
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

SCHEDULE 14A

**Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934
(Amendment No.)**

Filed by the Registrant

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))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material under Rule 14a-12

Aspen Aerogels, Inc.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
 - Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.
 - 1) Title of each class of securities to which transaction applies: _____
 - 2) Aggregate number of securities to which transaction applies: _____
 - 3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined): _____
 - 4) Proposed maximum aggregate value of transaction: _____
 - 5) Total fee paid: _____
 - Fee paid previously with preliminary materials.
 - Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing:
 - 1) Amount previously paid: _____
 - 2) Form, Schedule or Registration Statement No: _____
 - 3) Filing party: _____
 - 4) Date Filed: _____
-
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Northborough, Massachusetts

April 24, 2019

Dear Aspen Aerogels, Inc. Stockholder:

You are cordially invited to attend the 2019 annual meeting of stockholders of Aspen Aerogels, Inc. to be held at 9:00 a.m. Eastern Time on Wednesday, June 19, 2019 at the offices of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., One Financial Center, Boston, Massachusetts 02111.

Details regarding the meeting, the business to be conducted at the meeting, and information about Aspen Aerogels that you should consider when you vote your shares are described in the accompanying proxy statement.

At the annual meeting, two persons will be elected to our board of directors. In addition, we will ask stockholders to ratify the appointment of KPMG LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2019. The board of directors recommends the approval of each of these proposals. Such other business will be transacted as may properly come before the annual meeting.

Under Securities and Exchange Commission rules that allow companies to furnish proxy materials to stockholders over the Internet, we have elected to deliver our proxy materials to the majority of our stockholders over the Internet. This delivery process allows us to provide stockholders with the information they need, while at the same time conserving natural resources and lowering the cost of delivery. On or about April 24, 2019, we will send to our stockholders a Notice of Internet Availability of Proxy Materials (the "Notice") containing instructions on how to access our proxy statement for our 2019 annual meeting of stockholders and our 2018 annual report to stockholders. The Notice also provides instructions on how to vote online or by telephone and includes instructions on how to receive a paper copy of the proxy materials by mail.

We hope you will be able to attend the annual meeting. Whether you plan to attend the annual meeting or not, it is important that you cast your vote either in person or by proxy. You may vote over the Internet as well as by telephone or by mail. When you have finished reading the proxy statement, you are urged to vote in accordance with the instructions set forth in the proxy statement. We encourage you to vote by proxy so that your shares will be represented and voted at the meeting, whether or not you can attend.

Thank you for your continued support of Aspen Aerogels, Inc. We look forward to seeing you at the annual meeting.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Young", written over a light blue horizontal line.

Donald R. Young
President and Chief Executive Officer



Aspen Aerogels, Inc.
30 Forbes Road, Building B
Northborough, MA 01532

NOTICE OF 2019 ANNUAL MEETING OF STOCKHOLDERS

TIME: 9:00 a.m. Eastern Time

DATE: June 19, 2019

PLACE: Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., One Financial Center, Boston, Massachusetts 02111

PURPOSES:

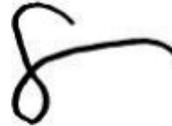
1. To elect Mr. Mark L. Noetzel and Mr. William P. Noglows as directors to serve three-year terms expiring in 2022;
2. To ratify the appointment of KPMG LLP as Aspen Aerogels, Inc.'s independent registered public accounting firm for the fiscal year ending December 31, 2019; and
3. To transact such other business that is properly presented at the annual meeting and any adjournments or postponements thereof.

WHO MAY VOTE:

You may vote if you were the record owner of Aspen Aerogels Inc.'s common stock at the close of business on April 22, 2019. A list of stockholders of record will be available at the annual meeting and at our principal executive offices located at 30 Forbes Road, Building B, Northborough, Massachusetts 01532 during the 10 days prior to the annual meeting.

All stockholders are cordially invited to attend the annual meeting. Whether you plan to attend the annual meeting or not, we urge you to vote by following the instructions in the Notice of Internet Availability of Proxy Materials that you previously received and submit your proxy by the Internet, telephone or mail in order to ensure the presence of a quorum. You may change or revoke your proxy at any time before it is voted at the meeting.

