UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of Earliest Event Reported): May 1, 2008

Axcelis Technologies, Inc.

(Exact Name of Registrant as Specified in its Charter)

Delaware000-3094134-1818596(State or other jurisdiction of incorporation(Commission File Number)(IRS Employer Identification No.)

108 Cherry Hill Drive
Beverly, Massachusetts
(Address of principal executive offices)

01915

(Zip Code)

Registrant's Telephone Number, Including Area Code: (978) 787-4000

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 7.01. Regulation FD Disclosure.

On May 1, 2008, Axcelis Technologies, Inc., posted on its website a memorandum from Mary Puma, Chairman and Chief Executive Officer, regarding the application of a governance policy adopted by the Board of Directors following the director election results at the Annual Meeting of Shareholders held on May 1, 2008. A copy of the memorandum is furnished as Exhibit 99.1 to this Form 8-K.

Exhibit 99.1 shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities under that Section and shall not be deemed to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

Exhibit No. Description

99.1 Memorandum from the Chairman and Chief Executive Officer to Axcelis Technologies, Inc. dated May 1, 2008

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SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: May 1, 2008 Axcelis Technologies, Inc.

By: /s/ STEPHEN G. BASSETT

Stephen G. Bassett Executive Vice President and Chief Financial Officer



May 1, 2008

Dear Axcelis shareholder,

Today at Axcelis' Annual Meeting of Stockholders, Stephen R. Hardis, R. John Fletcher and H. Brian Thompson were re-elected to the Board of Directors. Stockholders also ratified the appointment of Ernst & Young LLP as the Independent Registered Public Accounting firm for the Company. In addition, a proposal seeking to change the Certificate of Incorporation to provide for the elimination of the classified board structure failed to receive the approval of the requisite 75% of the outstanding shares.

Directors Hardis, Fletcher, and Thompson received less than a majority of the stockholder vote in support of their election. We believe that these results were impacted by the recommendation by Institutional Shareholder Services that stockholders withhold their votes for the election of the director nominees due to the failure of the Board to recommend in favor of the proposed change to the Certificate of Incorporation. Under one of Axcelis' corporate governance policies, each of these directors will offer to resign from the Board. The Nominating and Governance Committee will consider each of these resignations and make a recommendation to the full Board on the acceptance or rejection of the resignations. The Board will then act on the recommendation as they determine appropriate and in the best interests of shareholders. Axcelis will report on the Board's decision once it is made.

Sincerely,

Mary G. Puma
Chairman of the Board,
Chief Executive Officer and President