NOVA MEASURING INSTRUMENTS LTD Form 6-K April 17, 2008

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: April 17, 2008 Commission File No.: 000-30688

NOVA MEASURING INSTRUMENTS LTD.

Building 22, Weizmann Science Park, Rehovot P.O.B 266 Israel

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 x 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 O No X

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 and entitled Nova Measuring Instruments Schedules 2008 First Quarter Results Conference Call for May 5, 2008 at 10:00 am EDT .

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: April 17, 2008

Company Contact: Dror David, Chief Financial Officer Nova Measuring Instruments Ltd. Tel: 972-8-938-7505 E-mail: <u>info@nova.co.il</u> <u>http://www.nova.co.il</u> Investor Relations Contacts: Ehud Helft / Kenny Green GK Investor Relations Tel: +1-646-201-9246 E-mail: <u>info@gkir.com</u>

Nova Measuring Instruments Schedules 2008 First Quarter Results Conference Call for May 5, 2008 at 10:00 am EDT

REHOVOT, Israel April 17, 2008 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, announced that it will release its results for the first quarter of 2008 before the market opens on May 5, 2008. In conjunction with this release, Nova will host a conference call later that same day at 10:00 am Eastern Time.

Mr. Gabi Seligsohn, President and Chief Executive Officer, and Mr. Dror David, Chief Financial Officer will review and discuss the results as well as other business developments, and will be available to answer questions.

To participate, please call one of the following teleconferencing numbers. Please begin by placing your calls 5 minutes before the conference call commences. If you are unable to connect using the toll-free numbers, please try the international dial-in number.

U.S. Dial-in Number: 1 888 281 1167 ISRAEL Dial-in Number: 03 918 0620 INTERNATIONAL Dial-in Number: +972 3 918 0620 At: 10:00 a.m. Eastern Time 7:00 a.m. Pacific Time 5:00 p.m. Israeli Time

The conference call will also be webcast live from a link on Nova s website at www.nova.co.il.

For those unable to participate in the conference call, there will be a replay available the day following the call on Nova s website at <u>www.nova.co.il</u>.

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 <u>www.nova.co.il</u>.