By Order of the Board of Directors



Sahir C. Surmeli
Secretary

Northborough, Massachusetts
April 24, 2019

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Aspen Aerogels, Inc.
30 Forbes Road, Building B
Northborough, Massachusetts 01532

PROXY STATEMENT FOR THE ASPEN AEROGELS, INC.
2019 ANNUAL MEETING OF STOCKHOLDERS TO BE HELD ON JUNE 19, 2019

This proxy statement, along with the accompanying notice of 2019 annual meeting of stockholders, contains information about the 2019 annual meeting of stockholders of Aspen Aerogels, Inc., including any adjournments or postponements of the annual meeting. We are holding the annual meeting at 9:00 a.m., Eastern Time, on Wednesday, June 19, 2019, at the offices of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., located at One Financial Center, Boston, Massachusetts 02111.

In this proxy statement, we refer to Aspen Aerogels, Inc. as “Aspen Aerogels,” “the Company,” “we” and “us.”

This proxy statement relates to the solicitation of proxies by our board of directors for use at the annual meeting.

On or about April 24, 2019, we intend to begin sending to our stockholders entitled to vote the Important Notice Regarding the Availability of Proxy Materials containing instructions on how to access our proxy statement for the 2019 annual meeting of stockholders and our 2018 annual report.

**IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE
STOCKHOLDER MEETING TO BE HELD ON JUNE 19 , 201 9**

This proxy statement and our 2018 annual report to stockholders are available for viewing, printing and downloading at www.proxyvote.com. In order to view, print or download these materials, please have the 12-digit control number(s) that appears on your notice or proxy card available. On this website, you can also elect to receive future distributions of our proxy statements and annual reports to stockholders by electronic delivery.

Additionally, you can find a copy of our Annual Report on Form 10-K, which includes our financial statements, for the fiscal year ended December 31, 2018 on the website of the Securities and Exchange Commission, or the SEC, at www.sec.gov, or in the “SEC Filings” tab of the “Financial Information” subsection of the “Investors” section of our website at www.aerogel.com. You may also obtain a printed copy of our Annual Report on Form 10-K, including our financial statements, from us, free of charge, by sending a written request to:

Aspen Aerogels, Inc.
Attn: Investor Relations
30 Forbes Road, Building B
Northborough, Massachusetts, 01532

Exhibits will be provided upon written request and payment of an appropriate processing fee.

IMPORTANT INFORMATION ABOUT THE ANNUAL MEETING AND VOTING

Why is the Company Soliciting My Proxy?

The board of directors of Aspen Aerogels is soliciting your proxy to vote at the 2019 Annual Meeting of Stockholders to be held at the offices of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., located at One Financial Center, Boston, Massachusetts 02111, on Wednesday, June 19, 2019 at 9:00 a.m. Eastern Time and any adjournments or postponements of the meeting, which we refer to as the annual meeting. This proxy statement along with the accompanying Notice of 2019 Annual Meeting of Stockholders summarizes the purposes of the meeting and the information you need to know to vote at the annual meeting.

We have made available to you on the Internet or have sent you this proxy statement, the Notice of Annual Meeting of Stockholders, the proxy card and a copy of our annual report on Form 10-K for the fiscal year ended December 31, 2018 because you owned shares of our common stock on the record date. We will commence distribution of the Important Notice Regarding the Availability of Proxy Materials, which we refer to throughout this proxy statement as the Notice, and, if applicable, the proxy materials, to stockholders on or about April 24, 2019.

Why Did I Receive a Notice in the Mail Regarding the Internet Availability of Proxy Materials Instead of a Full Set of Proxy Materials?

As permitted by the rules of the U.S. Securities and Exchange Commission, or the SEC, we may furnish our proxy materials to our stockholders by providing access to such documents on the Internet, rather than mailing printed copies of these materials to each stockholder. Most stockholders will not receive printed copies of the proxy materials unless they request them. We believe that this process should expedite stockholders' receipt of proxy materials, lower the costs of the annual meeting and help to conserve natural resources. If you received the Notice by mail or electronically, you will not receive a printed or email copy of the proxy materials, unless you request one by following the instructions included in the Notice. Instead, the Notice instructs you as to how you may access and review all of the proxy materials and submit your proxy on the Internet. If you requested a paper copy of the proxy materials, you may authorize the voting of your shares by following the instructions on the proxy card, in addition to the other methods of voting described in this proxy statement.

Who Can Vote?

Only stockholders who owned our common stock at the close of business on April 22, 2019 are entitled to vote at the annual meeting. On this record date, there were 24,246,807 shares of our common stock outstanding and entitled to vote. Our common stock is our only class of voting stock.

You do not need to attend the annual meeting to vote your shares. Shares represented by valid proxies, received in time for the annual meeting and not revoked prior to the annual meeting, will be voted at the annual meeting. For instructions on how to change or revoke your proxy, see "May I Change or Revoke My Proxy?" below.

