 to the 1997 10-K.
3.2	Bylaws of the Company, incorporated by reference to Exhibit 3.2 to the 1997 10-K.
4.1	Specimen stock certificate representing common stock, incorporated by reference to Exhibit 4.1 to the Company s Registration Statement on Form S-1 (File No. 333-36937) (the IPO S-1).
4.2	Form of Warrants, incorporated by reference to Exhibit 4.2 to the IPO S-1.
4.3	Rights Agreement dated as of October 28, 1998 by and between the Company and LaSalle National Bank, incorporated by reference to Exhibit 1 to the Company s Registration Statement on Form 8-A, filed October 28, 1998.
4.4	Certificate of Designation of Series A Junior Participating Preferred Stock incorporated by reference to Exhibit 4.4 to the Company s Annual Report on Form 10-K for the year ended December 31, 1998 (the 1998 10-K).
4.5	Amendment to Rights Agreement dated August 1, 2001 between the Company and LaSalle National Association, as Rights Agent, incorporated by reference to Exhibit 4.5 to the Company s Quarterly Report on Form 10-Q for the quarter ended June 30, 2001.
4.6	2001 Nanophase Technologies Corporation Equity Compensation Plan, incorporated by reference to Exhibit 4.3 to the Company s Registration Statement on Form S-8 (File No. 333-74170).
4.7	Second Amendment to Rights Agreement dated May 24, 2002 between the Company and LaSalle National Association, as Rights Agent, incorporated by reference to Exhibit 4.3 to the Company s Registration Statement on Form S-3 (File No. 333-90326) filed June 12, 2003.

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Exhibit Number	
4.8	Third Amendment to Rights Agreement dated September 5, 2003 between the Company and LaSalle National Association, as Rights Agent, incorporated by reference to Exhibit 99.1 to the Company s Current Report on Form 8-K filed September 10, 2003.
4.9	Subscription Agreement dated September 8, 2003 between the Company and Grace Brothers, Ltd., incorporated by reference to Exhibit 99.2 to the Company s Current Report on Form 8-K filed September 10, 2003.
4.10	Stock Purchase Agreement dated March 23, 2004 between the Company and Altana Chemie AG, incorporated by reference to Exhibit 4.10 to the Company s Annual Report on Form 10-K filed March 30, 2004.
4.11	Registration Rights Agreement dated March 23, 2004 between the Company and Altana Chemie AG, incorporated by reference to Exhibit 4.11 to the Company s Annual Report on Form 10-K filed March 30, 2004.
4.12	2004 Nanophase Technologies Corporation Equity Compensation Plan, incorporated by reference to Exhibit 4 to the Company s Registration Statement on Form S-8 (File No. 333-119466).
4.13	Form of Stock Option Agreement under the 2004 Nanophase Technologies Corporation Equity Compensation Plan (2004 Equity Plan), incorporated by reference to Exhibit 4.13 to the Company s Annual Report on Form 10-K for the year ended December 31, 2004.
4.14	Form of Restricted Share Grant Agreement under the 2004 Equity Plan, incorporated by reference to Exhibit 4.14 to the Company s Annual Report on Form 10-K for the year ended December 31, 2004.
4.15	Form of Performance Share Grant Agreement under the 2004 Equity Plan, incorporated by reference to Exhibit 4.15 to the Company s Annual Report on Form 10-K for the year ended December 31, 2004.
10.1	The Nanophase Technologies Corporation Amended and Restated 1992 Stock Option Plan, as amended (the Stock Option Plan), incorporated by reference to Exhibit 10.1 to the IPO S-1.
10.2	Form of Indemnification Agreement between the Company and each of its directors and executive officers, incorporated by reference to Exhibit 10.2 to the IPO S-1.
10.3	Amended and Restated Registration Rights Agreements dated as of March 16, 1994, as amended, incorporated by reference to Exhibit 10.2 to the IPO S-1.
10.4	License Agreement dated June 1, 1990 between the Company and ARCH Development Corporation, as amended, incorporated by reference to Exhibit 10.7 to the IPO S-1.
10.5	License Agreement dated October 12, 1994 between the Company and Hitachi, incorporated by reference to Exhibit 10.8 to the IPO S-1.
10.6	License Agreement dated May 31, 1996 between the Company and Research Development Corporation of Japan, incorporated by reference to Exhibit 10.9 to the IPO S-1.
10.7	License Agreement dated April 1, 1996 between the Company and Cornell Research Foundation, incorporated by reference to Exhibit 10.10 to the IPO S-1.
10.8*	Consulting and Stock Purchase Agreement between Richard W. Siegel and the Company dated as of May 9, 1990, as amended February 13, 1991, November 21, 1991 and January 1, 1992, incorporated by reference to Exhibit 10.11 to the IPO S-1.
10.9	Lease Agreement between the Village of Burr Ridge and the Company, dated September 15, 1994, incorporated by reference to Exhibit 10.12 to the IPO S-1.
10.10	Distribution Agreement between the Company and C.I. Kasei, Ltd., (a subsidiary of Itochu Corporation) dated as of October 30, 1996, incorporated by reference to Exhibit 10.15 to the IPO S-1.
10.11	Supply Agreement between the Company and Schering-Plough HealthCare Products, Inc. dated as of March 15, 1997, incorporated by reference to Exhibit 10.17 to the IPO S-1.
10.12	License Agreement between the Company and C.I. Kasei Co., Ltd. (a subsidiary of Itochu Corporation) dated as of December 30, 1997, incorporated by reference to Exhibit 10.17 to the 1997 10-K.

10.13*	Employment Agreement dated as of November 9, 1999 between the Company and Joseph Cross, incorporated by reference to Exhibit 10.15 to the 1999 10-K.
10.14*	Employment Agreement dated as of March 15, 1999 between the Company and Daniel S. Bilicki, incorporated by reference to Exhibit 10.19 to the 1998 10-K.
10.15*	Form of Options Agreement under the Stock Option Plan, incorporated by reference to Exhibit 4.5 to the Company s Registration Statement on Form S-8 (File No. 333-53445).

