



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

DIVISION OF
CORPORATION FINANCE

November 1, 2011

Via Facsimile

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

**Re: Nanophase Technologies Corporation
Form 10-K for the Fiscal Year Ended December 31, 2010
Filed March 22, 2011
File No. 0-22333**

Dear Mr. Cesario:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2010

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 10

Overview, page 11

1. We note your statement in the last sentence that you expect to attract customers to help you achieve growth in "certain markets in 2011 and beyond". In future filings please discuss and analyze the markets in which you expect to achieve future growth.

Item 9A. Controls and Procedures, page 14

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Evaluation of Disclosure Controls and Procedures, page 14

2. Your management's effectiveness conclusion contains a materiality qualifier. Please note that the definition of disclosure controls and procedures in Rules 13a-15(e) and 15d-15(e) does not limit the effectiveness to only "material" information, but rather applies to "information." Please confirm to us that your management's effectiveness conclusions here and in Item 4 of your Forms 10-Q for the quarters ended June 30, 2011 and March 30, 2011 are based on the definition of disclosure controls and procedures as set forth in the Rules 13a-15(e) and 15d-15(e). Please comply with this comment in future filings.

Item 11. Executive Compensation, page 21

Summary Compensation Table, page 22

3. We note your disclosure in footnote 1 to the Summary Compensation Table. In future filings, please further state how the board determined the bonus amounts payable to each named executive officer.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Chambre Malone at (202) 551-3262 if you have questions regarding these comments.

Sincerely,

/s/ John Cash

John Cash
Accounting Branch Chief