

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-7010

Mail Stop 4631

November 6, 2009

Mr. Frank Cesario Chief Financial Officer Nanophase Technologies Corporation 1319 Marquette Drive Romeoville, Illinois 60446

Re: Nanophase Technologies Corporation

Form 10-K for the Fiscal Year Ended December 31, 2008 Form 10-K/A for the Fiscal Year Ended December 31, 2008 Form 10-Q for the Fiscal Quarter Ended March 31, 2009 Form 10-Q/A for the Fiscal Quarter Ended March 31, 2009 Form 10-Q for the Fiscal Quarter Ended June 30, 2009

File No. 000-22333

Dear Mr. Cesario:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

If you have any further questions regarding our review of your filings, please direct them to Dale Welcome, Staff Accountant, at (202) 551-3865 or, in his absence, to the undersigned at (202) 551-3768.

Sincerely,

John Cash Accounting Branch Chief