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Exhibit Number	
10.16**	Zinc Oxide Supply Agreement dated as of September 16, 1999 between the Company and BASF Corporation, as assignee, incorporated by reference to Exhibit 10.22 to the 1999 10-K.
10.17*	Employment Agreement dated as of November 2, 2000 between the Company and Robert Haines, incorporated by reference to Exhibit 10.22 to the Company s Annual Report on Form 10-K for the year ended December 31, 2000 (the 2000 10-K).
10.18	Lease Agreement between Centerpointe Properties Trust and the Company, dated June 15, 2000, incorporated by reference to Exhibit 10.23 to the 2000 10-K.
10.19**	Amendment No. 1 to Zinc Oxide Supply Agreement dated as of January, 2001 between the Company and BASF Corporation, incorporated by reference to Exhibit 10.24 to the 2000 10-K.
10.20	Promissory Note dated as of September 14, 2000 between the Company and BASF Corporation, incorporated by reference to Exhibit 10.25 to the 2000 10-K.
10.21**	Cooperation Agreement dated June 24, 2002 between the Company and Rodel, Inc., incorporated by reference to Exhibit 10.23 to the Company s Quarterly Report on Form 10-Q for the quarter ended June 30, 2002.
10.22*	Consulting Agreement dated December 12, 2002 between the Company and Dr. Gina Kritchevsky, incorporated by reference to Exhibit 10.24 to the Company s Annual Report on Form 10-K for the year ended December 31, 2002.
10.23	First Amendment to Promissory Note dated as of March 11, 2003 between the Company and BASF Corporation, incorporated by reference to Exhibit 10.25 to the Company s Annual Report on Form 10-K for the year ended December 31, 2002.
10.24	Amendment No. 2. to Zinc Oxide Supply Agreement dated as of March 17, 2003 between the Company and BASF Corporation, incorporated by reference to Exhibit 10.25 to the Company s Annual Report on Form 10-K for the year ended December 31, 2002.
10.25*	Employment Agreement dated March 24, 2003 between the Company and Mr. Edward G. Ludwig, Jr., incorporated by reference to Exhibit 10.25 to the Company s Annual Report on Form 10-K for the year ended December 31, 2002.
10.26*	Employment Agreement dated February 17, 2000 between the Company and Mr. Jess Jankowski, incorporated by reference to Exhibit 10.26 to the Company s Annual Report on Form 10-K filed March 30, 2004.
10.27*	Employment Agreement dated September 26, 2001 between the Company and Dr. Richard W. Brotzman, incorporated by reference to Exhibit 10.27 to the Company s Annual Report on Form 10-K filed March 30, 2004.
10.28***	Amendment No. 1 to Cooperation Agreement dated February 25, 2004 between the Company and Rohm and Haas Electronic Materials CMP Inc. (formerly known as Rodel, Inc.), incorporated by reference to Exhibit 10.28 to the Company s Annual Report on Form 10-K filed March 30, 2004.
10.29	Joint Development Agreement dated March 23, 2004 between the Company and Altana Chemie AG., incorporated by reference to Exhibit 10.29 to the Company s Quarterly Report on Form 10-Q filed August 13, 2004
10.30	Amendment No. 1 to License Agreement dated July 16, 2004 between the Company and C.I. Kasei Co., Ltd., incorporated by reference to Exhibit 10.30 to the Company s Quarterly Report on Form 10-Q filed August 13, 2004.
10.31***	Letter Agreement Amending Cooperation Agreement dated October 15, 2004 between the Company and Rohm and Haas Electronic Materials CMP Inc., incorporated by reference to Exhibit 10.1 to the Company s Current Report on Form 8-K filed October 22, 2004.
10.32	Building Lease dated September 15, 2004 between the Company and the Village of Burr Ridge, incorporated by reference to Exhibit 10.32 to the Company s Annual Report on Form 10-K for the year ended December 31, 2004.
23.1	Consent of McGladrey & Pullen, LLP.
31.1	Certification of the Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Exchange Act.
31.2	Certification of the Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Exchange Act.
32	Certification of the Chief Executive Officer and the Chief Financial Officer pursuant to 18 U.S.C. Section 1350

* Management contract or compensatory plan or arrangement.
** Confidentiality previously granted for portions of this agreement.
*** Confidentially requested, confidential portions have been omitted and filed separately with the Commission as required by Rule 24b-2.

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(b) Reports on Form 8-K:

On October 22, 2004, the Company furnished a Current Report on Form 8-K reporting under Items 1.01 and 9.01 that on October 22, 2004 it issued a press release announcing the Company and Rohm and Haas Electronic Materials CMP Inc. (RHEM) entered into a letter agreement, further amending the Cooperation Agreement between the Company and RHEM dated June 24, 2002 and initially amended February 25, 2004.

On November 1, 2004, the Company furnished a Current Report on Form 8-K reporting under Items 2.02 and 9.01 that on October 28, 2004 it issued a press release announcing its financial results for the quarter ended September 30, 2004.

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NANOPHASE TECHNOLOGIES CORPORATION

INDEX TO FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders

Nanophase Technologies Corporation

Romeoville, Illinois

We have audited the accompanying balance sheets of Nanophase Technologies Corporation as of December 31, 2004 and 2003, and the related statements of operations, stockholders equity, and cash flows for each of the years in the three-year period ended December 31, 2004. We also have audited management s assessment, included in the accompanying Annual Report on the Form 10-K, that Nanophase Technologies Corporation maintained effective internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control- Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Nanophase Technologies Corporation s management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on these financial statements, an opinion on management s assessment, and an opinion on the effectiveness of the company s internal control over financial reporting based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audit of financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, evaluating management s assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

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Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Nanophase Technologies Corporation as of December 31, 2004 and 2003, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2004 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, management s assessment that Nanophase Technologies Corporation maintained effective internal control over financial reporting as of December 31, 2004, is fairly stated, in all material respects, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Furthermore, in our opinion, Nanophase Technologies Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2004, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Schaumburg, Illinois

March 15, 2005

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NANOPHASE TECHNOLOGIES CORPORATION

BALANCE SHEETS

	As of December 31,	
	2004	**2003**
ASSETS		
Current assets:		
Cash and cash equivalents	$ 475,185	$ 399,999
Investments	11,155,126	4,562,364
Trade accounts receivable, less allowance for doubtful accounts of $24,271 and $25,000 on December 31, 2004 and 2003, respectively	792,662	1,244,490
Other receivable, net	3,498	24,214
Inventories, net	837,336	682,999
Prepaid expenses and other current assets	499,697	659,778
Total current assets	13,763,504	7,573,844
Equipment and leasehold improvements, net	7,457,764	8,192,995
Other assets, net	571,027	475,980
	$ 21,792,295	$ 16,242,819
LIABILITIES AND STOCKHOLDERS EQUITY		
Current liabilities:		
Current portion of long-term debt	$ 579,472	$ 1,034,379
Current portion of capital lease obligations	11,826	43,609
Accounts payable	324,485	438,304
Accrued expenses	894,022	743,771
Total current liabilities	1,809,805	2,260,063
Long-term debt, less current maturities		251,843
Long-term portion of capital lease obligations, less current maturities		11,826
		263,669
Commitments and contingencies:		
Stockholders equity:		
Preferred stock, $.01 par value; 24,088 authorized and no shares issued and outstanding		
Common stock, $.01 par value; 25,000,000 shares authorized; 17,895,482 and 15,902,674 shares issued and outstanding on December 31, 2004 and December 31, 2003, respectively	178,955	159,027
Additional paid-in capital	71,987,565	59,297,135
Accumulated deficit	(52,184,030)	(45,737,075)
Total stockholders equity	19,982,490	13,719,087
	$ 21,792,295	$ 16,242,819

(See accompanying Notes to Financial Statements)

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NANOPHASE TECHNOLOGIES CORPORATION

STATEMENTS OF OPERATIONS

	Years ended December 31,		
	2004	**2003**	**2002**
Revenue:			
Product revenue	$ 4,253,478	$ 4,880,313	$ 5,002,986
Other revenue	954,456	566,348	398,229
Total revenue	5,207,934	5,446,661	5,401,215
Operating expense:			
Cost of revenue	5,125,216	5,205,065	5,095,019
Research and development expense	1,929,348	1,906,791	1,572,997
Selling, general and administrative expense	4,361,357	4,095,877	3,854,051
Total operating expenses	11,415,921	11,207,733	10,522,067
Loss from operations	(6,207,987)	(5,761,072)	(5,120,852)
Interest income	171,582	67,992	152,626
Interest expense	(74,277)	(109,889)	(125,181)
Other, net	(306,273)	5,319	6,844
Loss before provision for income taxes	(6,416,955)	(5,797,650)	(5,086,563)
Provision for income taxes	(30,000)	(30,000)	(68,674)
Net loss	$ (6,446,955)	$ (5,827,650)	$ (5,155,237)
Net loss net per share-basic and diluted	$ (0.37)	$ (0.38)	$ (0.35)
Weighted average number of common shares outstanding	17,266,228	15,391,537	14,551,479

