NANOMETRICS INC Form DEF 14A April 07, 2014

SCHEDULE 14A (Rule 14A-101) INFORMATION REQUIRED IN PROXY STATEMENT SCHEDULE 14A INFORMATION Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant x Filed by a Party other than the Registrant " Check the appropriate box: "Preliminary Proxy Statement "Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2)) xDefinitive Proxy Statement "Definitive Additional Materials "Soliciting Material Pursuant to §240.14a-12

## NANOMETRICS INCORPORATED

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement if Other Than the Registrant)

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-1-

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-2-

NANOMETRICS INCORPORATED

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

TO THE STOCKHOLDERS OF NANOMETRICS INCORPORATED:

NOTICE IS HEREBY GIVEN that the annual meeting of stockholders of Nanometrics Incorporated, a Delaware corporation, will be held on Tuesday, May 20, 2014, at 8:00 a.m., local time, at our Corporate Headquarters located at 1550 Buckeye Drive, Milpitas, California 95035. At the annual meeting you will be asked to consider and vote upon the following:

1. A proposal to elect the Board's five nominees for director of Nanometrics, each to serve for a term of one year or until his successor has been duly elected and qualified.

2. A proposal to approve, as an advisory (non-binding) vote, the compensation paid to our executive officers, as disclosed in this Proxy Statement.

3. A proposal to ratify the appointment of PricewaterhouseCoopers LLP as Nanometrics' independent registered public accounting firm for the fiscal year ending December 27, 2014.

4. Such other business as may properly come before the annual meeting or any postponements or adjournments thereof.

These items are more fully described in the Proxy Statement accompanying this notice of annual meeting of stockholders.

Only stockholders of record at the close of business on March 27, 2014, are entitled to notice of and to vote at the annual meeting and any postponements or adjournments thereof. The Notice of Internet Availability of Proxy Materials is first being mailed to the stockholders of record on or about April 7, 2014.

All stockholders are cordially invited to attend the annual meeting in person. Whether or not you expect to attend the annual meeting, you are urged to mark, sign, date and return the proxy card that may be mailed to you or vote over the telephone or the Internet as instructed in the Notice of Internet Availability of Proxy Materials as promptly as possible to ensure your representation at the meeting. Any stockholder of record attending the annual meeting may vote in person even if that stockholder previously voted by proxy for the annual meeting.

BY ORDER OF THE BOARD OF DIRECTORS,

/s/ Bruce C. Rhine Bruce C. Rhine Chairman of the Board of Directors Milpitas, California April 7, 2014

### NANOMETRICS INCORPORATED PROXY STATEMENT

## INFORMATION CONCERNING SOLICITATION AND VOTING

General

Pursuant to rules adopted by the Securities and Exchange Commission, we have elected to provide access to our proxy materials over the Internet. Accordingly, we have sent you a Notice of Internet Availability of Proxy Materials (the "Notice") because the Board of Directors is soliciting your proxy to vote at our 2014 annual meeting of stockholders. All stockholders will have the ability to access the proxy materials on the website referred to in the Notice or request to receive a printed set of the proxy materials. Instructions on how to access the proxy materials over the Internet or to request a printed copy may be found in the Notice.

We intend to mail the Notice on or about April 7, 2014, to stockholders of record entitled to vote at the annual meeting.

Date, Time and Place

The annual meeting will be held on Tuesday, May 20, 2014, at 8:00 a.m., local time, at our Corporate Headquarters located at 1550 Buckeye Drive, Milpitas, California 95035. Directions to the annual meeting may be found on our website www.nanometrics.com by clicking on "Contact" then "Map & Local Driving Directions." Purpose; Other Matters

The annual meeting is being held to consider and vote upon the following:

1. A proposal to elect the Board's five nominees for director of Nanometrics, each to serve for a term of one year or until his successor has been duly elected and qualified.

2. A proposal to approve, as an advisory (non-binding) vote, the compensation paid to our executive officers, as disclosed in this Proxy Statement.

3. A proposal to ratify the appointment of PricewaterhouseCoopers LLP as Nanometrics' independent registered public accounting firm for the fiscal year ending December 27, 2014.

Stockholders will also be asked to consider and vote upon any other business that may properly come before the annual meeting or any adjournments or postponements of the annual meeting. We do not expect that any additional matters will be brought before the annual meeting. If any other matters are properly brought before the meeting, it is the intention of the persons named in the proxy to vote on those matters in accordance with their best judgment. Recommendation of the Board of Directors

The Board of Directors unanimously recommends that you vote:

- •"FOR" the election of the Board's nominees for director named in this Proxy Statement.
- "FOR" the approval of the compensation paid to Nanometrics' executive officers as disclosed in this Proxy Statement.
- "FOR" the ratification of the appointment of PricewaterhouseCoopers LLP as Nanometrics' independent registered public accounting firm for the fiscal year ending December 27, 2014.

Record Date; Outstanding Shares; Voting Rights

Only holders of record of common stock at the close of business on the record date for the annual meeting, March 27, 2014, are entitled to notice of and to vote at the annual meeting. As of the record date, there were 23,874,166 shares of common stock outstanding and entitled to vote at the annual meeting, held by approximately 196 holders of record. Each record holder of common stock on the record date is entitled to one vote for each share of common stock held as of the record date with respect to all proposals.