How Many Votes Do I Have?

Each share of our common stock that you own entitles you to one vote.

How Do I Vote?

Whether you plan to attend the annual meeting or not, we urge you to vote by proxy. All shares represented by valid proxies that we receive through this solicitation, and that are not revoked, will be voted in accordance with your instructions on the proxy card or as instructed via the Internet or telephone. You may specify whether your shares should be voted FOR or WITHHELD for each nominee for director, and whether your shares should be voted FOR, AGAINST or ABSTAIN with respect to the other proposal. If you properly submit a proxy without giving specific voting instructions, your shares will be voted in accordance with our board of directors' recommendations as noted below. Voting by proxy will not affect your right to attend the annual meeting. If your shares are registered directly in your name through our stock transfer agent, Computershare Trust Company, N.A., or you have stock certificates registered in your name, you may vote:

- **By Internet or by telephone.** Follow the instructions included in the Notice or, if you received printed materials, in the proxy card to vote over the Internet or by telephone.

- **By mail.** If you received a proxy card by mail, you can vote by mail by completing, signing, dating and returning the proxy card as instructed on the card. If you sign the proxy card but do not specify how you want your shares voted, they will be voted in accordance with our board of directors' recommendations as noted below.
- **In person at the meeting.** If you attend the meeting, you may deliver a completed proxy card in person or you may vote by completing a ballot, which will be available at the meeting.

Telephone and Internet voting facilities for stockholders of record will be available 24 hours a day and will close at 11:59 p.m. Eastern Time on June 18, 2019.

If your shares are held in "street name" (held in the name of a bank, broker or other holder of record), you will receive instructions from the holder of record. You must follow the instructions of the holder of record in order for your shares to be voted. Telephone and Internet voting also will be offered to stockholders owning shares through certain banks and brokers. If your shares are not registered in your own name and you plan to vote your shares in person at the annual meeting, you should contact your broker or agent to obtain a legal proxy or broker's proxy card and bring it to the annual meeting in order to vote.

How Does the Board of Directors Recommend That I Vote on the Proposals?

The board of directors recommends that you vote as follows:

- "FOR" the election of the nominees for director; and
- "FOR" the ratification of the appointment of KPMG LLP as our independent registered public accounting firm for our fiscal year ending December 31, 2019.

If any other matter is presented at the annual meeting, your proxy provides that your shares will be voted by one or both of the proxy holders listed in the proxy in accordance with his or their best judgment. At the time this proxy statement was first made available, we knew of no matters that needed to be acted on at the annual meeting, other than those discussed in this proxy statement.

May I Change or Revoke My Proxy?

If you give us your proxy, you may change or revoke it at any time before the annual meeting. You may change or revoke your proxy in any one of the following ways:

- if you received a proxy card, by signing a new proxy card with a date later than your previously delivered proxy and submitting it as instructed above;
- by re-voting by Internet or by telephone as instructed above;
- by notifying Aspen Aerogels' Secretary in writing before the annual meeting that you have revoked your proxy; or
- by attending the annual meeting in person and voting in person. Attending the annual meeting in person will not in and of itself revoke a previously submitted proxy. You must specifically request at the annual meeting that it be revoked.

Your most current vote, whether by telephone, Internet or proxy card is the one that will be counted.

What if I Receive More Than One Notice or Proxy Card?

You may receive more than one Notice or proxy card if you hold shares of our common stock in more than one account, which may be in registered form or held in street name. Please vote in the manner described above under "How Do I Vote?" for each account to ensure that all of your shares are voted.

Will My Shares be Voted if I Do Not Vote?

If your shares are registered in your name or if you have stock certificates, they will not be counted if you do not vote as described above under "How Do I Vote?" If your shares are held in street name and you do not provide voting instructions to the bank, broker or other nominee that holds your shares as described above, the bank, broker or other nominee that holds your shares has the authority to vote your unvoted shares only on the ratification of the appointment of our independent registered public accounting firm (Proposal 2 of this proxy statement) without receiving instructions from you. Therefore, we encourage you to provide voting instructions to your bank, broker or other nominee. This ensures your shares will be voted at the annual meeting and in the manner you desire. A "broker non-vote" will occur if your broker cannot vote your shares on a particular matter because it has not received

instructions from you and does not have discretionary voting authority on that matter or because your broker chooses not to vote on a matter for which it does have discretionary voting authority.

