

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

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SCHEDULE 13D  
(RULE 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT  
TO RULE 13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO  
RULE 13d-2(a)

Nanophase Technologies Corporation

-----  
(Name of Issuer)

Common Stock, no par value per share

-----  
(Title of Class of Securities)

630079101

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(CUSIP Number)

Rachel M. Pernia  
Vice President and Controller  
Harris & Harris Group, Inc.  
One Rockefeller Plaza  
Suite 1430  
New York, New York 10020  
(212) 332-3600

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(Name, Address and Telephone Number of Person Authorized  
to Receive Notices and Communications)

Copy to:

Daniel E. Stoller, Esq.  
Skadden, Arps, Slate, Meagher & Flom LLP  
919 Third Avenue  
New York, New York 10022  
(212) 735-3000

August 3, 1998

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(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 Rule 13d-1(e), 13d-1(f) or 13d-1(g), check  
the following box: [x]

CUSIP No. 630079101

1. NAME OF REPORTING PERSONS  
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (ENTITIES ONLY)

Harris & Harris Group, Inc.  
13-3119827

2. CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) \_\_\_\_  
(b) \_\_\_\_

3. SEC USE ONLY

4. SOURCE OF FUNDS

WC

5. CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e)

\_\_\_\_\_

6. CITIZENSHIP OR PLACE OF ORGANIZATION

New York

NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH

7. SOLE VOTING POWER 730,916 shares

8. SHARED VOTING POWER 0 shares

9. SOLE DISPOSITIVE POWER 730,916 shares

10. SHARED DISPOSITIVE POWER 0 shares

11. AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

730,916 shares

12. CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES

\_\_\_\_\_

13. PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

5.9 %

14. TYPE OF REPORTING PERSON

CO

ITEM 1. SECURITY AND ISSUER.

This Statement on Schedule 13D (the "Schedule 13D") relates to the common stock, no par value (the "Common Stock"), of Nanophase Technologies Corporation (the "Issuer"), a corporation originally incorporated in Illinois and reincorporated in Delaware in December 1997. The address of the principal executive offices of the Issuer is 453 Commerce Street, Burr Ridge, Illinois 60521.

ITEM 2. IDENTITY AND BACKGROUND.

- (a) Harris & Harris Group, Inc. ("Harris & Harris").
- (b) One Rockefeller Plaza, Suite 1430, New York, New York 10020.
- (c) Venture capital investment company, operating as a Business Development Company under the Investment Company Act of 1940, as amended.
- (d) Neither Harris & Harris nor any of its officers or directors was, during the last five years, convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) Neither Harris & Harris nor any of its officers or directors was, during the last five years, a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and, as a result of such proceeding, was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, Federal or State securities laws or finding any violation with respect to such laws.

(f) Organized and existing under the laws of the State of New York.

The names, business addresses, present principal occupations or employments and citizenships of the directors and officers of Harris & Harris are set forth in Schedule A hereto.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

Harris & Harris used \$1,626,204 to acquire the shares of the Issuer's Common Stock it now holds. All funds were provided from working capital.

ITEM 4. PURPOSE OF TRANSACTION.

Harris & Harris originally acquired all shares of Common Stock reported in this Schedule 13D for investment purposes, and previously reported its beneficial ownership of such shares on Schedule 13G. The most recent Schedule 13G filed by Harris & Harris with respect to such shares is dated February 12, 1998.

Harris & Harris is now reporting its beneficial ownership of the shares of Common Stock on Schedule 13D because it has become increasingly concerned about the Issuer's financial performance and the depressed value of the Issuer's shares of Common Stock. Harris & Harris believes that the Issuer's management has not performed well and believes that the Issuer should seek a new Chief Executive Officer. Harris & Harris intends to continue to communicate its concerns to the Issuer, and may seek to engage in discussions with the Issuer's management and Board of Directors with respect to means of enhancing value for the benefit of all shareholders.

In addition, Harris & Harris may discuss its concerns about the Issuer's financial performance, management and depressed stock price with other shareholders of the Issuer and other third parties. Such discussions with the Issuer, the Issuer's shareholders and other third parties may relate to matters specified in clauses (a) through (j) of Item 4 of Schedule 13D. Harris & Harris has no present intention to seek control of the Issuer or to participate in the management of the Issuer.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER.