A list of stockholders will be available for review at the annual meeting and our executive offices during regular business hours for a period of ten days before the annual meeting.

Admission to the Annual Meeting

Only stockholders, their designated proxies and guests of Nanometrics may attend the annual meeting. If you plan to attend the annual meeting and wish to vote in person, you will be given a ballot at the annual meeting. Please note, however, that if your shares are held in "street name," which means your shares are held of record by a broker, bank or other nominee, and you wish to vote at the annual meeting, you must bring to the annual meeting a "legal proxy" from the record holder of your shares authorizing you to attend and vote at the annual meeting.

Quorum and Vote Required

The presence, either in person or by proxy, of the holders of a majority of outstanding shares of our common stock entitled to vote at the annual meeting is required to constitute a quorum necessary to hold a valid annual meeting of stockholders.

If your broker holds your shares in its name, the broker is permitted to vote your shares on "discretionary" matters, even if it does not receive voting instructions from you. Proposal 3 is the only "discretionary" matter being considered by our stockholders. Therefore, we urge you to give voting instructions to your broker on all voting items. Shares that are not permitted to be voted by your broker on a proposal absent your voting instructions are called "broker non-votes" with respect to that proposal. Broker non-votes are counted toward a quorum, but are not considered votes for or against such a proposal and therefore will have no direct impact on whether that proposal receives stockholder approval. In addition, the vote required to approve each proposal is as follows:

Proposal 1

In the election of our directors, the nominees receiving the highest number of "FOR" votes will be elected. Votes marked "WITHHOLD" will have no effect on the election of directors. However, the Board of Directors has adopted a Majority Vote Policy, pursuant to which any director-nominee that is elected but fails to receive more "FOR" votes than "WITHHELD" votes must submit his resignation for consideration by the Board. The Board will then decide whether to accept the director's resignation. Details of the Majority Vote Policy are set out below under "Corporate Governance – Voting for Directors – Majority Vote Policy."

### Proposal 2

The affirmative vote ("FOR") of holders of a majority of the shares present in person or represented by proxy at the annual meeting and entitled to vote on the matter at the annual meeting is required for the approval of the advisory resolution on Nanometrics' executive compensation. If you "ABSTAIN," it will have the same effect as a vote "AGAINST." The results of this vote will not be binding on the Board of Directors.

Proposal 3

The affirmative vote ("FOR") of holders of a majority of the shares present in person or represented by proxy at the meeting and entitled to vote on the matter at the annual meeting is required to ratify the appointment of PricewaterhouseCoopers LLP as Nanometrics' independent registered public accounting firm for the fiscal year ending December 27, 2014. If you "ABSTAIN," it will have the same effect as a vote "AGAINST."

# Voting

## General

Stockholders of record as of the record date may vote their shares by attending the annual meeting and voting their shares in person or by proxy by using a proxy card that they may request or that we may elect to deliver at a later time, by telephone or by Internet as instructed below. Even if you plan to attend the annual meeting, we recommend that you vote by proxy prior to the annual meeting. You can always change your vote prior to or at the annual meeting as described below.

• To vote in person, come to the annual meeting and we will give you a ballot when you arrive.

• To vote by mail, simply complete, sign and date the proxy card that you request or that may be delivered and return it promptly in the envelope provided. If you return your signed proxy card to us before the annual meeting, we will vote your shares as you direct.

• To vote over the telephone, dial toll-free 1-800-690-6903 using a touch-tone phone and follow the recorded instructions. You will be asked to provide the Control Number from the Notice. Your vote must be received by 11:59 p.m. ET, May 19, 2014, to be counted.

• To vote through the internet, go to www.proxyvote.com to complete an electronic proxy card. You will be asked to provide the Control Number from the Notice. Your vote must be received by 11:59 p.m. ET, May 19, 2014, to be counted.

# Voting by Proxy

All properly executed proxies that are received prior to the annual meeting and not revoked will be voted at the annual meeting according to the instructions indicated on the proxies. If your proxy does not specify how you wish us to vote your shares, your shares will be voted:

• "FOR" the election of the Board's nominees for director named in this Proxy Statement;

• "FOR" the approval of the compensation paid to Nanometrics' executive officers, as disclosed in this Proxy Statement; and

• "FOR" the ratification of the appointment of PricewaterhouseCoopers LLP as Nanometrics' independent registered public accounting firm for the fiscal year ending December 27, 2014.

You may receive more than one Notice depending on how you hold your shares of common stock. For example, if you hold shares through someone else, such as a broker, you may also receive a Notice from that person. Please follow the instructions on each of the Notices to ensure that all of your shares are voted.

# Changing Your Vote

If you are the record holder of your shares of common stock, you can revoke or change your vote at any time before your proxy is voted at the annual meeting by:

- delivering to our corporate secretary a signed notice of revocation;
- granting the proxy holders a new, later dated proxy, which if provided by mail must be signed and delivered to our corporate secretary in advance of the vote at the annual meeting, or if provided by telephone or Internet must be submitted by following the instructions above before the deadline indicated above; or
- attending the annual meeting and voting in person (although simply attending the annual meeting will not, by itself, revoke your proxy).

