



DIVISION OF  
CORPORATION FINANCE

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

July 17, 2012

Via E-mail

Mr. Seth H. Bagshaw  
Vice President, Chief Financial Officer & Treasurer  
MKS Instruments, Inc.  
2 Tech Drive, Suite 201  
Andover, Massachusetts 01810

RE: **MKS Instruments, Inc.**  
**Form 10-K for the fiscal year ended December 31, 2011**  
**Filed February 24, 2012**  
**Form 10-K for the fiscal year ended December 31, 2010**  
**Filed February 25, 2011**  
**File No. 000-23621**

Dear Mr. Bagshaw:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings 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. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Martin James

Martin James  
Senior Assistant Chief Accountant

cc via e-mail: Pam Massero