

THERMO FISHER SCIENTIFIC INC.  
 Form S-8  
 September 16, 2009

As filed with the Securities and Exchange Commission on September 16, 2009

Registration No. 333-\_\_\_\_\_

**UNITED STATES  
 SECURITIES AND EXCHANGE COMMISSION  
 Washington, D.C. 20549  
 FORM S-8  
 REGISTRATION STATEMENT UNDER  
 THE SECURITIES ACT OF 1933  
 THERMO FISHER SCIENTIFIC INC.  
 (Exact Name of Registrant as Specified in Its Charter)**

**Delaware**  
 (State or Other Jurisdiction of Incorporation  
 or Organization)

**04-2209186**  
 (I.R.S. Employer Identification No.)

**81 Wyman Street  
 Waltham, Massachusetts 02451**  
 (Address of Principal Executive Offices)(Zip code)

**Thermo Fisher Scientific Inc. 401(k) Retirement Plan**  
 (Full Title of the Plan)

**Seth H. Hoogasian, Senior Vice President, General Counsel and Secretary  
 Thermo Fisher Scientific Inc.**

**81 Wyman Street  
 Waltham, Massachusetts 02451**  
 (Name and Address of Agent For Service)

**(781) 622-1000**  
 (Telephone Number, Including Area Code, of Agent For Service)

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
 (Do not check if a smaller reporting company)

**CALCULATION OF REGISTRATION FEE**

Title of Securities to be	Amount to be	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
<b>Registered</b>	<b>Registered(1)</b>		<b>Price</b>	
Common Stock, \$1.00 par value per share (including the associated Preferred Stock Purchase Rights)	1,000,000 shares	\$ 45.25(2)	\$ 45,250,000(2)	\$ 2,525

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions. In addition, pursuant to Rule 416(c) under the Securities Act of 1933, this registration statement also covers an indeterminate amount of interests to be offered or sold pursuant to the employee benefit plan described herein.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended, and based upon the

average of the  
high and low  
prices of the  
Registrant's  
Common Stock  
as reported on  
the New York  
Stock Exchange  
on September 9,  
2009.

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**PART I**  
**INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS**

**Item 1. Plan Information.**

The information required by Item 1 is included in documents sent or given to participants in the plan covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act of 1933, as amended (the Securities Act ).

**Item 2. Registrant Information and Employee Plan Annual Information.**

The written statement required by Item 2 is included in documents sent or given to participants in the plan covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act.

**PART II**  
**INFORMATION REQUIRED IN THE REGISTRATION STATEMENT**

**Item 3. Incorporation of Documents by Reference.**

Thermo Fisher Scientific (the Registrant ) and the Thermo Fisher Scientific Inc. 401(k) Retirement Plan (the Plan ) are subject to the informational and reporting requirements of Sections 13(a), 13(c), 14, and 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act ), and in accordance therewith file reports, proxy statements and other information with the Securities and Exchange Commission (the Commission ). The following documents, which are on file with the Commission, are incorporated in this registration statement by reference:

(a) The Registrant s latest annual report and the Plan s latest annual report filed pursuant to Section 13(a) or 15(d) of the Exchange Act or the latest prospectus filed pursuant to Rule 424(b) under the Securities Act that contains audited financial statements for the registrant s latest fiscal year for which such statements have been filed.

(b) All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the document referred to in (a) above.

(c) The description of the securities contained in the Registrant s registration statements on Form 8-A filed under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents subsequently filed by the Registrant and the Plan pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be part hereof from the date of the filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

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**Item 4. Description of Securities.**

Not applicable.

**Item 5. Interests of Named Experts and Counsel.**

Not applicable.

**Item 6. Indemnification of Directors and Officers.**

The following summary is qualified in its entirety by reference to the complete Delaware General Corporation Law ( DGCL ) and the Registrant s Third Amended and Restated Certificate of Incorporation ( Charter ) and the Registrant s By-Laws.

The Registrant s Charter and By-Laws provide that each person who was or is made a party or is threatened to be made a party to or is involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was a director or officer of the registrant is indemnified and held harmless by the registrant to the fullest extent authorized by the DGCL against all expense, liability and loss (including attorneys fees, judgments, fines and amounts paid or to be paid in settlement) actually and reasonably incurred or suffered by such person in connection with such proceeding.

Under Section 145 of the DGCL, a Delaware corporation must indemnify its present or former directors and officers against expenses (including attorney s fees) actually and reasonably incurred to the extent that the officer or director has been successful on the merits or otherwise in defense of any action, suit or proceeding brought against him or her by reason of the fact that he or she is or was a director or officer of the corporation. The DGCL generally permits a Delaware corporation to indemnify directors and officers against expenses, judgments, fines and amounts paid in settlement of any action or suit for actions taken in good faith and in a manner they reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action, which they had no reasonable cause to believe was unlawful.

