## NANOPHASE TECHNOLOGIES CORPORATION

#### Form SC 13D/A

#### September 03, 2004

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

SCHEDULE 13D/A

UNDER THE SECURITIES EXCHANGE ACT OF 1934 (Amendment No. 2)

Nanophase Technologies Corporation (Name of Issuer)

COMMON STOCK, par value \$.01 (Title of Class of Securities)

630079101 (CUSIP Number)

Jerald A. Trannel
290 South County Farm Road, Third Floor
Wheaton, Illinois 60187-4526
Telephone: (630) 588-7200
(Name, Address and Telephone Number of Person Authorized to

Receive Notices and Communications)

September 2, 2004 (Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of Section 240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box. []

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Section 240.13d-7(b) for other parties to whom copies are to be sent.

The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

2 Schedule 13D/A

CUSIP No. 630079101 Page 2 of 7 Pages

Names of Reporting Person
 S.S. OR I.R.S. Identification No. of Above Persons

Grace Brothers, Ltd. 2. Check the Appropriate Box if a Member of a Group (See instructions) (a) [ ] (b) [ ] 3. SEC Use Only 4. Source of Funds (See instructions) 00 5. Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e) [ ] 6. Citizenship or Place of Organization Illinois Limited Partnership 7 Sole Voting Power Number of 8 Shared Voting Power Shares Beneficially 2,985,195 shares Owned by Each Reporting 9 Sole Dispositive Power Person 0 With 10 Shared Dispositive Power 2,985,195 shares 11. Aggregate Amount Beneficially Owned by Each Reporting Person 2,985,195 shares 12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See instructions) [ ] 13. Percent of Class Represented by Amount in Row (11) 16.7% 14. Type of Reporting Person (See instructions) PN, BD 3 Schedule 13D/A CUSIP No. 630079101 Page 3 of 7 Pages 1. Names of Reporting Person S.S. OR I.R.S. Identification No. of Above Persons Grace Investments, Ltd. 2. Check the Appropriate Box if a Member of a Group (See instructions) (a) [ ] (b) [ ] 3. SEC Use Only

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4. Source of Funds (See instructions)
5. Check if Disclosure of Legal Proceedings is Required
Pursuant to Items 2(d) or 2(e) [ ]
6. Citizenship or Place of Organization
Illinois Limited Partnership
             7 Sole Voting Power
Number of
               0
            8 Shared Voting Power
Shares
Beneficially 300,000 shares
Owned by
Each
            9 Sole Dispositive Power
Reporting
Person
With
            10 Shared Dispositive Power
               300,000 shares
11. Aggregate Amount Beneficially Owned by Each Reporting
Person
300,000 shares
12. Check if the Aggregate Amount in Row (11) Excludes
Certain Shares (See instructions) [ ]
13. Percent of Class Represented by Amount in Row (11)
1.7%
14. Type of Reporting Person (See instructions)
PN,
Schedule 13D/A
CUSIP No. 630079101 Page 4 of 7 Pages
1. Names of Reporting Person
S.S. OR I.R.S. Identification No. of Above Persons
Bradford T. Whitmore
2. Check the Appropriate Box if a Member of a Group (See
instructions)
(a) [ ]
(b) [ ]
3. SEC Use Only
4. Source of Funds (See instructions)
5. Check if Disclosure of Legal Proceedings is Required
Pursuant to Items 2(d) or 2(e) [ ]
6. Citizenship or Place of Organization
United States
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7 Sole Voting Power

