As filed with the Securities and Exchange Commission on June 25, 2004 Registration No. 333-01893

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-3 POST-EFFECTIVE AMENDMENT NO. 1 To Registration Statement Under The Securities Act of 1933

THERMO ELECTRON CORPORATION (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 Number)

81 Wyman Street Waltham, Massachusetts 02454-9046 (Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Seth H. Hoogasian, Secretary Thermo Electron Corporation 81 Wyman Street P. O. Box 9046 Waltham, Massachusetts 02454-9046 (Name, address, including zip code, and telephone number, including area code, of agent for service)

(781) 622-1000

Approximate date of commencement of proposed sale to public:

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. []

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. []

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. []

If this form is post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. []______

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. []

This Post-Effective Amendment No. 1 on Form S-3 to the Registration Statement on Form S-3 (Reg. No. 333-01893) is being filed by the Registrant to remove from registration any of the securities that remain unsold or undistributed thereunder as of the date of the filing of this post-effective amendment. The securities were registered to permit their sale by the Thermo Electron Corporation Employees Stock Ownership Plan and Trust to the public or their distribution to the participants in the plan who elect to receive distribution in kind upon the termination of the plan. The plan has been terminated and has fulfilled it obligations with respect to the sale or distribution of such securities. As such, the Registrant hereby removes any remaining unsold or undistributed securities from registration and the registration is hereby terminated.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, Thermo Electron Corporation has duly caused this Post-Effective Amendment on Form S-3 to the Registration Statement on Form S-3 (Reg. No. 333-01893) to be signed on its behalf by the undersigned, thereunto duly authorized, in Waltham, Massachusetts, on this 25th day of June, 2004.

THERMO ELECTRON CORPORATION

By: /s/ Marijn E. Dekkers Marijn E. Dekkers President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment on Form S-3 to the Registration Statement on Form S-3 (Reg. No. 333-01893) has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title(s)</u>	<u>Date</u>
/s/ Marijn E. Dekkers Marijn E. Dekkers	President, Chief Executive Officer, and Director (Principal Executive Officer)	June 25, 2004
/s/ Theo Melas-Kyriazi Theo Melas-Kyriazi	Vice President, and Chief Financial Officer (Principal Financial Officer)	June 25, 2004
/s/ Peter E. Hornstra Peter E. Hornstra	Corporate Controller and Chief Accounting Officer (Principal Accounting Officer)	June 25, 2004
/s/ Jim P. Manzi Jim P. Manzi	_ Chairman of the Board and Director	June 25, 2004
/s/ John L. LaMattina John L. LaMattina	Director	June 25, 2004
/s/ Peter J. Manning Peter J. Manning	Director	June 25, 2004

/s/ Robert A. McCabe Robert A. McCabe	_ Director	June 25, 2004
/s/ Robert W. O'Leary Robert W. O'Leary	Director	June 25, 2004
/s/ Michael E. Porter Michael E. Porter	Director	June 25, 2004
/s/ Elaine S. Ullian Elaine S. Ullian	Director	June 25, 2004