Your bank, broker or other nominee does not have the ability to vote your uninstructed shares in the election of directors. Therefore, if you hold your shares in street name, it is critical that you cast your vote if you want your vote to be counted for the election of directors (Proposal 1 of this proxy statement).

What Vote is Required to Approve Each Proposal and How are Votes Counted?

Proposal 1: Elect Directors

The nominees for director who receive the most votes (also known as a “plurality” of the votes cast) will be elected. You may vote either FOR all of the nominees, WITHHOLD your vote from all of the nominees or WITHHOLD your vote from any one or more of the nominees. Votes that are withheld will not be included in the vote tally for the election of the directors. Brokerage firms do not have authority to vote customers’ unvoted shares held by the firms in street name for the election of the directors. As a result, any shares not voted by a customer will be treated as a broker non-vote. Such broker non-votes will have no effect on the results of this vote.

Proposal 2: Ratify Appointment of Independent Registered Public Accounting Firm

The affirmative vote of a majority of the shares cast affirmatively or negatively for this proposal is required to ratify the appointment of our independent registered public accounting firm. Abstentions will have no effect on the results of this vote. Brokerage firms have authority to vote customers’ unvoted shares held by the firms in street name on this proposal. If a broker does not exercise this authority, such broker non-votes will have no effect on the results of this vote. We are not required to obtain the approval of our stockholders to appoint our independent registered public accounting firm. However, if our stockholders do not ratify the appointment of KPMG LLP as our independent registered public accounting firm for 2019, the audit committee of our board of directors will reconsider its appointment.

Is Voting Confidential?

We will keep all the proxies, ballots and voting tabulations private. We only let our Inspectors of Election, representatives of Broadridge Investor Communication Solutions, Inc., examine these documents. Management will not know how you voted on a specific proposal unless it is necessary to meet legal requirements. We will, however, forward to management any written comments you make on the proxy card or that you otherwise provide.

Where Can I Find the Voting Results of the Annual Meeting?

The preliminary voting results will be announced at the annual meeting, and we will publish preliminary, or final results if available, in a Current Report on Form 8-K within four business days of the annual meeting. If final results are unavailable at the time we file the Form 8-K, then we will file an amended report on Form 8-K to disclose the final voting results within four business days after the final voting results are known.

What Are the Costs of Soliciting these Proxies?

We will pay all of the costs of soliciting these proxies. Our directors and employees may solicit proxies in person or by telephone, fax or email. We will pay these employees and directors no additional compensation for these services. We will ask banks, brokers and other institutions, nominees and fiduciaries to forward these proxy materials to their principals and to obtain authority to execute proxies. We will then reimburse them for their expenses.

What Constitutes a Quorum for the Annual Meeting?

The presence, in person or by proxy, of the holders of a majority of the voting power of all outstanding shares of our common stock entitled to vote at the annual meeting is necessary to constitute a quorum at the annual meeting. Votes of stockholders of record who are present at the annual meeting in person or by proxy, abstentions, and broker non-votes are counted for purposes of determining whether a quorum exists.

Attending the Annual Meeting

The annual meeting will be held at 9:00 a.m. Eastern Time on Wednesday, June 19, 2019 at the offices of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., located at One Financial Center, Boston, Massachusetts 02111. When you arrive at the offices of

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., signs will direct you to the appropriate meeting rooms. You need not attend the annual meeting in order to vote.

Householding of Annual Disclosure Documents

SEC rules concerning the delivery of annual disclosure documents allow us or your broker to send a single Notice or, if applicable, a single set of our proxy materials to any household at which two or more of our stockholders reside, if we or your broker believe that the stockholders are members of the same family. This practice, referred to as “householding,” benefits both you and us. It reduces the volume of duplicate information received at your household and helps to reduce our expenses. The rule applies to our Notices, annual reports, proxy statements and information statements. Once you receive notice from your broker or from us that communications to your address will be “householded,” the practice will continue until you are otherwise notified or until you revoke your consent to the practice. Stockholders who participate in householding will continue to have access to and utilize separate proxy voting instructions.

If your household received a single Notice or, if applicable, a single set of proxy materials this year, but you would prefer to receive your own copy, please contact our transfer agent, Computershare Trust Company, N.A., by calling their toll free number, 1-800-368-5948.

