

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

August 21, 2009

**ORDER GRANTING CONFIDENTIAL TREATMENT
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

Nanometrics Incorporated

File No. 000-13470 - CF# 24017

Nanometrics Incorporated submitted an application under Rule 24b-2 requesting confidential treatment for information it excluded from the Exhibits to a Form 10-Q filed on August 11, 2009.

Based on representations by Nanometrics Incorporated that this information qualifies as confidential commercial or financial information under the Freedom of Information Act, 5 U.S.C. 552(b)(4), the Division of Corporation Finance has determined not to publicly disclose it. Accordingly, excluded information from the following exhibits will not be released to the public for the time period specified:

Exhibit 10.12	through August 11, 2019
Exhibit 10.13	through August 11, 2019

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority:

Pamela Howell
Special Counsel