If you have provided voting instructions to your broker, bank or other nominee for the annual meeting, you must follow the instructions provided by your broker, bank or other nominee to change your voting instructions for the annual meeting.

# Proxy Solicitation

Nanometrics is making this solicitation and will pay the entire cost of preparing, assembling, printing, mailing and distributing these proxy materials and soliciting votes. In addition to mailing these proxy materials, proxies or votes may be solicited in person, by telephone or by electronic communication by our directors, officers and employees, who will not receive any additional compensation for such solicitation activities. Upon request, we will reimburse reasonable out of pocket

expenses to brokerage houses and other custodians, nominees and fiduciaries for forwarding proxy and solicitation materials to stockholders.

Assistance

If you need assistance in completing your proxy card or have questions regarding the annual meeting, please contact Investor Relations at (408) 545 6000 or write to Nanometrics Incorporated, at our executive offices located at 1550 Buckeye Drive, Milpitas, California 95035, Attn: Investor Relations.

"Householding" of Proxy Materials

The Securities and Exchange Commission has adopted rules that permit companies and intermediaries such as brokers to satisfy delivery requirements for Notices of Internet Availability of Proxy Materials or other annual meeting materials with respect to two or more stockholders sharing the same address by delivering a single Notice of Internet Availability of Proxy Materials or set of other annual meeting materials addressed to those stockholders. This process, which is commonly referred to as "householding," potentially provides extra convenience for stockholders and cost savings for companies. Nanometrics and some brokers household proxy materials, delivering a single Notice of Internet Availability of Proxy Materials or set of other annual meeting materials to multiple stockholders sharing an address unless contrary instructions have been received from the affected stockholders. Upon written or oral request to our Investor Relations department, by mail at 1550 Buckeye Drive, Milpitas, California, 95035 or by telephone at (408) 545–6000, we will promptly deliver a copy of the Notice of Internet Availability of Proxy Materials to a stockholder if that stockholder shares an address with another stockholder to which a single copy of such notice or other annual meeting materials was delivered. A stockholder may notify us as described above if the stockholder wishes to receive a separate copy of such notice or other annual meeting materials in the future or, alternatively, if the stockholder wishes to receive a single copy of the notice or other annual meeting materials instead of multiple copies.

## Stockholder Proposals

Stockholders are entitled to present proposals for action at the 2015 annual meeting of stockholders. For any proposal to be considered for inclusion in our Proxy Statement and form of proxy for submission to the stockholders at the 2015 annual meeting of stockholders, the proposal must comply with the requirements of Rule 14a 8 under the Exchange Act and be submitted in writing by notice delivered or mailed by first class United States mail, postage prepaid, to Nanometrics Incorporated, 1550 Buckeye Drive, Milpitas, California 95035, Attention: Office of the Secretary, which must be received by us no later than December 8, 2014. If the date of our 2015 annual meeting is changed by more than 30 days from the one year anniversary of the date of the 2014 annual meeting, the proposal must be received a reasonable time before we begin to print and mail our proxy materials. The submission of a stockholder proposal does not guarantee that it will be included in our proxy statement.

In addition, Nanometrics' Bylaws include advance notice provisions that require stockholders desiring to bring other business before the 2015 annual stockholders meeting, but not for inclusion in our Proxy Statement for that meeting, to do so in accordance with the terms of the Bylaws' advance notice provisions. Nanometrics' advance notice provisions require, among other things, that stockholders provide timely notice to the secretary of Nanometrics regarding such business, and provide certain additional information to Nanometrics as set forth in the Bylaws. To be timely, a stockholders' notice must be delivered to or mailed and received at Nanometrics Incorporated, 1550 Buckeye Drive, Milpitas, California 95035, Attention: Office of the Secretary, and must be received by us no later than December 8, 2014. If we set the date of our 2015 annual meeting to a date more than 30 days from the one year anniversary of the date of our 2014 annual meeting, then the deadline for receipt of stockholder proposals will be no later than the close of business on the later of 120 calendar days in advance of the 2015 annual meeting. If a stockholder does not provide us with notice of a stockholder proposal to the stockholders for a vote at the meeting. Meeting Results

Preliminary voting results will be announced at the annual meeting. In addition, final voting results will be published in a current report on Form 8-K that we expect to file within four business days after the annual meeting. If final voting results are not available to us in time to file a Form 8-K within four business days after the meeting, we intend to file a Form 8 K to publish preliminary results and, within four business days after the final results are known to us,

file an additional Form 8-K to publish the final results.

#### PROPOSAL 1 ELECTION OF DIRECTORS

At the 2014 annual meeting of stockholders, unless otherwise instructed, the proxy holders will vote the proxies received by them for the nominees named below, each of whom has been nominated by the Board of Directors and is presently a director of Nanometrics.

The Board of Directors currently has seven members. Effective as of the start of the 2014 annual meeting of stockholders the authorized number of directors shall be reduced to five. Mr. Bain and Dr. Oldham will not be standing for reelection. All other current directors are standing for election at the 2014 annual meeting. The nominees were recommended by the Nominating and Governance Committee of the Board of Directors. All of the nominees named below were previously elected as directors by our stockholders.

