

NOVA MEASURING INSTRUMENTS LTD

Form 6-K

December 27, 2007

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 6-K

Report of Foreign Private Issuer
Pursuant to Rule 13a-16 or 15d-16
of the Securities Exchange Act of 1934

Date of Report: December 27, 2007

Commission File No.: 000-30688

NOVA MEASURING INSTRUMENTS LTD.

Building 22 Weizmann Science Park, Rehovot

P.O.B 266

Israel

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Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F:

Form 20-F Form 40-F

Indicate by check mark whether the registrant is submitting this Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): _____

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to 12g3-2(b) under the Securities Exchange Act of 1934:

Yes No

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with 12g3-2(b):
N/A.

Attached hereto and incorporated by way of reference herein is a press release issued by the Registrant on, and dated, December 27, 2007, and entitled Nova to Present at the Needham 10th Annual Growth Stock Conference .

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, thereunto duly authorized.

NOVA MEASURING INSTRUMENTS LTD.
(the "Registrant")

By: /s/ Dror David

Dror David
Chief Financial Officer

Date: December 27, 2007

Company Contact:

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Company Press Release

Nova to Present at the

Needham 10th Annual Growth Stock Conference

Rehovot, Israel, December 27, 2007 Nova Measuring Instruments Ltd. (Nasdaq: NVMI), provider of leading edge stand alone metrology and the market leader of integrated metrology solutions to the semiconductor process control market, today announced that the Company's President & CEO, Mr. Gabi Seligsohn, is scheduled to present at 9:30am on Thursday, January 10th, 2008 at the upcoming Needham & Co. investor conference.

Mr. Seligsohn will also be holding one-on-one meetings with institutional investors at the conference as well as in New York throughout that week. Investors interested in scheduling a meeting should either contact Nova's investor relations team or their Needham sales representative.

Following are the conference details:

10th Annual Needham & Co. Growth Stock Conference
The New York Palace Hotel, 455 Madison Ave, New York, NY.
Presentation date and time: Thursday, January 10th, 2008 at 9:30 a.m. EST (6:30 a.m. PST)

An audio web-cast of the conference presentation will be available on Nova's Investor Relations section of the company's website at: www.nova.co.il.

About Nova

Nova Measuring Instruments Ltd. develops, produces and markets advanced integrated and stand alone metrology solutions for the semiconductor manufacturing industry. Nova is traded on the NASDAQ & TASE under the symbol NVMI. The Company's website is www.nova.co.il.