(See accompanying Notes to Financial Statements)

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NANOPHASE TECHNOLOGIES CORPORATION

STATEMENTS OF STOCKHOLDERS EQUITY

	Preferred Stock		Common Stock		Additional	Deferred		
Description	**Shares**	**Amount**	**Shares**	**Amount**	**Paid-in Capital**	**Stock-based Compensation**	**Accumulated Deficit**	**Total**
Balance as of January 1, 2002		$	13,705,931	$ 137,059	$ 50,260,747	$	$ (34,754,188)	$ 15,643,618
Exercise of stock options			20,296	203	44,346			44,549
Exercise of warrants			28,950	290	32,221			32,511
Stock-based compensation			12,700	127	82,423			82,550
Common stock offering			1,370,000	13,700	6,158,593			6,172,293
Deferred stock compensation					79,750	(79,750)		
Amortization of deferred stock compensation						12,681		12,681
Net loss for the year ended December 31, 2002							(5,155,237)	(5,155,237)
Balance as of December 31, 2002			15,137,877	151,379	56,658,080	(67,069)	(39,909,425)	16,832,965
Exercise of stock options			287,446	2,874	594,595			597,469
Stock-based compensation			24,350	244	74,024			74,268
Common stock offering			453,001	4,530	1,970,436			1,974,966
Amortization of deferred stock compensation						67,069		67,069
Net loss for the year ended December 31, 2003							(5,827,650)	(5,827,650)
Balance as of December 31, 2003			15,902,674	159,027	59,297,135		(45,737,075)	13,719,087
Exercise of stock options			283,526	2,835	1,466,552			1,469,387
Exercise of warrants			453,001	4,530	1,956,634			1,961,164
Common stock offering			1,256,281	12,563	9,249,769			9,262,332
Stock-based compensation					17,475			17,475
Net loss for the year ended December 31, 2004							(6,446,955)	(6,446,955)
Balance as of December 31, 2004		$	$ 17,895,482	$ 178,955	$ 71,987,565	$	$ (52,184,030)	$ 19,982,490

(See accompanying Notes to Financial Statements)

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NANOPHASE TECHNOLOGIES CORPORATION

STATEMENTS OF CASH FLOWS

	Years ended December 31,		
	2004	**2003**	**2002**
Operating activities:			
Net loss	$ (6,446,955)	$ (5,827,650)	$ (5,155,237)
Adjustments to reconcile net loss to cash used in operating activities:			
Depreciation and amortization	1,392,122	1,521,353	1,237,818
Amortization of deferred stock compensation		67,069	12,681
Stock-based compensation	17,475	74,268	82,550
Allowance for excess inventory quantities	(5,636)	(46,084)	26,262
Loss on disposition of equipment	55,265		5,138
Patent write-off		19,727	
Changes in assets and liabilities related to operations:			
Trade accounts receivable	175,034	(497,923)	(71,243)
Other receivable	20,716	(7,424)	50,659
Inventories	(148,701)	344,919	(51,828)
Prepaid expenses and other assets	160,081	87,161	(365,345)
Accounts payable	(225,189)	157,877	(119,215)
Accrued expenses	138,991	(339,386)	256,573
Net cash used in operating activities	(4,866,797)	(4,446,093)	(4,091,187)
Investing activities:			
Acquisition of patents	(166,075)	(77,707)	(72,957)
Acquisition of equipment and leasehold improvements	(529,498)	(220,611)	(1,483,808)
Proceeds from disposal of equipment	11,000		2,188
Payment of accounts payable incurred for the purchase of equipment and leasehold improvements		(200,362)	(833,824)
Purchases of investments	(279,852,900)	(49,063,331)	(108,375,116)
Maturities of investments	273,260,138	51,563,775	108,155,264
Net cash (used in) provided by investing activities	(7,277,335)	2,001,764	(2,608,253)
Financing activities:			
Principal payment on debt obligations, including capital leases	(473,565)	(603,746)	(281,311)
Proceeds from borrowings		429,955	594,503
Proceeds from sale of common stock and exercise of stock options and warrants	12,692,883	2,572,435	6,249,353
Net cash provided by financing activities	12,219,318	2,398,644	6,562,545
Increase (decrease) in cash and cash equivalents	75,186	(45,685)	(136,895)
Cash and cash equivalents at beginning of period	399,999	445,684	582,579
Cash and cash equivalents at end of period	$ 475,185	$ 399,999	$ 445,684

Supplemental cash flow information:						
Interest paid	$	74,277	$	109,889	$	125,181
Income taxes paid	$	30,000	$	30,000	$	38,674
Supplemental non-cash investing and financing activities:						
Accounts receivable paid through offset of long-term debt	$	276,794	$	194,768	$	242,860
Capital lease obligations incurred for use of equipment	$		$		$	65,007
Accounts payable incurred for the purchase of equipment and leasehold improvements	$	111,370	$		$	200,362
Accrual related to asset retirement obligation	$		$	82,000	$	

(See accompanying Notes to Financial Statements)

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS

(1) 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, environmental catalysts, antimicrobial products and a variety of polishing applications, including semiconductors and optics. New markets and applications also are 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 and previously has recognized revenue from the occasional sale of production equipment to its technology licensee, as well as $600,000 in revenue for 2004 (only) as discussed in Note 16. None of these activities are expected to drive the long-term growth of the business. All of these types of items are recognized as other revenue in the Company s Statement of Operations, as they do not represent revenue directly from the Company s Nanocrystalline materials.

(2) Summary of Significant Accounting Policies

Use of Estimates

The preparation of financial statements requires the Company to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents primarily consist of demand deposits. The Company has employed corporate sweep accounts, when cost-effective in order to maximize interest income earned with its operating funds. From time to time, the Company s cash accounts may exceed federally insured limits.

Investments

Investments are classified by the Company at the time of purchase for appropriate designation and are reevaluated as of each balance sheet date. The Company s policy is to classify money market funds and certificates of deposit as investments. These investments are classified as held-to maturity when the Company has the positive intent and ability to hold the securities to maturity. Held-to maturity securities are stated at amortized cost and are adjusted to maturity for the amortization of premiums and accretion of discounts. Such adjustments for amortization and accretion are included in interest income. The Company has also made investments in variable rate demand notes. The investments have been

NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

classified as available for sale securities. Investments classified as available for sale securities are recorded at market value using the specific identification method; unrealized gains and losses (excluding other-than-temporary impairments) are reflected in other comprehensive income (OCI). Due to the nature of the Company s investments being short-term, the fair value of these investments approximates their cost, accordingly, no unrealized gains or losses have been reflected in OCI.

Investments are considered to be impaired when a decline in fair value is judged to be other-than-temporary. The Company employs a systematic methodology that considers available evidence in evaluating potential impairment of its investments on a quarterly basis. If the cost of an investment exceeds its fair value, the Company evaluates, among other factors, general market conditions, the duration and extent to which the fair value is less than cost, as well as the Company s intent and ability to hold the investment. The Company also considers specific adverse conditions related to the financial health of and business outlook for the investee, including industry and sector performance, changes in technology, operational and financing cash flow factors and rating agency actions. Once a decline in fair value is determined to be other-than-temporary, an impairment charge is recorded and a new cost basis in the investment is established.

