

Mail Stop 6010

May 20, 2008

Seth H. Hoogasian
Senior Vice President, General Counsel and Secretary
Thermo Fisher Scientific, Inc.
81 Wyman Street
P.O. Box 9046
Waltham, MA 02454

**Re: Thermo Fisher Scientific, Inc.
Annual Report on Form 10-K for the fiscal year ended December 31, 2007
File No. 001-08002**

Dear Mr. Hoogasian:

We have limited our review of your filing to those issues we have addressed in our comment. Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comment or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Item 11. Executive Compensation, page 54

1. We refer to the disclosure under the caption "Annual Cash Incentive Bonus" beginning on page 12 of the proxy statement that you have incorporated by reference into your Form 10-K. It appears that the amounts paid to your named executive officers as annual cash incentive bonuses under your 2003 Annual Incentive Award Plan should have been disclosed under the caption "Non-Equity Incentive Plan Compensation" in your Summary Compensation Table pursuant to Item 402(c)(2)(vii) of Regulation S-K rather than under the caption "Bonus" (refer also to Item 402(a)(6)(iii)), and that the threshold, target and maximum amounts related to those awards should have been disclosed in your "Grants of Plan Based Awards For 2007" table pursuant to Item 402(d)(2)(iii) of Regulation S-K. Please provide such disclosure in your future filings, to the extent then applicable, or provide us with your analysis as to why such information should not have been included in the referenced tables in accordance with the referenced Item requirements.

Seth H. Hoogasian
Thermo Fisher Scientific, Inc.
May 20, 2008
Page 2

Please respond to our comment within 10 business days or tell us when you will provide us with a response. Please understand that we may have additional comments after reviewing your response to our comment.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comment, please provide, in writing, a 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

Please contact Joe McCann at (202) 551-6262 or me at (202) 551-3635 with any questions.

Sincerely,

Tim Buchmiller
Senior Attorney