If the nominees are unable or decline to serve as a director at the time of the annual meeting, the proxies will be voted for any nominee who shall be designated by the present Board to fill the vacancy. We do not have any reason to believe that any of the nominees will be unable or will decline to serve as a director. Directors are elected by a plurality of the votes of the holders of shares present in person or by proxy and entitled to vote on the election of directors. The five nominees receiving the highest number of affirmative votes will be elected. Pursuant to our Majority Vote Policy, if a nominee for director receives a greater number of "Withhold" votes than "For" votes, that director shall promptly tender to the Nominating and Governance Committee his offer of resignation. Within 90 days following certification of the stockholder vote, the Committee shall recommend to the Board the action to be taken with respect to such offer of resignation, and the Board shall consider and act upon the Committee's recommendation. Unless marked otherwise, the proxy holders will vote proxies returned to us for the nominees named below. Director Nominees

Set forth below is information regarding each of our directors, including their ages, as of April 5, 2014, the periods during which they have served as a director, and certain information as to principal occupations and directorships held by them in corporations whose shares are publicly registered.

J. Thomas Bentley, 64, has served as a director since April 2004. Mr. Bentley served as a Managing Director at SVB Alliant (formerly Alliant Partners), a mergers and acquisitions firm, from 1990, when he co-founded the firm, until October 2005. Mr. Bentley currently serves on the board of directors of Rambus, Inc., a chip interface technology company. Mr. Bentley holds a B.A. degree in Economics from Vanderbilt University and a Masters of Science in Management from the Massachusetts Institute of Technology. Mr. Bentley's extensive knowledge of the capital markets, strategic planning and mergers and acquisitions from his experience at SVB Alliant provides expertise to the Board in matters regarding Nanometrics' capital requirements and strategic direction.

Edward J. Brown, Jr., 56, has served as a director since February 2013. Mr. Brown is currently the chief executive officer of the Cymer Light Source Division of ASML, a supplier of light sources for deep ultraviolet photolithography systems. Mr. Brown has held this position since the completion of Cymer's merger with ASML Holding, Ltd. in May 2013. Prior to the merger with ASML, Mr. Brown served as president and chief operating officer of Cymer, Inc. since September 2005. From 1984 to 2005, Mr. Brown was employed at Applied Materials, Inc. where he held numerous high-level management positions including group vice president and senior advisor to the president, vice president and general manager of the Intel business unit, as well as managing director heading up their largest product division, global operations. Prior to Applied Materials Inc., Brown held key engineering positions at TRW Corporation and Burroughs Corporation. Mr. Brown is a member of SEMI North American Advisory Board. Mr. Brown received a master's degree in business administration from National University and a bachelor's degree in industrial studies from San Diego State University. Mr. Brown's qualifications to serve as a director include his 30 years of experience in the semiconductor industry and his operations expertise.

Stephen G. Newberry, 60, has served as a director since May 2011. Mr. Newberry has been chairman of the board of directors of Lam Research since November 2012. He joined Lam Research in August 1997 as executive vice president and chief operating officer and was promoted to the position of president and chief operating officer in July 1998. In June 2005, he was named president and chief executive officer, and in December 2010, he was named vice chairman of the board of directors and chief executive officer. In addition to serving as a director of Lam Research, Mr. Newberry is a director of Splunk, Inc., and Semiconductor Equipment and Materials International (SEMI), the industry's trade association. He also serves as a member of the Dean's Advisory Cabinet, University of California at

Davis Graduate School of Management. Mr. Newberry was previously a director of Amkor Technologies, Inc. Prior to joining Lam Research, Mr. Newberry was group vice president of global operations and planning at Applied Materials,

Inc. Mr. Newberry served five years in naval aviation prior to joining Applied Materials. He is a graduate of the U.S. Naval Academy with a BS degree in Ocean Engineering and the Harvard Graduate School of Business Program for Management Development. Mr. Newberry's qualifications to serve as a director include his 30 years' experience in the semiconductor equipment industry, his active role in the semiconductor industry's trade association, and his strong leadership and operations expertise.

Bruce C. Rhine, 56, has served as our Chairman of the Board of Directors since July 2007 and as a director since July 2006. From July 2006 to February 2008, Mr. Rhine served as our Chief Strategy Officer. From March 2007 to August 2007, Mr. Rhine served as our Chief Executive Officer. From 2000 to 2006, Mr. Rhine served as Chairman and Chief Executive Officer of Accent Optical Technologies, Inc. and as its President from January 2003 to April 2005 and from August 2000 to September 2001. Mr. Rhine holds a B.S. degree in Chemical Engineering and an M.B.A. in Finance from The Pennsylvania State University. In addition to his experience from his prior senior management service to Nanometrics, Mr. Rhine brings extensive industry knowledge and executive management experience to the Board. Timothy J. Stultz, Ph.D., 66, has served as President, Chief Executive Officer and a director since August 2007. From June 2003 to August 2007, Dr. Stultz served as the President and Chief Executive Officer and a director of Imago Scientific Instruments Corporation, a supplier of proprietary 3-D atom probe microscopes to the research materials and microelectronics industries. Prior to Imago, Dr. Stultz served as President and Chief Executive Officer for ThauMDx, a developer of diagnostic systems and technologies for the analysis of biomolecules, drugs and chemicals. Dr. Stultz also serves on the Board of Directors of Tessera Technologies, Inc. Dr. Stultz received his B.S., M.S. and Ph.D. degrees in Materials Science and Engineering from Stanford University. In addition to his institutional knowledge as the executive leader of Nanometrics, Dr. Stultz's scientific background and significant senior executive management experience in high-tech industries is important to the Board.

THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS THAT THE STOCKHOLDERS VOTE "FOR" THE NOMINEES SET FORTH ABOVE.

### CORPORATE GOVERNANCE

Board of Directors Meetings and Committees

The full Board of Directors met a total of six times during the fiscal year ended December 28, 2013. During the fiscal year ended December 28, 2013, all directors attended at least 75% of the aggregate number of meetings of the Board of Directors and meetings of committees on which they served. The standing committees of the Board of Directors include an Audit Committee, a Compensation Committee and a Nominating and Governance Committee.

The Board of Directors has determined that for the fiscal year ended December 28, 2013, all of its directors meet the independence requirements of the NASDAQ Stock Market, with the exception of Timothy J. Stultz, Ph.D., due to his position as our President and Chief Executive Officer.

Directors are encouraged to attend the annual meeting of stockholders. All members of the Board of Directors then in office attended the 2013 annual meeting of stockholders.

### Audit Committee

The Audit Committee of the Board of Directors oversees our financial reporting, our internal audit and control functions, the results and scope of the annual audit and quarterly reviews conducted by our independent registered public accounting firm, and our compliance with legal matters that may have a significant impact on our financial reports. In addition, the Audit Committee has the responsibility to consider and recommend the engagement of, and to review fee arrangements with, our independent registered public accounting firm. The Audit Committee also monitors transactions between Nanometrics and our officers and directors for any potential conflicts of interest and assists the Board of Directors in its risk oversight role.

During the 2013 fiscal year, the Audit Committee consisted of Howard A. Bain III (chairman), J. Thomas Bentley and Bruce C. Rhine. The Board of Directors has determined that each member of our Audit Committee is "independent" within the meaning of the rules of the Securities and Exchange Commission and the Listing Rules of NASDAQ, and has the qualifications or previous experience to be able to read and understand financial statements. Further, the Board of Directors has determined that each of Mr. Bain, Chairman of the Audit Committee, and Mr. Bentley qualifies as an "audit committee financial expert," as such term is used in the Securities and Exchange Commission rules. The Audit Committee met eight times during the 2013 fiscal year.

The report of the Audit Committee is included on page 28 of this Proxy Statement. The Board of Directors has adopted a written Audit Committee Charter, which is available on our website at http://investor.nanometrics.com/governance.cfm.

Compensation Committee

The Compensation Committee has overall responsibility for evaluating and approving our executive officer compensation, including incentive compensation, benefit, severance, equity-based and other compensation plans, policies and programs. During the 2013 fiscal year, the Compensation Committee reviewed and approved our compensation policies and programs for the chief executive officer, as well as established and had oversight responsibility with regard to the compensation of other executive officers of Nanometrics. The Compensation Committee also has the responsibility to recommend to the Board of Directors a compensation program for non-employee members of the Board.

The Compensation Committee is also responsible for approving the grant of stock options and stock awards to our employees under our equity compensation plans. The Compensation Committee has delegated to Nanometrics' officers the authority, within certain parameters, to approve the grant of stock options with respect to employees and consultants who are not executive officers for purposes of Section 16 of the Exchange Act. The Compensation Committee also assists the Board of Directors in assessing the risks, if any, associated with Nanometrics' overall compensation policies. Although the Compensation Committee has not done so to date, the Compensation Committee may, to the extent permitted under applicable law, the rules of NASDAQ and the Securities and Exchange Commission, and Nanometrics' Certificate of Incorporation and Bylaws, form and delegate its authority to a subcommittee when appropriate, including delegating to a subcommittee consisting solely of independent, non-employee, outside directors to make grants of stock options to executive officers and directors, provided that such grants are presented to the full Compensation Committee for approval at the following Compensation Committee meeting.

During the 2013 fiscal year, the Compensation Committee consisted of Stephen G. Newberry (who became the Chairman on May 24, 2013), J. Thomas Bentley, and for part of the year, Edward J. Brown Jr. (who joined the Compensation

Committee on May 24, 2013) and William G. Oldham (who left the Compensation Committee on May 24, 2013). Each current member of our Compensation Committee is an "outside" director as defined in Section 162(m) of the Internal Revenue Code of 1986, as amended, and a "non-employee" director within the meaning of Rule 16b-3 of the Exchange Act. The Board of Directors has determined that each of the directors serving on our Compensation Committee is "independent" within the meaning of the Listing Rules of NASDAQ as currently in effect. The Compensation Committee met six times during the 2013 fiscal year.

The Compensation Committee Report is included on page 19 of this Proxy Statement. The Board of Directors has adopted a written Compensation Committee Charter, which is available on our website at http://investor.nanometrics.com/governance.cfm.