The Company s investments are held by its investment bank who is a member of all major stock exchanges and the Securities Investor Protection Corporation (SIPC). Securities and cash held in custody by the Company s investment bank are afforded complete protection for the Company s investment positions through SIPC and a commercial insurer (commonly known as Excess SIPC coverage), however, it does not protect against losses from the rise and fall in market value of investments.

Trade Accounts Receivable

Trade accounts receivable are carried at original invoice amount less an estimate made for doubtful receivables based on a review of all outstanding amounts on a monthly basis. Management determines the allowance for doubtful accounts by identifying troubled accounts and by using historical experience applied to an aging of accounts. Trade accounts receivable are written off when deemed uncollectible. Recoveries of trade accounts receivable previously written off are recorded when received.

The Company s typical credit terms are thirty days from shipment and invoicing.

The activity in the Allowance for Doubtful Accounts is as follows:

	2004	2003
Balance, Beginning of year	$ 25,000	$ 25,000
Charge offs	(729)	

Recoveries		
Provision		
Balance, End of year	$ 24,271	$ 25,000

NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

Inventories

Inventories are stated at the lower of cost, maintained on a first in, first out basis, or market. The Company has recorded allowances to reduce inventory relating to excess quantities of certain materials. Write-downs of inventories establish a new cost basis, which is not increased for future increases in market value of inventories or changes in estimated excess quantities.

Equipment and Leasehold Improvements

Equipment is stated at cost and is being depreciated over its estimated useful life (3-20 years) using the straight-line method. Leasehold improvements are stated at cost and are being amortized using the straight-line method over the shorter of the useful life of the asset or the term of the lease (3-16 years). Depreciation expense for leased assets is included with depreciation expense for owned assets. From time to time the company has self-constructed assets. These assets are stated at cost plus the capitalization of labor and have an estimated useful life (7-10 years) using the straight-line method.

The Company follows the provisions of SFAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets. Reviews are performed whenever events or changes in circumstances indicate that the carrying amount of assets may not be recoverable or that the useful life is shorter than originally estimated. The Company assesses the recoverability of its assets by comparing the projected undiscounted net cash flows associated with the related asset or group of assets over their remaining lives against their respective carrying amounts. Impairment, if any, is based on the excess of the carrying amount over the fair value of those assets. If assets are determined to be recoverable, but the useful lives are shorter than originally estimated, the net book value of the assets is depreciated over the newly determined remaining useful lives.

Asset Retirement Obligations

In connection with its leased facilities, the Company is required to remove certain leasehold improvements upon termination of its occupancy. Effective January 1, 2003, the Company follows the provisions of SFAS 143, Accounting for Asset Retirement Obligations , under which the Company recognizes a liability for the fair value of its asset retirement obligations. The fair value of that liability is measured based on an expected cash flow approach and accretion expense is recognized each period to recognize increases to the fair value of the liability due to the passage of time. Increases to the fair value of the liability, except for accretion, are added to the carrying value of the long-lived asset. Those increases are then reported in amortization expense over the estimated useful life of the long-lived asset.

The Company adopted the provisions of SFAS 143, as of January 1, 2003. At the date of adoption the Company recorded an asset retirement obligation and related asset in the amount of $82,000. The cumulative effect of the change on 2003 and the pro forma amounts for 2002, had the newly adopted method been applied retroactively, have not been presented because the amounts were immaterial to the financial statements.

Activity in the asset retirement obligation account for the year ended December 31, 2004, is as follows:

	2004	**2003**
Balance, beginning	$ 94,157	$
Adoption of standard		82,000
Accretion due to passage of time	11,260	12,157
Balance, ending	$ 105,417	$ 94,157

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

The effect of the implementation of this standard resulted in an increase in net loss of $40,912 and $50,551 (no effect on per common share calculation) for 2004 and 2003, respectively. The added expenses were comprised of $11,260 and $12,157 in accretion expense and $29,109 and $38,394 in amortization expense for 2004 and 2003, respectively.

Intangible Assets

Intangible assets are included in other assets and are being amortized over the estimated useful life (17 or 20 years) of the respective patents and trademarks using the straight-line method.

Product Revenue

Product revenue consists of sales of product that are recognized when realized and earned. This occurs when persuasive evidence of an arrangement exists, title transfers via shipment of products or when delivery has occurred, the price is fixed or determinable and collectibility is reasonably assured.

Other Revenue

Other revenue consists of revenue from development funding (see RHEM discussion in Note 16) and fees from a technology license and the sale of production equipment that is designed and built by the Company. Such sale of equipment last occurred in the first quarter of 2003. These types of equipment sales occur on occasion and are also treated as other revenue. Technology license fees are recognized when earned pursuant to the agreed upon contractual arrangement, when performance obligations are satisfied, the amount is fixed or determinable, and collectibility is reasonably assured. Shipping and handling costs are included in other revenue when products are shipped and included in cost of goods sold when invoiced by the Company s vendors.

Advertising Expenses

The Company does not capitalize advertising expenses, they are either expensed when incurred or when related advertisements are first published. The Company recognized $21,248, $800 and $0 in advertising expenses for the years 2004, 2003 and 2002, respectively.

Income Taxes

The Company accounts for income taxes using the liability method. As such, deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Deferred tax assets and liabilities are calculated using the enacted tax rates and laws that are expected to be in effect when the anticipated reversal of these differences is scheduled to occur. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized.

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

Employee Stock Options

For the year ended December 31, 2004, 283,526 shares of Common Stock were issued pursuant to option exercises and no shares were issued in the form of an annual restricted stock grant to the Company s outside directors, compared to 287,446 and 24,350 shares of Common Stock respectively, in the same period in 2003.

As permitted by Statement of Financial Accounting Standards No. 123 Accounting for Stock-Based Compensation (FASB 123), the Company accounts for stock options granted to employees in accordance with APB Opinion No. 25, Accounting for Stock Issued to Employees (APB No. 25). As long as the exercise price of the options granted equals the estimated fair value of the underlying stock on the measurement date, no compensation expense is recognized by the Company for these options. FASB 123, established an alternative fair value method of accounting for stock-based compensation plans. As required by FASB 123 for companies using APB No. 25 for financial reporting purposes, the Company makes pro forma disclosures regarding the impact on net loss of using the fair value method of FASB Statement No. 123.

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

Pro forma information regarding net income is required by FASB No. 123, which also requires that the information be determined as if the Company had accounted for the employee stock options granted subsequent to December 31, 1994 under the fair value method of that Statement. The fair value for these options was estimated at the date of grant using a Black-Scholes option pricing model with the following assumptions for the years ended December 31, 2004, 2003 and 2002:

The following table illustrates the various assumptions used to calculate the Black-Scholes option pricing model:

	Years Ended December 31,		
	2004	**2003**	**2002**
U.S. Government zero coupon 7-year bond interest rates:	3.93%	3.79%	4.93%
Dividend yield:	0.00%	0.00%	0.00%
Weighted-average expected life of the option:	7 years	7 years	7 years
Volatility factors:	79.10%	102.49%	78.36%
Weighted-average fair value of the options granted:	$ 4.12	$ 3.21	$ 4.905

For purposes of the pro forma disclosures, the estimated fair value of the options is amortized to expense over the vesting period of the respective option. Because FASB No. 123 is applicable only to options granted subsequent to December 31, 1994, its pro forma impact was not fully reflected until 2002. The pro forma impact on the three years shown is meant to approximate the effects of the expensing of stock options.