If you do not wish to participate in householding and would like to receive your own Notice or, if applicable, set of Aspen Aerogels proxy materials in future years, follow the instructions described below. Conversely, if you share an address with another Aspen Aerogels stockholder and together both of you would like to receive only a single Notice or, if applicable, set of proxy materials, follow these instructions:

- If your Aspen Aerogels shares are registered in your own name, please contact our transfer agent, Computershare Trust Company, N.A., and inform them of your request by calling them at 1-800-368-5948 or writing them at Computershare Investor Services, P.O. Box 505008, Louisville, Kentucky 40233-9814.
- If a broker or other nominee holds your Aspen Aerogels shares, please contact the broker or other nominee directly and inform them of your request. Be sure to include your name, the name of your brokerage firm and your account number.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of April 22, 2019 for (a) the executive officers named in the Summary Compensation Table on page 15 of this proxy statement, (b) each of our directors and director nominees, (c) all of our current directors and executive officers as a group and (d) each stockholder known by us to own beneficially more than 5% of our common stock.

Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to the securities. We deem shares of common stock that may be acquired by an individual or group within 60 days of April 22, 2019 pursuant to the exercise of options or warrants or the vesting of restricted stock units (“RSUs”) to be outstanding for the purpose of computing the percentage ownership of such individual or group, but are not deemed to be outstanding for the purpose of computing the percentage ownership of any other person shown in the table.

Except as indicated in footnotes to this table, we believe that the stockholders named in this table have sole voting and investment power with respect to all shares of common stock shown to be beneficially owned by them based on information provided to us by these stockholders. Percentage of ownership is based on 24,246,807 shares of common stock outstanding on April 22, 2019.

Name of Beneficial Owner	Shares beneficially owned	
	Number	Percentage
Directors and Named Executive Officers:		
Donald R. Young (1)	708,851	2.9%
John F. Fairbanks (2)	350,516	1.4%
Corby C. Whitaker (3)	262,305	1.1%
Rebecca B. Blalock (4)	78,037	*
Robert M. Gervis (5)	251,281	1.0%
Steven R. Mitchell (6)	103,707	*
Mark L. Noetzel (7)	120,051	*
William P. Noglows (8)	123,728	*
Richard F. Reilly (9)	116,107	*
All directors and current executive officers as a group (13 persons) (10)	2,713,259	10.4%
Five Percent Stockholders:		
GKFF Ventures I, LLC (11)	3,167,322	13.1%
Oaktop Capital Management II, L.P. (12)	2,593,272	10.7%
Ariel Investments, LLC (13)	1,826,280	7.5%
Telemark Asset Management, LLC (14)	1,303,500	5.4%

* Represents beneficial ownership of less than 1% of the outstanding shares of our common stock.

- (1) Consists of 91,624 shares of our common stock held by Mr. Young, 78,125 restricted shares of common stock held by Mr. Young, 538,313 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 22, 2019, 741 shares issuable upon the exercise of options held by Mr. Young’s children, of which Mr. Young has sole voting power, and 48 shares issuable upon the exercise of options held by a trust for the benefit of Mr. Young’s family, of which Mr. Young has sole voting power.
- (2) Consists of 75,865 shares of our common stock held by Mr. Fairbanks and 274,651 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 22, 2019.
- (3) Consists of 58,065 shares of our common stock held by Mr. Whitaker and 204,240 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 22, 2019.
- (4) Consists of 32,702 shares of our common stock (including restricted stock with forfeiture provisions lapsing within 60 days following April 22, 2019) held by Ms. Blalock and 45,335 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 22, 2019.
- (5) Consists of 120,895 shares of our common stock (including restricted stock with forfeiture provisions lapsing within 60 days following April 22, 2019) held by Mr. Gervis, 72,491 shares of our common stock held by the Robert Gervis 2014 Grantor Retained Annuity Trust, of which Mr. Gervis is a beneficiary and his spouse is trustee, and 57,895 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 22, 2019.
- (6) Consists of 48,144 shares of our common stock (including restricted stock with forfeiture provisions lapsing within 60 days following April 22, 2019) held by Mr. Mitchell and 55,563 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 22, 2019.