(a) The aggregate number and percentage of shares of Common Stock to which this Schedule 13D relates is 730,916 shares, constituting 5.9% of the 12,393,039 shares of Common Stock issued and outstanding on June 30, 1998.

(b) Harris & Harris has sole voting power and sole dispositive power over all 730,916 shares of Common Stock.

(c) During the past 60 days, Harris & Harris has not engaged in any transactions with respect to the Common Stock.

(d) Not applicable.

(e) Not applicable.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER.

None.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.

None.

SIGNATURES

After reasonable inquiry and to the best knowledge and belief of the entity set forth below, such entity certifies that the information

set forth in this Statement is true, complete, and correct.

August 3, 1998

HARRIS & HARRIS GROUP, INC.

By: /s/ Rachel M. Pernia

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Rachel M. Pernia  
Vice President and Controller

Schedule A

Information Concerning Directors and Officers of  
Harris & Harris Group, Inc.

CHARLES E. HARRIS - Chairman of the Board and Chief Executive Officer

- a. Principal Occupation or Employment: Chairman of the Board and Chief Executive Officer of Harris & Harris Group, Inc.
- b. Business Address: Harris & Harris Group, Inc.  
One Rockefeller Plaza, Suite 1430  
New York, New York 10020
- c. Citizenship: United States

MEL P. MELSHEIMER - President, Chief Operating Officer and Chief Financial Officer

- a. Principal Occupation or Employment: President, Chief Operating Officer and Chief Financial Officer of Harris & Harris Group, Inc.
- b. Business Address: Harris & Harris Group, Inc.  
One Rockefeller Plaza, Suite 1430  
New York, New York 10020
- c. Citizenship: United States

RACHEL M. PERNIA - Vice President, Controller, Treasurer and Secretary

- a. Principal Occupation or Employment: Vice President, Controller, Treasurer and Secretary of Harris & Harris Group, Inc.
- b. Business Address: Harris & Harris Group, Inc.  
One Rockefeller Plaza, Suite 1430  
New York, New York 10020
- c. Citizenship: United States

DR. C. WAYNE BARDIN - Director

- a. Principal Occupation or Employment: President of Thyreos Corporation, a pharmaceutical company
- b. Business Address: Thyreos Corporation  
19 East 88th Street  
New York, New York 10128
- c. Citizenship: United States

DR. PHILLIP A. BAUMAN - Director

- a. Principal Occupation or Employment: Orthopedic Surgeon
- b. Business Address: Orthopedic Associates of New York  
345 West 58th Street  
New York, New York 10019
- c. Citizenship: United States

G. MORGAN BROWNE - Director

- a. Principal Occupation or Employment: Administrative Director of Cold Spring Harbor Laboratory, a private not-for-profit institution conducting research and education programs in the fields of molecular biology and genetics
- b. Business Address: Cold Spring Harbor Laboratory  
One Bungtown Road  
Cold Spring Harbor, New York 11724
- c. Citizenship: United States

HARRY E. EKBLUM - Director

- a. Principal Occupation or Employment: Partner in Ekblom & Ekblom LLC, a law firm
- b. Business Address: Ekblom & Ekblom LLC  
110 Whitehall Street  
New York, New York 10004
- c. Citizenship: United States

DUGALD A. FLETCHER - Director

- a. Principal Occupation or Employment: President of Fletcher & Company, Inc., a management consulting firm
- b. Business Address: Fletcher & Company, Inc.  
28 Shelter Lane  
Locust Valley, New York 11560
- c. Citizenship: United States

GLENN E. MAYER - Director

- a. Principal Occupation or Employment: Senior Vice President of the Investment Banking Division of Reich & Company, a division of Fahnestock & Company, investment banking
- b. Business Address: Fahnestock & Company  
780 Third Avenue  
New York, New York 10017
- c. Citizenship: United States

WILLIAM R. POLK - Director

- a. Principal Occupation or Employment: Self-employed consultant
- b. Business Address: MAS St. Antoine  
669 Chemin de la Sine  
06140 Vence Alpes  
Maritimes  
France

c. Citizenship: United States

JAMES E. ROBERTS - Director

a. Principal Occupation or Employment: Vice Chairman of Trenwick American Reinsurance Corporation, a reinsurance company

b. Business Address: Trenwick America Reinsurance Corporation  
One Station Place/Metro Center  
Stamford, Connecticut 06902

c. Citizenship: United States