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 5, 2005

NANOGEN, INC.

(Exact name of registrant specified in its charter)

Delaware (State or other jurisdiction

000-23541 (Commission File Number) 33-0489621 (I.R.S. Employer

of incorporation)

Identification No.)

10398 Pacific Center Court, San Diego, California (Address of principal executive offices)

92121 (Zip Code)

Registrant s telephone, including area code: (858) 410-4600

(Former name and 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):

- " 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))

Item 1.01. Entry into a Material Definitive Agreement.

On January 7, 2005, Nanogen, Inc. (Nanogen or the Company) announced the appointment of Robert Saltmarsh as its Chief Financial Officer. Mr. Saltmarsh s appointment was effective January 5, 2005. Nanogen and Mr. Saltmarsh entered into an employment agreement dated December 20, 2004 (the Employment Agreement) regarding the terms of Mr. Saltmarsh s employment. A copy of the Employment Agreement is attached hereto as Exhibit 10.1 and the following summary is qualified in its entirety by reference to the Employment Agreement.

The Employment Agreement provides that Mr. Saltmarsh will receive an initial annual base salary of \$240,000 and an annual achievement bonus of up to fifty percent (50%) of his base salary (Achievement Bonus). In addition, Mr. Saltmarsh is entitled to receive a transaction bonus equal to fifty percent (50%) of his base salary upon the occurrence of certain corporate transactions defined in the Employment Agreement (Transaction Bonus). In the event Mr. Saltmarsh receives a Transaction Bonus, no Achievement Bonus will be paid to Mr. Saltmarsh in the year in which such Transaction Bonus is paid.

The Employment Agreement also provides that upon the occurrence of certain transactions involving a change in control, all of Mr. Saltmarsh s stock options received before the date of the transaction will accelerate and become exercisable in full. Furthermore, the Board of Directors may, in its sole discretion, elect to accelerate the vesting of all or a portion of Mr. Saltmarsh s stock options upon the occurrence of certain other corporate transactions.

Pursuant to the Employment Agreement, if Mr. Saltmarsh s employment is terminated by the Company without cause or in the event of a constructive termination, the Company will continue to pay Mr. Saltmarsh s base salary for six (6) months from the date of such termination as severance compensation. The Employment Agreement has an initial term of three (3) years, subject to automatic renewal for successive additional three (3) year terms. In the event the Employment Agreement is not renewed, Mr. Saltmarsh will become entitled to salary continuation payments for a period of six (6) months.

In connection with his appointment as Chief Financial Officer, on January 5, 2005, the Compensation Committee of the Board of Directors granted Mr. Saltmarsh options to purchase 150,000 shares of the Company s common stock. The options vest in equal monthly installments over a four year period.

Item 5.02. Departure of Directors or Principal Officers; Election of Directors; Appointment of Principal Officers.

On January 7, 2005, Nanogen issued a press release announcing the appointment of Robert Saltmarsh as Chief Financial Officer. A copy of the press release is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

Mr. Saltmarsh, 54, has served as Nanogen s Vice President of Corporate Development since September 2004. Prior to joining Nanogen, Mr. Saltmarsh consulted for a series of start-up companies from June 2002 to August 2004 and taught entrepreneurial finance at the University of California at Riverside from January to June 2004. Previously, he was

Chief Financial Officer of Riffage.com from January 2000 to December 2000. Mr. Saltmarsh also served as Vice President of Finance and Treasurer at Silicon Graphics, Inc. from January 1996 to January 2000, and prior to that was Vice President of Finance and Treasurer at Apple Computer.

In connection with Mr. Saltmarsh s appointment, Nanogen and Mr. Saltmarsh entered into an Employment Agreement, a description of which is set forth in Item 1.01 of this Current Report on Form 8-K and incorporated into this Item 5.02 by reference.

Item 9.01. Financial Statements and Exhibits.

- (c) Exhibits. The following documents are filed as exhibits to this report:
 - 10.1 Employment Agreement by and between Nanogen, Inc. and Robert Saltmarsh, dated December 20, 2004.
 - 99.1 Press Release of Nanogen, Inc., dated January 7, 2005.

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.

NANOGEN, INC.

Date: January 11, 2005 By: /s/ Nicholas J. Venuto

Name: Nicholas J. Venuto
Title: Senior Director, Finance

EXHIBIT INDEX

Exhibit

Number	Document Description
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