Compensation Committee Processes and Procedures: Typically, the Compensation Committee meets at least quarterly, and with greater frequency, if necessary. The Compensation Committee meets regularly in executive session. However, from time-to-time, various members of management and other employees as well as outside consultants may be invited by the Compensation Committee to make presentations, to provide financial or other background information or advice, or to otherwise participate in Compensation Committee meetings. The Chief Executive Officer may not participate in, or be present during, any deliberations or determinations of the Compensation Committee regarding his compensation. The charter of the Compensation Committee grants the Compensation Committee full access to all books, records, facilities and personnel of Nanometrics, as well as authority to obtain, at the expense of Nanometrics, advice and assistance from internal and external legal, accounting or other advisors and consultants and other external resources that the Compensation Committee considers necessary or appropriate in the performance of its duties. In particular, the Compensation Committee has the authority to retain compensation consultants to assist in its evaluation of executive and director compensation, including the authority to approve the consultant's reasonable fees and other retention terms.

The Compensation Committee typically makes most of the significant adjustments to annual compensation, determined bonus and equity awards, and established new performance objectives, at one or more meetings held during the first quarter of the year. However, the Compensation Committee also considers matters related to individual compensation, such as compensation for new executive hires, as well as high-level strategic issues, such as the efficacy of Nanometrics' compensation strategy, potential modifications to that strategy and new trends, plans or approaches to compensation, at various meetings throughout the year. Generally, the Compensation Committee's process comprises two related elements: the determination of compensation levels and the establishment of performance objectives for the current year. As discussed further in the Compensation Discussion and Analysis below, for executives other than the Chief Executive Officer, the Compensation Committee solicits and considers evaluations and recommendations submitted to the Committee by the Chief Executive Officer. In the case of the Chief Executive Officer, the evaluation of his performance is conducted by the Compensation Committee, which determines any adjustments to his compensation as well as awards to be granted. For all executives, as part of its deliberations, the Compensation Committee may review and consider, as appropriate, materials such as financial reports and projections, operational data, tax and accounting information, tally sheets that set forth the total compensation that may become payable to executives in various hypothetical scenarios, executive and director stock ownership information, company stock performance data, analyses of historical executive compensation levels, current company-wide compensation levels, and recommendations of the Compensation Committee's compensation consultant, including analyses of executive compensation paid at other companies identified by the consultant. Under its charter, the Compensation Committee may select, or receive advice from, a compensation consultant, legal counsel or other adviser to the Compensation Committee, other than in-house counsel and certain other types of advisers, only after taking into consideration six factors, prescribed by the SEC and NASDAQ, that bear upon the adviser's independence; however, there is no requirement than any adviser be independent.

During the past fiscal year, the Compensation Committee engaged Compensia, Inc. as its compensation consultant. Compensia has advised the committee for several years and is very familiar with the industry and geographies in which Nanometrics operates. The Compensation Committee requested that Compensia:

• evaluate the efficacy of Nanometrics' existing compensation strategy and practices in supporting and reinforcing Nanometrics' long-term strategic goals;

- assist in refining Nanometrics' compensation strategy and in developing and implementing an executive
- compensation program to execute that strategy; and
- make recommendations regarding 2013 executive compensation.

As part of its engagement, the Compensation Committee requested that Compensia develop a comparative group of companies and to perform analyses of competitive performance and compensation levels for that group. The Committee instructed Compensia to select comparator companies similarly sized and in the same or closely related industry to that of Nanometrics using factors such as, but not limited to, revenue size, market cap, and number of employees. At the request of

the Compensation Committee, Compensia also provided information regarding the labor markets in which Nanometrics competes. Compensia ultimately developed recommendations that were presented to the Compensation Committee for its consideration. Following an active dialogue with Compensia, the Compensation Committee made its independent determinations regarding the compensation of Nanometrics' executive officers. These decisions are discussed in the Compensation Discussion and Analysis section of this Proxy Statement. Nominating and Governance Committee

The Nominating and Governance Committee assists the Board of Directors in identifying and qualifying candidates to join the Board of Directors and addresses various governance issues. The Nominating and Governance Committee utilizes a variety of methods for identifying and evaluating nominees. Its general policy is to assess the appropriate size and needs of the Board of Directors and whether any vacancies are expected due to retirement or otherwise. In addition, candidates for director nominees are typically reviewed in the context of the current composition of the Board, the operating requirements of Nanometrics, the current needs of the Board, and the long-term interests of stockholders, with the goal of maintaining a balance of knowledge, experience and capability. In the event those vacancies are anticipated, or otherwise arise, the Nominating and Governance Committee will consider recommending various potential candidates to fill such vacancies. Candidates may come to the attention of the Nominating and Governance Committee through its current members, stockholders or other persons. Pursuant to the Nominating and Governance Committee charter, the Committee will consider properly submitted stockholder recommendations for nominations for candidacy. Stockholders who wish to recommend individuals for consideration by the Nominating and Governance Committee to become nominees for election to the Board may do so by delivering a written recommendation to the Nominating and Governance Committee at our principal offices. Nominees may also be submitted directly by stockholders in accordance with Nanometrics' Bylaws as discussed under "Stockholder Proposals" above. Although the Nominating and Governance Committee does not have a formal policy regarding stockholder recommendations for director nominees because the Board of Directors has an open policy regarding communications with stockholders and has not deemed it necessary to develop a formal policy regarding recommendations for director nominations by stockholders, the Nominating and Governance Committee intends to consider director candidates properly submitted by stockholders under the same criteria as candidates recommended by directors or others. The Nominating and Governance Committee has no specific minimum qualifications for director candidates. In general, however, persons considered for Board of Directors positions must have demonstrated leadership capabilities, be of sound mind and high moral character, have no personal or financial interest that would conflict or appear to conflict with the interests of Nanometrics and be willing and able to commit the necessary time for Board of Directors and committee service. The Nominating and Governance Committee also intends to consider such factors as possessing relevant expertise upon which to be able to offer advice and guidance to management, demonstrated excellence in his or her field, having the ability to exercise sound business judgment and having the commitment to rigorously represent the long-term interests of Nanometrics' stockholders. However, the Nominating and Governance Committee retains the right to modify these qualifications from time- to-time.