The following table illustrates the effect on net loss and loss per share had compensation cost for all of the stock-based compensation plans been determined based on the grant date fair values of awards (the method described in FASB Statement No. 123, Accounting for Stock-Based Compensation):

	Years Ended December 31,		
	2004	**2003**	**2002**
Net Loss:			
As reported	$ (6,446,955)	$ (5,827,650)	$ (5,155,237)
Deduct total stock-based employee compensation expense determined under fair value based method for all awards	(835,394)	(1,824,906)	(2,298,786)
Pro forma net loss	(7,282,349)	(7,652,556)	(7,454,023)

Loss per share:			
Basic - As reported	(0.37)	(0.38)	(0.35)
Basic Pro forma	(0.42)	(0.50)	(0.51)
Diluted - As reported	(0.37)	(0.38)	(0.35)
Diluted Pro forma	(0.42)	(0.50)	(0.51)

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

Fair Value of Financial Instruments

The Company s financial instruments include investments, accounts receivable, accounts payable, accrued liabilities and long-term debt. The fair values of all financial instruments were not materially different from their carrying values.

Net Loss Per Share

Net loss per common share is computed based upon the weighted average number of common shares outstanding. Common equivalent shares of 497,671 for 2004, 342,652 for 2003 and 476,473 for 2002 are not included in the per share calculations because the effect of their inclusion would be anti-dilutive.

	Years ended December 31,		
	2004	**2003**	**2002**
Net loss	$ (6,446,955)	$ (5,827,650)	$ (5,155,237)
Weighted average common shares outstanding	17,266,228	15,391,537	14,551,479
Net loss per common share-basic and diluted	$ (0.37)	$ (0.38)	$ (0.35)

Recently Issued Accounting Standards

In December 2004, the FASB issued FASB Staff Position (FSP) 109-1, *Application of FASB Statement No. 109, Accounting for Income Taxes, to the Tax Deduction on Qualified Production Activities Provided by the American Jobs Creation Act of 2004* (FSP 109-1). The American Jobs Creation Act (AJCA) introduces a special tax deduction related to qualified production activities. This deduction is equal to 3% of qualified income for years 2005 and 2006, then is scheduled to increase to a 6% deduction for years 2007 through 2009, and finally, will be fully phased-in as a 9% deduction beginning in year 2010. FSP 109-1 clarifies that this tax deduction should be accounted for as a special tax deduction in accordance with Statement of Financial Accounting Standards No. 109, Accounting for Income Taxes. Pursuant to the ACJA, the Company will not be able to claim this benefit during any annual periods during which losses are incurred. We do not expect the adoption of these new tax provisions to have a material impact on the Company s financial statements.

In December 2004, the FASB issued Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment* (SFAS 123R). SFAS 123R will require that the compensation cost relating to share-based payment transactions be recognized in financial statements. That cost will be measured based on the fair value of the equity or liability instruments issued. SFAS 123R covers a wide range of share-based compensation arrangements including share (or stock) options, restricted share plans, performance-based awards, share appreciation rights and employee share purchase plans. SFAS 123R replaces FASB 123, *Accounting for Stock Issued to Employees*. SFAS 123R will be effective for Nanophase for the third fiscal quarter ending September 30, 2005, beginning on July 1, 2005. SFAS 123R allows two methods for determining the effects of the transition: the modified prospective transition method and the modified retrospective method of transition. Under the modified prospective transition method, an entity would use the fair value-based accounting method for all employee awards granted, modified, or settled after the effective date. As of the effective date, compensation cost related to the nonvested portion of awards outstanding as of that date would be based on the grant-date fair value of those awards as calculated under the original provisions of Statement No. 123; that is, an entity would not remeasure the grant-date fair value estimate of the unvested portion of awards granted prior to the

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

effective date of the final Statement. Under the modified retrospective method of transition, an entity would recognize employee compensation cost for prior periods presented in accordance with the original provisions of Statement No. 123; that is, an entity would recognize employee compensation cost in the amounts reported in the pro forma disclosures provided in accordance with Statement No.123. Although it has not yet completed its study of the transition methods, the Company believes it will elect the modified prospective transition method. The Company is in the process of evaluating the impact of adopting SFAS 123R and of determining the impact on our results of operations or financial position.

In November 2004, the FASB issued SFAS No. 151, *Inventory Costs-an Amendment of ARB No. 43, Chapter 4* (SFAS 151), which is the result of the FASB s efforts to converge U.S. accounting standards for inventory with International Accounting Standards. SFAS 151 requires that abnormal amounts of idle facility expense, freight, handling costs and wasted material be recognized as current period charges. It also requires that allocation of fixed production overheads to the costs of conversion be based on the normal capacity of the production facilities. SFAS 151 is effective for inventory costs incurred during fiscal years beginning after June 15, 2005. We do not expect adoption of SFAS 151 to have a material impact on the Company s results of operations.

(3) Investments

Investments at December 31, 2004 and 2003 were comprised of variable rate demand notes, certificates of deposit and a money market fund. Included in investments is $110,090 and $581,489 at December 31, 2004 and 2003, respectively, in the form of certificates of deposit which are pledged as collateral, primarily for the Company s business insurance premiums (see Note 7), and restricted as to withdrawal or usage. Investments held in short-term variable rate demand notes and certificates of deposit have maturity days of less than 30 days. The Company s investments on December 31, 2004 and 2003 were as follows:

	As of December 31,	
	2004	**2003**
Variable rate demand notes	$ 10,000,000	$ 3,500,000
Money market fund	1,039,225	479,090
Certificates of deposit	110,090	581,489
Accrued interest	5,811	1,785
	$ 11,155,126	$ 4,562,364

(4) Inventories

Inventories consist of the following:

	As of December 31,	
	2004	2003
Raw materials	$ 391,346	$ 393,995
Finished goods	1,051,535	900,185
	1,442,881	1,294,180
Allowance for excess quantities	(605,545)	(611,181)
	$ 837,336	$ 682,999

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

The activity in the Allowance for Excess Inventory Quantities as follows:

	2004	2003
Balance, Beginning of year	$ 611,181	$ 657,265
Deductions(1)	(5,636)	(46,084)
Costs and Expenses		
Balance, End of year	$ 605,545	$ 611,181

(1) Reduction in inventory allowance as a result of the disposal or sale of inventories for which an allowance had previously been provided.

(5) Equipment and Leasehold Improvements

Equipment and leasehold improvements consist of the following:

	As of December 31,	
	2004	2003
Machinery and equipment	$ 9,187,960	$ 8,766,084
Office equipment	390,920	366,460
Office furniture	75,871	75,871
Leasehold improvements	4,382,801	4,374,732
Construction in progress	182,305	74,029
	14,219,857	13,657,176
Less: Accumulated depreciation and amortization	(6,762,093)	(5,464,181)
	$ 7,457,764	$ 8,192,995

Depreciation expense was $1,297,912, $1,460,853 and $1,223,359, for the years ended December 31, 2004, 2003 and 2002, respectively.

NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

(6) Intangible Assets

The following is a summary of intangible assets on December 31, 2004 and 2003:

	2004		2003	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Subject to Amortization:				
Trademarks	$ 14,921	$ 6,184	$ 14,921	$ 5,062
Patents	343,950	96,797	167,249	56,000
	$ 358,871	$ 102,981	$ 182,170	$ 61,062

Amortization expense recognized on all amortizable intangibles totaled $41,919, $9,949 and $14,459 for the years ended December 31, 2004, 2003 and 2002, respectively.

Estimated aggregate amortization expenses for each of the next five years is as follows:

Year ending December 31:	
2005	$ 28,000
2006	28,000
2007	28,000
2008	28,000
2009	28,000

(7) Pledged Assets and Long-Term Debt

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. On December 31, 2004, 2003 and 2002, borrowings against this note amounted to $579,472, $856,267 and $1,051,035, respectively. The note bears interest at 8.45% per annum, with interest accruing beginning January 1, 2002, and the first payment commencing in February of 2002. The note is collateralized by certain powder coating, packaging, lab and related equipment. Contractually, as of December 31, 2004, the Company has five months to pay back this note, based on a rate per kilogram of product shipped, with any remaining outstanding balance at June 1, 2005 becoming payable on demand.

In December 2003, the Company financed $430,000 in insurance premiums at 4.87% per annum through October 2004. The balance due on the note was at $0 and $429,955 on December 31, 2004 and 2003, respectively. The note is collateralized by a declining letter of credit to be reduced over the life of the obligation.

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

(8) Lease Commitments

The Company leases its operating facilities under operating leases. Nanophase leases its Romeoville facility under an agreement whose initial term will expire in July 2006, with an option to extend the lease for two additional periods of five years each. The current monthly rent on this lease amounts to $25,568. Nanophase leases its Burr Ridge facility under an agreement whose initial term expired in September 1999. The Company then exercised its options to extend the lease for five additional one-year terms, the last of which expired in September 2004. The Company executed a new lease for its Burr Ridge facility in September 2004. The initial term of the new lease expires in September 2007, but the Company has options to extend the lease for up to three additional one-year terms. The current monthly rent on this lease amounts to $10,000.

The following is a schedule of future minimum lease payments as required under the above operating leases:

Year ending December 31:	
2005	$ 447,313
2006	308,874
2007	95,481
Total minimum payments required:	$ 851,668

Rent expense, including real estate taxes, under these leases amounted to $521,264, $511,112 and $516,352, for the years ended December 31, 2004, 2003 and 2002, respectively.

During the years ended December 31, 2004 and 2003, the Company entered into capital leases for equipment. On December 31, 2004 and 2003, equipment under capital leases for both years had a cost of $205,314 with accumulated depreciation of $128,413 and $87,350, respectively. The following is a schedule of future minimum lease payments as required under the above capital leases:

Year ending December 31, 2005	$ 12,111
Less: Amount representing interest	(285)
Present value of net future minimum lease payments	11,286
Less: Current Portion	(11,826)
	$

(9) Accrued Expenses

Accrued expenses consist of the following:

	As of December 31,	
	2004	2003
Accrued payroll and related expenses	$ 285,695	$ 290,368
Accrued professional services	237,485	124,622
Other	370,842	328,781
	$ 894,022	$ 743,771

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

(10) License Agreements

The Company was granted a non-exclusive license by a third party to make, use, and sell products of the type claimed in two U.S. patents. In consideration for this license, the Company agreed to pay royalties of 1% of net sales, as defined, and made an advance royalty payment of $17,500. Royalties under this agreement amounted to approximately $29,200, $25,600 and $37,000 for the years ended December 31, 2004, 2003 and 2002, respectively

In December 1997, the Company entered into a license agreement whereby the Company granted a royalty-bearing exclusive right and license, as defined, to purchase, make, use and sell nanocrystalline materials in designated parts of Asia to C. I. Kasei, a division of Itochu Corporation (CIK). Under this agreement, the Company also will earn royalties on net sales of manufactured products containing nanocrystalline materials. The agreement also provided for minimum sales targets and minimum royalty payments to maintain exclusivity. The agreement expires on March 31, 2013 unless earlier terminated as provided therein. The Company recorded royalty revenues, classified as Other Revenue on the Statements of Operations, under this agreement of $300,000 for the years ended December 31, 2004, 2003 and 2002, respectively.

(11) Income Taxes

The Company s provision for income taxes, as presented on its Statements of Operations for the periods presented, is attributable to foreign income taxes paid as a result of certain transactions with customers in foreign countries. The Company has no income tax provision, current or deferred, relating to U.S. federal, state or local income taxes.

A reconciliation of income tax expense to the amount computed by applying the Federal income tax rate to loss before provision for income taxes as of December 31, 2004, 2003 and 2002, is as follows:

	2004	2003	2002
Income tax credit at statutory rates	$ (2,181,765)	$ (1,971,201)	$ (1,729,431)
Nondeductible expenses	9,084	31,348	5,419
Tax benefit of disqualifying dispositions of stock by employees	(683,900)	(405,459)	(38,060)
State income tax, net of federal benefits	(320,848)	(289,883)	(254,328)
Foreign income taxes	30,000	30,000	68,674
Other	24,429	40,195	(76,600)
Benefit of net operating loss and foreign tax credits not recognized, Increase in valuation allowance	3,153,000	2,595,000	2,093,000
	$ 30,000	$ 30,000	$ 68,674

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company s deferred income taxes consist of the following:

	As of December 31,	
	2004	**2003**
Deferred tax assets:		
Net operating loss carryforwards	$ 23,568,000	$ 20,441,000
Foreign tax credit carryforward	156,000	156,000
Inventory and other allowances	258,000	258,000
Excess (tax) book depreciation	(162,000)	(126,000)
Excess (tax) book amortization	16,000	
Other accrued costs	114,000	68,000
Total deferred tax assets	23,950,000	20,797,000
Less: Valuation allowance	(23,950,000)	(20,797,000)
Deferred income taxes	$	$

The valuation allowance increased $3,153,000 for the year ended December 31, 2004 due principally to the increase in the net operating loss carryforward and uncertainty as to whether future taxable income will be generated prior to the expiration of the carryforward period. Under the Internal Revenue Code, certain ownership changes, including the prior issuance of preferred stock and the Company s public offering of common stock, may subject the Company to annual limitations on the utilization of its net operating loss carryforward.

The Company has net operating loss carryforwards for tax purposes of approximately $60,432,000 on December 31, 2004, which expire between 2005 and 2024.

As a result of certain transactions with third parties operating in foreign countries, the Company may be subject to the withholding and payment of foreign income taxes as transactions are completed. Under the Internal Revenue Code, foreign tax payments may be used to offset federal income tax liabilities when incurred, subject to certain limitations. On December 31, 2004, the Company has a foreign tax credit carryforward of $156,000.

