

**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 19, 2009**

**Axcelis Technologies, Inc.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction  
of incorporation)

**000-30941**  
(Commission  
File Number)

**34-1818596**  
(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:

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

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**Item 2.05 Costs Associated with Exit or Disposal Activities.**

On May 19, 2009, Axcelis Technologies, Inc. ("Axcelis") communicated a plan of termination to employees under which material charges will be incurred under generally accepted accounting principles applicable to Axcelis. These reductions were required to better align Axcelis' operating costs with near term revenue expectations in light of the severity of the downturn in semiconductor capital equipment industry. The reductions are estimated to yield savings of \$25 million annually.

Axcelis anticipates recording restructuring charges in connection with one-time termination benefits in the range of \$5 million to \$6 million during the second quarter of 2009. These benefits will be paid in cash to employees, over their severance periods. No other type of costs are expected to be incurred in connection with this action.

On May 20, 2009, the Company issued a press release disclosing the plan of termination. A copy of the Company's press release is furnished with this Current Report on Form 8-K as Exhibit 99.1 and incorporated herein by reference.

**Item 9.01 Financial Statements and Exhibits**

(c) Exhibits

| <u>Exhibit No.</u> | <u>Description</u>               |
|--------------------|----------------------------------|
| 99.1               | Press Release dated May 20, 2009 |

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 26, 2009

Axcelis Technologies, Inc.

By: /s/ STEPHEN G. BASSETT

Stephen G. Bassett

Executive Vice President and Chief Financial Officer

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## **AXCELIS ANNOUNCES WORKFORCE REDUCTION**

### *Workforce Reduction Aimed at Reducing Operating Costs and Improving Financial Performance*

BEVERLY, Mass., May 20, 2009 — Axcelis Technologies, Inc., (Nasdaq:ACLS) a leading supplier of ion implantation and cleaning systems, today announced a global workforce reduction of approximately 235, or 20% of its employees, since year end 2008.

The company had previously implemented a series of cost saving activities including furloughs, plant shutdowns and layoffs. Given the severity of this downturn, these additional actions were required to better align operating costs with near term revenue expectations. The reductions are estimated to yield savings of \$25 million annually. As a result, Axcelis anticipates recording restructuring charges in the range of \$5 million to \$6 million during the second quarter of 2009.

Commenting on the company's announcement, Chairman and CEO Mary Puma said, "This is a difficult, but necessary decision due to the continued weakness in the semiconductor industry. We are actively working on rigorous cost containment to reduce our operating expenses and cash outlay, while continuing to make strategic investments in our Optima implant and Integra RS cleaning product lines. These actions will ensure that we will be able to respond to customer demand when the market rebounds."

### **Safe Harbor Statement**

This document contains forward-looking statements under the SEC safe harbor provisions. These statements, which include our estimations of the financial benefits of the restructuring are based on management's current expectations and should be viewed with caution. They are subject to various risks and uncertainties, many of which are outside the control of the Company, including the amount and timing of expenses associated with the restructuring, and the continuing demand for semiconductor equipment, relative market growth, continuity of business relationships with and purchases by major customers, competitive pressure on sales and pricing, increases in material and other production costs that cannot be recouped in product pricing and global economic, political and financial conditions. These risks and other risk factors relating to Axcelis are described more fully in the most recent Form 10-K filed by Axcelis and in

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other documents filed from time to time with the Securities and Exchange Commission.

### **About Axcelis Technologies, Inc.**

Axcelis Technologies, Inc., headquartered in Beverly, Massachusetts, provides innovative, high-productivity solutions for the semiconductor industry. Axcelis is dedicated to developing enabling process applications through the design, manufacture and complete life cycle support of ion implantation and cleaning systems. The company's Internet address is: [www.axcelis.com](http://www.axcelis.com).

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