- (7) Consists of 61,720 shares of our common stock (including restricted stock with forfeiture provisions lapsing with in 60 days following April 22, 2019) held by Mr. Noetzel and 58,331 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 22, 2019 .
- (8) Consists of 68,144 shares of our common stock (including restricted stock with forfeiture provisions lapsing within 60 days following April 22, 2019) held by Mr. Noglows and 55,584 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 22, 2019.
- (9) Consists of 58,144 shares of our common stock (including restricted stock with forfeiture provisions lapsing within 60 days following April 22, 2019) held by Mr. Reilly and 57,963 shares of our common stock issuable upon the exercise of options exercisable within 60 days following April 22, 2019.
- (1 0) See footnotes 1 through 9. Also includes 43,723 shares of our common stock and 149,559 shares of our common stock issuable upon the exercise of options held by George L. Gould, Ph.D., our Chief Technology Officer, which are exercisable within 60 days following April 22, 2019; 46,595 shares of common stock and 148,208 shares of our common stock issuable upon exercise of options held by Jeffrey A. Ball, our Vice President, Operations, which are exercisable within 60 days following April 22, 2019; 35,150 shares of common stock and 107,947 shares of our common stock issuable upon exercise of options held by Kelley A. Conte, our Vice President, Human Resources, which are exercisable within 60 days following April 22, 2019; and 19,438 shares of common stock and 48,056 share of our common stock issuable upon exercise of options held by Gregg R. Landes, Vice President, Strategic Development and Operational Excellence.
- (1 1) Consists of 3,167,322 shares held by GKFF Ventures I, LLC (formerly known as Argonaut Ventures I, LLC) (“GKFF Ventures”). GKFF Ventures is managed by Ken Levit and Robert Thomas. George Kaiser Family Foundation (“GKFF”) is the sole equity owner of GKFF Ventures. Messrs. Levit and Thomas and GKFF may be deemed to share voting and investment control over the shares, which are beneficially owned by GKFF Ventures. Each of these individuals and GKFF disclaims beneficial ownership of the reported securities except to the extent of his or its pecuniary interest therein. The address of GKFF Ventures I, LLC is c/o George Kaiser Family Foundation, 7030 South Yale Avenue, Suite 600, Tulsa, Oklahoma 74136. This information is based on a Form 13F filed by George Kaiser Family Foundation with the SEC on January 25, 2019.
- (1 2) Consists of 2,593,272 shares of our common stock beneficially owned by Oaktop Capital Management II, L.P. in its capacity as an investment advisor. The address of Oaktop Capital Management II, L.P. is One Main Street, Suite 202, Chatham, NJ 07928. This information is based solely on the Schedule 13G filed by Oaktop Capital Management II, L.P. with the SEC on February 13, 2019.
- (13) Consists of 1,826,280 shares of our common stock beneficially owned by Ariel Investments LLC, in its capacity as an investment advisor. The address of Ariel Investments LLC is 200 E. Randolph Street, Suite 2900, Chicago, IL 60601. This information is based solely on the Schedule 13G filed by Ariel Investment LLC with the SEC on February 14, 2019.
- (14) Consists of 1,303,500 shares or our common stock beneficially owned by Telemark Asset Management, LLC, Telemark Fund, LP and Colin McNay, Telemark Asset Management, LLC is the investment adviser of Telemark Fund, LP. Colin McNay is the President and sole owner of Telemark Asset Management, LLC. The address of Telemark Asset Management, LOLC is One International Place, Suite 4620 Boston MA, 02110. This information is based solely on the Schedule 13G filed by Telemark Asset Management, LLC with the SEC on February 22, 2019.

MANAGEMENT AND CORPORATE GOVERNANCE

The Board of Directors

Our Restated Certificate of Incorporation and Restated Bylaws provide that our business is to be managed by or under the direction of our board of directors. Our board of directors is divided into three classes for purposes of election. One class is elected at each annual meeting of stockholders to serve for a three-year term. Our board of directors currently consists of seven members classified into three classes as follows: (1) Mark L. Noetzel and William P. Noglows constitute the Class II directors and their current terms will expire at the 2019 annual meeting of stockholders, (2) Steven R. Mitchell, Richard F. Reilly and Donald R. Young constitute the Class III directors and their current terms will expire at the 2020 annual meeting of stockholders and (3) Rebecca B. Blalock and Robert M. Gervis constitute the Class I directors and their current terms will expire at the 2021 annual meeting of stockholders.

On February 27, 2019, our board of directors accepted the recommendation of the nominating and governance committee and voted to nominate Mark L. Noetzel and William P. Noglows for re-election at the annual meeting for a term of three years to serve until the 2022 annual meeting of stockholders, and until their respective successors have been elected and qualified.