(12) Capital Stock

In October 1998, pursuant to a Stockholder Rights Agreement between Nanophase and LaSalle National Association, as Rights Agent, the Company declared a dividend of one Preferred Stock Purchase Right (a Right) for each outstanding share of Company common stock on November 10, 1998 and each share of common stock issued by the Company after such date. The Rights are not presently exercisable. Each Right entitles the holder, upon the occurrence of certain specified events, to purchase from the Company one ten-thousandth of a share of the Company s Series A Junior Participating Preferred Stock at a purchase price of $25 per one-ten thousandth of a share (the Purchase Price). The Rights further provide that each Right will entitle the holder, upon the occurrence of certain specified events, to purchase from the Company, common stock having a value of twice the Purchase Price and, upon the occurrence of certain other specified events, to purchase from another entity into which the Company is merged or which acquires 50% or more of the Company s assets or earnings power, common stock of such other entity having a value of twice the Purchase Price. In general, the Rights may be redeemed by the Company at a price of $0.01 per Right. The Rights expire on October 28, 2008. On September 5, 2003, in anticipation of the September 8, 2003 private placement to Grace Brothers Ltd., the Company amended its existing Stockholder Rights Agreement to revise the beneficial ownership threshold at which a person or group of persons becomes an acquiring person and triggers certain provisions under the Stockholder Rights Agreement. As revised, a person or group would become an acquiring person if that person or group becomes the beneficial owner of 35% or more of the outstanding shares of the Company s stock. Prior to this amendment, the beneficial ownership threshold was 25%.

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

As of December 31, 2004 and 2003, the Company has 24,088 authorized shares of preferred stock, of which 2,500 shares have been designated as Series A Junior Participating Preferred Stock and reserved for issuance in connection with the Rights described above. Shares of Series A Junior Participating Preferred Stock are nonredeemable and subordinate to any other series of the Company s preferred stock, unless otherwise provided for in the terms of the preferred stock; has a preferential dividend in an amount equal to 10,000 times any dividend declared on each share of common stock; has 10,000 votes per share, voting together with the Company s common stock; and in the event of liquidation, entitles its holder to receive a preferred liquidation payment equal to 10,000 times the payment made per share of common stock. In addition, as of December 31, 2004, 2,500,593 authorized but unissued shares of common stock have been reserved for future issuance upon exercise of stock options.

(13) Stock Options, Warrants and Stock Grants

The Company has entered into stock option agreements with certain officers, employees, directors and three members of the Company s former Advisory Board. On December 31, 2004, the Company had outstanding options to purchase 1,741,092 shares of common stock. The stock options generally expire ten years from the date of grant. Of the total number of options granted, 487,386 of the outstanding options vest over a five-year period, 1,223,283 vest over a three-year period from their respective grant dates and 30,423 vest on the eighth anniversary following their grant date.

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

Exercise prices are determined by the Compensation and Governance Committee of the Board of Directors and equal the estimated fair values of the Company s common stock at the grant date. The table below summarizes option activity through December 31, 2004:

	Number of Options	Exercise Price	Weighted Average Exercise Price
Outstanding at January 1, 2002	1,815,226	.112-12.250	5.293
Options granted during 2002	297,900	3.780-6.650	6.554
Options exercised during 2002	(20,296)	.112-3.886	2.195
Options canceled during 2002	(5,980)	3.813-12.250	8.485
Outstanding at December 31, 2002	2,086,850	.112-11.625	5.495
Options granted during 2003	251,800	3.660-5.550	3.791
Options exercised during 2003	(287,446)	.432-3.886	2.078
Options canceled during 2003	(122,585)	3.660-10.875	6.689
Outstanding at December 31, 2003	1,928,619	.112-11.625	5.705
Options granted during 2004	100,000	5.550	5.550
Options exercised during 2004	(283,526)	.112-10.875	5.183
Options canceled during 2004	(4,001)	.112-3.660	3.659
Outstanding at December 31, 2004	1,741,092	.432-11.625	5.786

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

Information with respect to stock options outstanding and stock options exercisable on December 31, 2004 follows:

	Options Outstanding		
	Number Outstanding on December 31, 2004	Weighted-Average Remaining Contractual Life (Years)	Weighted-Average Exercise Price
Range of Exercise Prices			
$0.432-2.375	139,614	3.352	$ 1.794
$2.938-3.886	611,563	4.950	3.622
$5.000-7.063	541,240	7.174	6.464
$7.625-11.625	448,675	5.735	9.160
	1,741,092		

	Options Exercisable	
	Number Exercisable on December 31, 2004	Weighted-Average Exercise Price
Range of Exercise Prices		
$0.432-2.375	139,614	$ 1.794
$2.938-3.886	457,762	3.609
$5.000-6.650	190,605	6.447
$7.063-11.625	594,175	8.410
	1,382,156	5.948

Option shares exercisable on December 31, 2003 and 2002 were 1,324,528 and 1,186,504 and had a weighted average exercise price of $5.708 and $4.400, respectively.

In connection with the issuance of Series C convertible preferred stock in 1993, the Company issued common stock purchase warrants for 662,287 shares at no additional cost to the Series C convertible preferred stockholders. At the Company s initial public offering on November 26, 1997, all preferred stock shares were converted to common stock shares. These warrants had an exercise price of $1.123 per share and expired upon the tenth anniversary of issuance. For the year ended December 31, 2002, 28,950 warrants were converted into 28,950 shares of common stock and were exercised for $32,511. On December 31, 2003 there were 453,001 warrants issued, outstanding, and exercisable. All of these outstanding warrants were issued pursuant to the Company s September 8, 2003 private equity offering at a rate of one per common share purchased. Their exercise price was $4.415 per share and the expiration was September 8, 2004. No warrants were exercised in 2003. On September 2, 2004, 453,001 warrants were exercised relating to the Company s September 2003 private equity offering of $4.415 per share. For the year ended December 31, 2004 there were no warrants outstanding.

For the years ended December 31, 2004, 2003 and 2002, the Company recognized $0, $74,268 and $82,550 in stock compensation expense related to the grant of 0, 24,350 and 12,700 shares of stock to five directors respectively. Also, in December of 2002, an officer of the Company resigned, however, her services were retained on a consulting basis for one year. The terms of her consulting agreement allowed

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

for all stock options previously granted to remain in effect during the term of this agreement, subject to her complying with all her obligations under the agreement. Upon the end of the term, any stock options previously granted became fully vested and exercisable in accordance with the applicable option agreement underlying each grant. Therefore, the Company is required to estimate the fair value of these options pursuant to accounting provided for under FASB No.123. The fair value of these options was estimated on December 6, 2002, the date the consulting agreement began through December 31, 2003, the termination date of the agreement. March 30, 2004 was the last date allowable to exercise these options. Using the Black-Scholes option pricing model to calculate the appropriate expense the Company recorded $79,750 in deferred compensation cost of which $12,681 was recognized as compensation expense in December of 2002 with the remaining $67,069 expensed in 2003. There is no cash impact to the Company with respect to this calculation, which is required under FAS No. 123.

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 that 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 that the grantee has not terminated service prior to the vesting date. The Company as required pursuant to APB No.25 recognized $6,725 for the restricted share rights and $10,750 for the performance share rights totaling $17,475 in stock-based compensation expense in 2004. Compensation expense for performance share rights is determined using variable plan accounting based upon management s estimate of the number of share rights that will eventually vest.

(14) 401(k) Profit-Sharing Plan

The Company has a 401(k) profit-sharing plan covering substantially all employees who meet defined service requirements. In 2004, the Company amended its 401(k) plan providing for deferred salary contributions by the plan participants and maximum contributions by the Company of 100% of the first 3% and 50% of the next 2% of the participant s salary. The Company contributions under this plan were $120,335, $81,875 and $82,618 for the years ended December 31, 2004, 2003 and 2002, respectively.

(15) Related Party Transactions

The Company terminated its consulting agreement with Dr. Richard W. Siegel, a director/stockholder, in July 2002. Payments under this agreement were $2,000 per month. Dr. Siegel remains a director of the Company.

