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): January 21, 2017

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:

- 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.

Barbara J. Lundberg, a member of the Board of Directors of Axcelis Technologies, Inc., died on January 21, 2017. Ms. Lundberg had been a Director since 2014 and served as chairman of the Audit Committee of the Company's Board of Directors.

Due to the death of Ms. Lundberg, the Company's Board of Directors currently consists of 7 independent directors and Ms. Puma, the Company's chief executive officer. The Audit Committee currently consists of two independent directors. In the next weeks, the Board of Directors will set the number of seats for election at the 2017 annual meeting and will address the chairmanship and composition of the Audit Committee.

SIGNATURE

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: January 24, 2017 Axcelis Technologies, Inc.

By: /s/ Lynnette C. Fallon

Lynnette C. Fallon

Executive Vice President HR/Legal and General Counsel