Set forth below are the names of those persons nominated for election as directors at the 2019 annual meeting and those directors whose terms do not expire this year, their ages, their positions in the Company, if any, their principal occupations or employment for at least the past five years, the length of their tenure as directors and the names of other public companies in which such persons hold or have held directorships during the past five years, as of April 22, 2019. Additionally, information about the specific experience, qualifications, attributes or skills that led to our board of directors' conclusion at the time of filing of this proxy statement that each person listed below should serve as a director is set forth below:

Name	Age	Position
Donald R. Young	61	President, Chief Executive Officer and Director
Rebecca B. Blalock	63	Director
Robert M. Gervis	58	Director
Steven R. Mitchell	49	Director
Mark L. Noetzel	61	Director
William P. Noglows	61	Chairman of the Board
Richard F. Reilly	71	Director

Donald R. Young has been our President, Chief Executive Officer and a member of our board of directors since November 2001. Prior to joining us, Mr. Young worked in the United States and abroad in a broad range of senior operating roles for Cabot Corporation, a leading global specialty chemical company. Prior to Cabot Corporation, Mr. Young worked in the investment business at Fidelity Management & Research. Mr. Young holds a BA from Harvard College and an MBA from Harvard Business School. The board has concluded that Mr. Young possesses specific attributes that qualify him to serve as a member of our board of directors, including the perspective and experience he brings as our Chief Executive Officer, which brings historic knowledge, operational expertise and continuity to our board of directors.

Rebecca B. Blalock has served on our board of directors since June 2016. Ms. Blalock is a partner at Advisory Capital LLC, which provides strategic consulting in the areas of energy and information technology. She has served in that role since October 2011. From October 2002 to October 2011, Ms. Blalock was Senior Vice President and Chief Information Officer of Southern Company, a Fortune 500 energy company. From 1979 to October 2002, Ms. Blalock served in various positions at Georgia Power and Southern Company Services, which are subsidiaries of Southern Company. Ms. Blalock's management experience during her tenure at Georgia Power included serving as Vice President of Community and Economic Development from January 2000 to October 2002 and Director, Corporate Communication from February 1996 to February 2000. She has also served on the Board of Directors of Hannon Armstrong Sustainable Infrastructure Capital, Inc. (NYSE:HASI), including on its Compensation Committee since March 15, 2017 and on its Finance and Risk Committee since May 15, 2017. She also serves on the Advisory Board of Sol America. Ms. Blalock is also a Trustee of the Woodruff Arts Foundation and serves on the Board of Councilors of The Carter Center. Ms. Blalock holds a BBA in Marketing from State University of West Georgia and an MBA in Finance from Mercer University. Ms. Blalock also completed the Program for Management Development (PMD) at Harvard Business School, received a cyber-security certificate from the Georgia Institute of Technology in 2017 and a Cyber Risk Oversight Certificate from National Association of Corporate Directors in 2018. The board has concluded that she possesses specific attributes that qualify her to serve as a member of our board of directors, including the strategic insight, expertise and experience she has developed in senior executive management at a Fortune 500 company in the energy industry, particularly with information technology, as well as her experience with the business environment in Georgia.

Robert M. Gervis has served on our board of directors since January 2011. Mr. Gervis has been a self-employed advisor and investor since April 2009, as well as a member of various public and private company boards of directors. Prior to April 2009,

Mr. Gervis served in various senior executive positions at Fidelity Investments from July 1994 to March 2009. Mr. Gervis' management experience during his tenure with Fidelity Investments included serving as (i) Chief Executive Officer of an oil and natural gas exploration and production company from December 2002 to March 2006; (ii) Chief Operating Officer of an international, full-service real estate development and investment company from May 2002 to June 2003; (iii) Managing Director of a private equity division from March 2002 to March 2006, which invested in a broad range of industries, including technology, biotechnology, real estate, oil and gas exploration and production and telecommunications; and (iv) President of Ballyrock Investment Advisors from April 2006 to March 2009, a registered investment adviser which managed Fidelity Investments' structured credit business. Prior to joining Fidelity Investments, Mr. Gervis was a partner at the law firm of Weil, Gotshal & Manges. He currently is an investor in, and occasionally serves on the boards of, private companies primarily in the Boston area. Mr. Gervis previously served as a director of Axiall Corporation (NYSE: AXLL) and Tronox Incorporated (NYSE: TROX). Mr. Gervis holds a BS in Industrial Engineering from Lehigh University and a JD from George Washington University. Mr. Gervis also is a CFA charter holder. The board has concluded that Mr. Gervis possesses specific attributes that qualify him to serve as a member of our board of directors, including his extensive experience in finance, capital markets and investing, his management skills, as well as his experience with sophisticated transactions as a corporate attorney. In addition, because Mr. Gervis has served on many boards of directors, the board has concluded that he has substantial experience regarding how boards can and should effectively oversee and manage companies, and a significant understanding of governance issues.

