

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 its 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.

/s/ Robert A. McCabe Director June 25, 2004
Robert A. McCabe

/s/ Robert W. O'Leary Director June 25, 2004
Robert W. O'Leary

/s/ Michael E. Porter Director June 25, 2004
Michael E. Porter

/s/ Elaine S. Ullian Director June 25, 2004
Elaine S. Ullian