The Nominating and Governance Committee also recommends to the Board of Directors certain guidelines regarding corporate governance and standards regarding the independence of outside directors applicable to Nanometrics and reviews such guidelines and standards and the provisions of the Nominating and Governance Committee charter on a regular basis to confirm that such guidelines, standards and charter remain consistent with sound corporate governance practices and with any legal or regulatory requirements of NASDAQ and the Securities and Exchange Commission. The Nominating and Governance Committee also monitors the Board of Directors, and Nanometrics' compliance with any commitments made to our regulators and changes in corporate governance practices. The Nominating and Governance Committee does not have a stated policy with regard to diversity of the Board of Directors. However, the Committee believes that Board members should represent a balance of diverse backgrounds and skills, including marketing, finance, manufacturing, engineering, science, and international experience. During the 2013 fiscal year, the Nominating and Governance Committee consisted of Bruce C. Rhine (who became the Chairman on May 24, 2013), William G. Oldham, and for part of the year Stephen G. Newberry (who was appointed to the Committee on May 24, 2013), and Stephen J Smith, Ph.D. and Norman V. Coates (each of whom left the Committee on May 24, 2013). The Board of Directors has determined that each of the directors serving on our Nominating and Governance Committee is "independent" within the meaning of the Listing Rules of NASDAQ.

The Nominating and Governance Committee met four times in the 2013 fiscal year.

The Board of Directors has adopted a written Nominating and Governance Committee Charter, which is available on our website at http://investor.nanometrics.com/governance.cfm. Board Structure

Bruce C. Rhine serves as the Chairman of the Board and Timothy J. Stultz, Ph.D. serves as both the Chief Executive Officer is appropriate and a director of Nanometrics. We believe that having a separate Chairman and Chief Executive Officer is appropriate and is consistent with corporate governance best practices. From July 2006 to February 2008, Mr. Rhine served as our Chief Strategy Officer, and from March 2007 to August 2007 Mr. Rhine served as our Chief Executive Officer. Because of his previous roles with Nanometrics, Mr. Rhine is intimately familiar with Nanometrics' business and industry, and very capable of effectively identifying strategic priorities, leading discussions of the Board of Directors and defining Nanometrics' strategic objectives. The Board of Directors determined that Mr. Rhine became an independent member of the Board effective February 2011 under the NASDAQ Listing Rules due to the passage of time subsequent to his previous management role with Nanometrics. Dr. Stultz, as the Chief Executive Officer, is the individual selected by the Board of Directors to manage Nanometrics on a day-to-day basis, and his prior experience and direct involvement in Nanometrics' operations allows him to provide valuable insights with respect to strategic planning and the operational requirements to meet Nanometrics' short- and long-term objectives. Nanometrics' independent directors bring experience, oversight and expertise from outside the company and industry. The Board's Role in Risk Oversight

One of the Board's primary responsibilities is reviewing Nanometrics' strategic plans and objectives, including oversight of the principal risk exposures of the company. The Board does not have a standing risk management committee, but rather administers this oversight function directly through the Board as a whole, as well as through various Board standing committees that address risks inherent in their respective areas of oversight. In particular, the Board is responsible for monitoring and assessing strategic risk exposure, including a determination of the nature and level of risk appropriate for the company. The Audit Committee assists the Board in oversight and monitoring of the legal and financial risks facing Nanometrics, and management's approach to addressing these risks and strategies for risk mitigation. The Audit Committee is also responsible for discussing guidelines and policies governing the process by which management and other persons responsible for risk management, assess and manage Nanometrics' exposure to risk, as well as Nanometrics' major financial risk exposures and the steps management has taken to monitor and control such exposures, based on consultation with Nanometrics' management and independent auditors. Our Compensation Committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking. The Board addresses, at least annually, the principal current and future risk exposures of Nanometrics. The Board receives regular reports from members of senior management on areas of material risk to Nanometrics, including operational, financial, legal and regulatory, strategic and reputation risks. Voting For Directors – Majority Vote Policy

If a nominee for director in an uncontested election receives a greater number of "withhold" votes for election than "for" votes ("Majority Withheld Vote"), that director must promptly tender to the Board his or her offer of resignation. If a director receives a Majority Withheld Vote, our Nominating and Governance Committee (or such other committee as the Board may appoint) shall make a recommendation to the Board, which will decide whether to accept or reject the resignation previously tendered by such director.

