

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

SCHEDULE 13G

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES
13d-1(b) (c), AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO
RULE 13d-2(b)
UNDER THE SECURITIES EXCHANGE ACT OF 1934

NANOPHASE TECHNOLOGIES CORPORATION

(Name of Issuer)

COMMON STOCK, PAR VALUE \$.01 PER SHARE

(Title of Class and Securities)

630079101

(CUSIP Number)

JUNE 6, 2001

(Date of Event Which Requires Filing of this
Statement)

Check the appropriate box to designate the rule pursuant to
which this
Schedule is filed:

() Rule 13d-1(b)

(x) Rule 13d-1(c)

() Rule 13d-1(d)

*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 the disclosures provided
in a prior cover page.

The information required in 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).

SCHEDULE 13G

(1) NAMES 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) (X)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION

NEW YORK

(5) SOLE VOTING POWER

NUMBER OF SHARES	<u>705,916</u>
BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	(6) SHARED VOTING POWER
	<u>0</u>
	(7) SOLE DISPOSITIVE POWER
	<u>705,916</u>
	(8) SHARED DISPOSITIVE POWER
	<u>0</u>

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

705,916

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 9 EXCLUDES
CERTAIN SHARES (See Instructions)

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

5.18%

(12) TYPE OF REPORTING PERSON (See Instructions)

CO

SCHEDULE 13G

(1) NAMES OF REPORTING PERSONS
I.R.S. IDENTIFICATION NOS. OF ABOVE PERSONS (entities only)

Mel P. Melsheimer

(2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP:

(a)
(b)

(3) SEC USE ONLY

(4) CITIZENSHIP OR PLACE OF ORGANIZATION

UNITED STATES

(5) SOLE VOTING POWER

NUMBER OF SHARES	<u>25,000</u>
BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	(6) SHARED VOTING POWER
	<u>0</u>
	(7) SOLE DISPOSITIVE POWER
	<u>25,000</u>
	(8) SHARED DISPOSITIVE POWER

(9) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

25,000

(10) CHECK BOX IF THE AGGREGATE AMOUNT IN ROW 9 EXCLUDES CERTAIN SHARES (See Instructions) []

(11) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9

0.18%

(12) TYPE OF REPORTING PERSON (See Instructions)

IN

Item 1(a). Name of Issuer:

Nanophase Technologies Corporation (the "Company")

Item 1(b). Address of Issuer's Principal Executive Offices:

1319 Marquette Drive
Romeoville, Illinois 60446

Item 2(a). Name of Persons Filing:

This Schedule 13G is being jointly filed by Harris & Harris Group, Inc. ("Harris & Harris") and Mel P. Melsheimer, President, Chief Operating Officer and Chief Financial Officer of Harris & Harris (collectively, the "Reporting Persons"), with respect to shares of common stock, par value \$.01 per share (the "Common Stock"), of the Company.

Item 2(b). Address of Principal Business Office:

The principal business address of each of the Reporting Persons is:

One Rockefeller Plaza
Suite 1430
New York, New York 10020

Item 2(c). Citizenship:

Harris & Harris is a venture capital investment company, incorporated in the state of New York, and operating as a Business Development Company under the Investment Company Act of 1940. Mr. Melsheimer is a citizen of the United States.

Item 2(d). Title of Class of Securities:

Common Stock, par value \$.01 per share.

Item 2(e). CUSIP Number:

630079101

Item 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check whether the person filing is a:

Not Applicable.

This Schedule 13G is filed pursuant to Rule 13d-1(c).

Item 4. Ownership:

Information concerning the number and percentage of shares of the Company Common Stock beneficially owned by each Reporting Person, and the number of such shares as to which each Reporting Person has sole or shared voting power and sole or shared dispositive power is set forth on pages 2 and 3 of this Schedule 13G.

Item 5. Ownership of Five Percent or Less of Class:

Not Applicable.

Item 6. Ownership of More than Five Percent on Behalf of Another Person:

Not Applicable.

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reported on by the Parent Holding Company.

Not Applicable.

Item 8. Identification and Classification of Members of the Group.

Not Applicable.

Item 9. Notice of Dissolution of Group.

Not Applicable.

Item 10. Certifications.

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Date: June 7, 2001

Harris & Harris Group, Inc.

By:/s/ Mel P. Melsheimer
Mel P. Melsheimer
President, Chief Operating
Officer and Chief
Financial Officer

By:/s/ Mel P. Melsheimer
Mel P. Melsheimer