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Number of 272,812 shares
Shares
Beneficially 8 Shared Voting Power
Owned by
              3,285,195 shares
Each
Reporting 9 Sole Dispositive Power
Person
              272,812 shares
With
            10 Shared Dispositive Power
               3,285,195 shares
11. Aggregate Amount Beneficially Owned by Each Reporting
Person
3,558,007 shares
12. Check if the Aggregate Amount in Row (11) Excludes
Certain Shares (See instructions) [ ]
13. Percent of Class Represented by Amount in Row (11)
19.9%
14. Type of Reporting Person (See instructions)
ΤN
 5
Schedule 13D/A
CUSIP No. 630079101 Page 5 of 7 Pages
1. Names of Reporting Person
S.S. OR I.R.S. Identification No. of Above Persons
Spurgeon Corporation
2. Check the Appropriate Box if a Member of a Group (See
instructions)
(a) [ ]
(b) [ ]
3. SEC Use Only
4. Source of Funds (See instructions)
5. Check if Disclosure of Legal Proceedings is Required
Pursuant to Items 2(d) or 2(e) [ ]
6. Citizenship or Place of Organization
Illinois Corporation
             7 Sole Voting Power
             0
Number of
Shares
Beneficially 8 Shared Voting Power
            3,285,195 shares
Owned by
Each
Reporting 9 Sole Dispositive Power
              0
Person
With
            10 Shared Dispositive Power
```

3,285,195 shares

- 11. Aggregate Amount Beneficially Owned by Each Reporting
  Person
  3,285,195 shares

  12. Check if the Aggregate Amount in Row (11) Excludes
  Certain Shares (See instructions) [ ]
- 13. Percent of Class Represented by Amount in Row (11)

18.4%

14. Type of Reporting Person (See instructions)  ${\it CO}$ 

6
Page 6 of 7 Pages

The undersigned hereby amends its Schedule 13D as filed on September 19, 2003 and amended on April 6, 2004 relating to the Common Stock of Nanophase Technologies Corporation. Unless otherwise indicated, all capitalized terms used herein but not defined herein shall have the same meaning as set forth in the Schedule 13D. Except as set forth herein, the Schedule 13D remains unchanged.

Item 5. Interest in Securities of the Issuer

- (a) As of the date of this filing, Grace exercised its warrants for 453,001 shares of Common Stock at an exercise price of \$4.415, and beneficially own 2,985,195 shares of Common Stock, representing approximately 16.7% of the outstanding shares of Common Stock. Grace Investments beneficially owns 300,000 shares of Common Stock, representing approximately 1.7% of the outstanding shares of Common Stock. As general partner of Grace and Grace Investments, Spurgeon may be deemed the beneficial owner of 3,285,195 shares of Common Stock, or 18.4% of the outstanding shares of Common Stock, although they otherwise disclaim beneficial ownership. As general partner of Grace and Grace Investments, Whitmore may be deemed the beneficial owner of 3,285,195 shares of Common Stock, and 272,812 shares of Common Stock as direct beneficial owner, or 19.9% of the outstanding shares of Common Stock.
- (b) Grace: shared voting power (with Whitmore and Spurgeon)

2,985,195 Shares of Common Stock

Grace Investments: shared voting power (with Whitmore and Spurgeon)

300,000 Shares of Common Stock

Whitmore: shared voting power (with Grace, Grace Investments and Spurgeon)
3,285,195 Shares of Common Stock;
and
sole voting power
272,812 Shares of Common Stock

Spurgeon: shared voting power (with Grace, Grace

Investments, and Whitmore)
3,285,195 Shares of Common Stock

7
Page 7 of 7 Pages

SIGNATURE

After reasonable inquiry and to the best of its knowledge and belief, the undersigned certifies that the information set forth in this Statement with respect to it is true, complete and correct.

Dated: September 3, 2004

Grace Brothers, Ltd.

By: /s/ Bradford T. Whitmore Name: Bradford T. Whitmore Its: General Partner

Grace Investments, Ltd.

By: /s/ Bradford T. Whitmore Name: Bradford T. Whitmore Its: General Partner

Bradford T. Whitmore

By: /s/ Bradford T. Whitmore Name: Bradford T. Whitmore

Spurgeon Corporation

By: /s/ Jerald A. Trannel Name: Jerald A. Trannel Its: Vice President