The Board must act on the tendered resignation, taking into account the recommendation of such committee, within 90 days from the date of the certification of the election results. The director whose resignation is under consideration is not permitted to participate in the recommendation of the committee or deliberations of the Board with respect to his or her resignation. However, if the only directors who did not receive a Majority Withheld Vote in the same election constitute less than a majority of directors, all directors may participate in the action regarding whether to accept the resignation offers. If a director's resignation is not accepted by the Board, the director will continue to serve until the next annual meeting of shareholders or until his or her successor is duly elected and qualified, or his or her earlier resignation or removal. If a director's resignation is accepted by the Board, then the Board, in its sole discretion, must fill any resulting vacancy or decrease the size of the Board. Code of Ethics

We have adopted a Code of Business Conduct and Ethics that applies to all directors, executive officers and employees. We post our Code of Business Conduct and Ethics on our website at:

http://investor.nanometrics.com/governance.cfm.

Stockholder Communication Policy

We have established a formal process for stockholders to send communications to the Board of Directors or to individual directors. The names of all directors are available to stockholders in this Proxy Statement. Stockholder communications may be submitted in writing to Nanometrics Incorporated, 1550 Buckeye Drive, Milpitas, California 95035,

Attention: Office of the Secretary. If we receive any stockholder communication intended for the full Board of Directors or any individual director, we will forward the communication to the full Board of Directors or the individual director, unless the communication is clearly of a marketing nature or is unduly hostile, threatening, illegal or similarly inappropriate.

Related Person Transaction Policy

Nanometrics has a written policy regarding related party transactions that requires that the Audit Committee review any transaction or series of transactions in excess of \$50,000 in any year between Nanometrics, on the one hand, and an officer, director or 5% or greater stockholder, on the other. Nanometrics' Chief Financial Officer has the responsibility for bringing the facts concerning a proposed related party transaction to the Audit Committee. The policy permits approval only in the event of a finding that the transaction is on terms no less favorable than would have been obtained in an ordinary arms-length transaction with an independent third party.

### SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth beneficial ownership of Nanometrics common stock as of March 27, 2014, by each director, by each of the named executive officers, by all directors and executive officers as a group, and by all persons known to Nanometrics to be the beneficial owners of more than 5% of Nanometrics stock. Unless otherwise indicated, all persons and entities have sole voting and investment power over the shares reported. Unless otherwise indicated, the address of each executive officer or director of Nanometrics is 1550 Buckeye Drive, Milpitas, CA 95035. As of the close of business on March 27, 2014, there were 23,874,166 shares of common stock outstanding.

Amount and Nature of Beneficial Ownership<sup>(1)</sup> Shares

Shares	RSU's to be released and Stock Options Exercisable Within 60 Days Of 3/27/2014	Total Shares Beneficially Owned	Percent of Class	
2,650,150	0	1,438,458	11.1	%
2,334,473	0	2,334,473	9.8	%
2,127,897	0	2,127,897	8.9	%
1,919,680	0	2,002,173	8.0	%
1,920,193	0	1,920,193	8.0	%
Shares	RSU's to be released and Stock Options Exercisable Within 60 Days of March 27, 2014	Total Shares Beneficially Owned	Percent of Class	
827,558	128,118	955,676	4.0	%
15,148	20,625	35,773	*	
49,648	23,496	73,144	*	
0	6,930	6,930	*	
16,928	25,996	42,924	*	
	2,650,150 2,334,473 2,127,897 1,919,680 1,920,193 Shares 827,558 15,148 49,648 0	Sharesreleased and Stock Options Exercisable Within $60$ Days Of $3/27/2014$ 2,650,15002,334,47302,127,89701,919,68001,920,1930RSU's to be released and Stock Options Exercisable Within $60$ Days of March $27, 2014$ Shares128,11815,14820,62549,64823,49606,930	Shares released and Stock Options Exercisable Within 60 Days Of 3/27/2014 Total Shares Beneficially Owned   2,650,150 0 1,438,458   2,334,473 0 2,334,473   2,127,897 0 2,127,897   1,919,680 0 2,002,173   1,920,193 0 1,920,193   Shares RSU's to be released and Stock Options Exercisable Within 60 Days of March 27, 2014 Total Shares Beneficially Owned   827,558 128,118 955,676   15,148 20,625 35,773   49,648 23,496 73,144   0 6,930 6,930	Sharesreleased and Stock Options Exercisable Within $60$ Days Of $3/27/2014$ Total Shares Beneficially OwnedPercer of Cla2,650,15001,438,45811.12,334,47302,334,4739.82,127,89702,127,8978.91,919,68002,002,1738.01,920,19301,920,1938.01,920,19301,920,1938.0SharesRSU's to be released and Stock Options Exercisable Within $60$ Days of March $27, 2014$ Total Shares Beneficially Owned827,558128,118955,6764.015,14820,62535,773*49,64823,49673,144*06,9306,930*