(16) Significant Customers and Contingencies

Revenue from three customers constituted approximately 69.7%, 12.9% and 6.2%, respectively, of the Company s 2004 revenue. Amounts included in accounts receivable on December 31, 2004 relating to these three customers were approximately $215,000, $152,000 and $300,000, respectively. Revenue from these three customers constituted approximately 61.0%, 22.4% and 10.7%, respectively, of the Company s 2003 revenue. Amounts included in accounts receivable on December 31, 2003 relating to these three customers were approximately $557,000, $357,000 and $281,000, respectively. Revenue from these three same customers constituted approximately 72.6%, 2% and 6.8%, respectively, of the Company s 2002 revenue.

NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

The Company currently has supply agreements with BASF Corporation (BASF) and Rohm and Haas Electronic Materials CMP, Inc. (RHEM), the Company s two largest customers, 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 on March 17, 2003, 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 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. In March 2003, the $2,000,000 trigger referenced above was reduced from $4,000,000 pursuant to an amendment to the supply agreement with the Company s largest customer.

The Company believes that it has complied with all contractual requirements and that it has not had a triggering event . The Company further believes that the proceeds of the May 29, 2002 and September 8, 2003 private placements, its equity investment on March 23, 2004 and the exercise of warrants on September 2, 2004 relating to the Company s September 2003 fundraising provide sufficient cash balances to avoid the first triggering event referenced above for the foreseeable future. If a triggering event were to occur and BASF elected to proceed with the transfer 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.

In February of 2004, the Company amended its original agreement with Rohm and Haas Electronic Materials CMP, Inc. (RHEM formerly known as Rodel, Inc). This amendment allows for RHEM to maintain exclusivity based upon it purchasing lower dollar amounts of nanocrystalline materials, while extending the agreement through 2009. This amendment does not require RHEM to purchase any materials from the Company in 2004, but it does require an aggregate of $600,000 in development funding be paid to Nanophase in four equal quarterly installments in 2004 to support its efforts in joint slurry product development with RHEM for current and future semiconductor technologies.

(17) Business Segmentation and Geographical Distribution

Revenue from international sources approximated $673,900, $755,900 and $586,800 for the years ended December 31, 2004, 2003 and 2002, respectively. Of this international revenue, only in 2003 did any country, in this case Japan, compose a material portion of total revenue at $585,600. Otherwise, no revenue from any particular country was material in nature. The $300,000 technology license fee typically received every twelve months from our Japanese licensee is included in each of the three years presented.

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

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

(18) Quarterly Financial Data (Unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2004				
Total revenue	$ 1,293,359	$ 1,542,068	$ 1,377,118	$ 995,389
Loss from operations	(1,453,580)	(1,467,153)	(1,397,026)	(1,890,228)
Net loss	(1,470,564)	(1,452,248)	(1,658,272)	(1,865,871)
Basic and diluted loss per share	(0.09)	(0.08)	(0.09)	(0.10)
2003				
Total revenue	$ 1,664,082	$ 1,307,536	$ 1,238,973	$ 1,236,070
Loss from operations	(1,420,886)	(1,539,950)	(1,350,130)	(1,450,106)
Net loss	(1,436,717)	(1,562,185)	(1,365,954)	(1,462,794)
Basic and diluted loss per share	(0.09)	(0.10)	(0.09)	(0.09)

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NANOPHASE TECHNOLOGIES CORPORATION

NOTES TO FINANCIAL STATEMENTS - (Continued)

(19) Commitments and Contingencies

In 1998, Harbour Court LPI, a small stockholder of the Company, sued Nanophase, several of the Company s then-current and former officers and the underwriters of the Company s initial public offering of common stock in the United States District Court for the Northern District of Illinois. The complaint alleged that the defendants had violated the federal Securities Exchange Act of 1934 by making supposedly fraudulent material misstatements and omissions of fact in connection with soliciting consents to the Company s initial public offering from certain of its preferred stockholders. The supposed misrepresentations concerned purported mischaracterization of revenue that the Company received from its then-largest customer. The complaint further alleged that the suit should be maintained as a plaintiff class action on behalf of certain former preferred stockholders whose shares of preferred stock were converted into common stock in connection with the Company s initial public offering. The complaint sought relief including unquantified compensatory damages and attorneys fees. In September 2000, each defendant answered the complaint, denying all wrongdoing. Following certain discovery, the Company decided to avoid protracted litigation and resulting defense costs by agreeing to settle all claims against all defendants for $800,000, plus up to an additional $50,000 for the cost of settlement administration. The settlement did not admit liability by any party. The Court ordered final approval of the settlement in January 2002 and dismissed the complaint with prejudice. In January 2003, the Court approved interim payment to plaintiffs of $17,102 in settlement administration costs. In January 2005, the Court approved an additional $4,628 in further settlement administration costs and determined that administration of the settlement had been completed. Because both the settlement and the settlement administration costs were funded by Nanophase s directors and officers liability insurance, neither the settlement nor the settlement administration costs payments have had a material adverse effect on the Company s financial position or results of operations.

In 2001, George Tatz, a purchaser of 200 shares of the Company s common stock, sued Nanophase and Joseph Cross, its president and CEO, in the United States District Court for the Northern District of Illinois. The complaint alleged that defendants violated the federal Securities Exchange Act of 1934 by making supposedly fraudulent material misstatements and omissions of fact in connection with the Company s public disclosures, including certain press releases, concerning its dealings with Celox, a British customer. The complaint further alleged that the action should be maintained as a plaintiff class action on behalf of certain buyers who purchased shares of the Company s common stock from April 5, 2001 through October 24, 2001. The complaint sought relief including unquantified compensatory damages and attorneys fees. Thereafter, plaintiff filed an amended complaint, alleging that the Company and four of its officers (Joseph Cross, its chief executive officer; Daniel Bilicki, its vice president of sales and marketing; Jess Jankowski, its then-acting chief financial officer; and Gina Kritchevsky, its then-current chief technology officer) were liable under the federal Securities Exchange Act of 1934 for making supposedly fraudulent material misstatements and omissions of fact in connection with the Company s public disclosures concerning its relationship with Celox and the Company s purportedly improper booking, and later reversal, of $400,000 in revenue from a one-time sale to that customer treated as a bill and hold transaction. The amended complaint alleged the same class and sought the same relief as in plaintiff s initial complaint. In November 2002, defendants answered the amended complaint, denying all wrongdoing. Following certain discovery, in June 2003, the Company decided to avoid protracted litigation and resulting defense costs by agreeing to settle all claims against all defendants for $2,500,000. Thereafter, the Court certified the class alleged in the amended complaint. In December 2003, the Court ordered final approval of the settlement and dismissed the amended complaint with prejudice. The settlement did not admit liability by any party. In January 2005, the Court ordered distribution of the net settlement funds to the plaintiff class. Because the settlement was funded by the Company s directors and officers liability insurance, the settlement has not had a material adverse effect on Nanophase s financial position or results of operations.

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. Because Nanophase believes that the scope and validity of the patent claims in this patent are appropriate, the Company is vigorously defending its patent position. It is not feasible to predict whether the Company ultimately will succeed in maintaining the scope and validity of the claims of this patent. 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. 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 Nanophase s legal protection of the invention that is subject to this patent and potentially harm its business and operating results.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 17th day of March, 2005.

NANOPHASE TECHNOLOGIES CORPORATION

By: /s/ Joseph Cross

Joseph Cross
President and Chief Executive Officer

EXHIBIT INDEX

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