The Registrant is governed by the provisions of the DGCL permitting the registrant to purchase director s and officer s insurance to protect itself and any director, officer, employee or agent of the registrant. The registrant has an insurance policy which insures the directors and officers of the registrant and its subsidiaries against certain liabilities which might be incurred in connection with the performance of their duties. The registrant also has indemnification agreements with its directors and officers that provide for the maximum indemnification allowed by law.

**Item 7. Exemption from Registration Claimed.**

Not applicable.

**Item 8. Exhibits.**

The Exhibit Index immediately preceding the exhibits is incorporated herein by reference.

The Registrant will submit or has submitted the Plan to the Internal Revenue Service (the IRS ) in a timely manner and has made or will make all changes required by the IRS in order to qualify the Plan.

**Item 9. Undertakings.**

1. The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; *provided, however*, that paragraphs (i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

2. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

3. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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**SIGNATURES**

**The Registrant.** Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Waltham, Commonwealth of Massachusetts, on this 16th day of September, 2009.

THERMO FISHER SCIENTIFIC INC.

By: /s/ Seth H. Hoogasian  
 Seth H. Hoogasian  
 Senior Vice President, General Counsel and  
 Secretary

**POWER OF ATTORNEY AND SIGNATURES**

We, the undersigned officers and directors of Thermo Fisher Scientific Inc., hereby severally constitute and appoint Peter M. Wilver, Anthony H. Smith and Seth H. Hoogasian, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Thermo Fisher Scientific Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<b>Signature</b>	<b>Title</b>	<b>Date</b>
/s/ Marijn E. Dekkers Marijn E. Dekkers	President, Chief Executive Officer and Director (Principal executive officer)	September 16, 2009
/s/ Peter M. Wilver Peter M. Wilver	Senior Vice President and Chief Financial Officer (Principal financial officer)	September 16, 2009
/s/ Peter E. Hornstra Peter E. Hornstra	Vice President and Chief Accounting Officer (Principal accounting officer)	September 16, 2009
/s/ Jim P. Manzi Jim P. Manzi	Chairman of the Board and Director	September 16, 2009
/s/ Michael A. Bell Michael A. Bell	Director	September 16, 2009

Signature	Title	Date
/s/ Tyler Jacks Tyler Jacks	Director	September 16, 2009
/s/ Stephen P. Kaufman Stephen P. Kaufman	Director	September 16, 2009
/s/ Judy C. Lewent Judy C. Lewent	Director	September 16, 2009
/s/ Thomas J. Lynch Thomas J. Lynch	Director	September 16, 2009
/s/ Peter J. Manning Peter J. Manning	Director	September 16, 2009
/s/ William G. Parrett William G. Parrett	Director	September 16, 2009
/s/ Michael E. Porter Michael E. Porter	Director	September 16, 2009
/s/ Scott M. Sperling Scott M. Sperling	Director	September 16, 2009
/s/ Elaine S. Ullian Elaine S. Ullian	Director	September 16, 2009

**The Plan.** Pursuant to the requirements of the Securities Act of 1933, the trustee or other persons who administer the Thermo Fisher Scientific Inc. 401(k) Retirement Plan have duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Waltham, Commonwealth of Massachusetts, on this 16th day of September, 2009.

THERMO FISHER SCIENTIFIC INC. 401(K)  
RETIREMENT PLAN

By: /s/ Seth H. Hoogasian  
Thermo Fisher Scientific Inc. Management  
Pension





**INDEX TO EXHIBITS**

Number	Description
4.1	Rights Agreement, dated as of September 15, 2005, by and between Thermo Electron Corporation and American Stock Transfer & Trust Company, as Rights Agent, which includes as Exhibit A, the Terms of Series B Junior Participating Preferred Stock, and as Exhibit B, the Form of Rights Certificate (filed as Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed September 16, 2005 [File No. 1-8002] and incorporated in this document by reference)
4.2	Amendment No. 1 to the Rights Agreement, dated as of May 7, 2006, between Thermo Electron Corporation and American Stock Transfer & Trust Company, as rights agent (filed as Exhibit 1.1 to the Registrant's Registration Statement on Form 8-A/A filed May 12, 2006 [File No. 1-8002] and incorporated in this document by reference)
23.1	Consent of PricewaterhouseCoopers LLP, independent registered public accounting firm
24	Power of attorney (included on the signature pages of this registration statement)
99.1	Thermo Fisher Scientific Inc. 401(k) Retirement Plan, as amended