Steven R. Mitchell has served on our board of directors since August 2009. Mr. Mitchell has served as the Chief Executive Officer of Argonaut Private Capital L.P. since July 2016 prior to which he was the managing director of Argonaut Private Equity, LLC, or Argonaut, since November 2004. Prior to joining Argonaut, Mr. Mitchell was a principal in both Radical Incubation and 2929 Entertainment. He currently serves on the boards of directors of several privately owned companies, including Stepstone Group; DMB Pacific, LLC; Sanford Energy, Inc.; Otis Eastern Services, LLC; Specific Systems, LLC; The Fred Jones Companies, LLC; JAC Holding Enterprises, Inc.; Alkami Technology, Inc.; Downing Wellhead Equipment, LLC; Pivot3, Inc. and Global Technology Partners, LLC. From 1996 to 1999, Mr. Mitchell was a corporate attorney at Gibson, Dunn & Crutcher LLP. Mr. Mitchell holds a BBA in Marketing from Baylor University and a JD from University of San Diego School of Law. The board has concluded that Mr. Mitchell possesses specific attributes that qualify him to serve as a member of our board of directors, including his experience building, investing in and growing several manufacturing, technology and product companies and his experience with sophisticated transactions as a corporate attorney. In addition, because Mr. Mitchell has served on many boards of directors, the board has concluded that he has substantial experience regarding how boards can and should effectively oversee and manage companies, and a significant understanding of governance issues.

Mark L. Noetzel has served on our board of directors since December 2009. Mr. Noetzel has worked as a consultant to a number of public and private companies since May 2009. From June 2007 to May 2009, Mr. Noetzel was President and Chief Executive Officer of Cilion, Inc., a biofuels company. Prior to joining Cilion in 2007, he had served in several senior positions at BP plc, including Group Vice President, Global Retail, from 2003 until 2007, Group Vice President, B2B Fuels and New Markets, during 2001 and 2002 and Group Vice President, Chemicals, from 1997 until 2001. Prior to those senior management roles with BP plc, Mr. Noetzel served in other management and non-management roles with Amoco Corporation from 1981 until BP acquired Amoco in 1998. Mr. Noetzel served on the board of directors of Axiall Corporation (NYSE: AXLL) from September 2009 until Axiall was acquired by Westlake Chemical Corporation in August 2016. Mr. Noetzel served as Chairman of Axiall from January 2010 to March 2016. Mr. Noetzel also currently serves on the board of Siluria Technologies Inc., a privately owned technology company and previously served on the board of Dixie Chemical Company Inc., also privately owned, from September 2017 to November 2018. Mr. Noetzel holds a BA in Political Science from Yale University and an MBA from the Wharton School at University of Pennsylvania. The board has concluded that Mr. Noetzel possesses specific attributes that qualify him to serve as a member of our board of directors, including more than ten years of experience in senior executive management roles with large, international businesses within the chemical and fuel industries and his experience as chairman of the board of a public company.

William P. Noglows has served on our board of directors since our initial public offering in June 2014 and previously served on our board of directors from January 2011 to April 2013. Mr. Noglows has served as Chairman of the Board of Cabot Microelectronics Corporation since November 2003 and as President and Chief Executive Officer from November 2003 until December 2014. Mr. Noglows also serves on the boards of Littelfuse, Inc. and NuMat Technologies, Inc. From 1984 through 2003, Mr. Noglows served in various management positions at Cabot Corporation, culminating in serving as an executive vice president and general manager. Mr. Noglows had previously served as a director of Cabot Microelectronics from December 1999 until April 2002. Mr. Noglows received his B.S. in Chemical Engineering from Georgia Institute of Technology. The board has concluded that Mr. Noglows possesses specific attributes that qualify him to serve as a member and chairman of our board of directors, including his experience as chief executive officer of a leading public company and his expertise in developing technology. In addition, because Mr. Noglows has served on boards of directors of two other public companies, the board has concluded that he has significant experience regarding how boards can and should effectively oversee and manage companies, and a significant understanding of governance issues.

Richard F. Reilly has served on our board of directors since July 2010. For 31 years prior to his retirement in 2009, Mr. Reilly specialized in audits of manufacturing, technology and distribution companies with KPMG LLP, including 28 years in the role of senior audit partner. Prior to his tenure with KPMG LLP, Mr. Reilly worked in private industry, serving in various accounting management roles in technology and manufacturing companies. Mr. Reilly also served for ten years in the U.S. Army reserve as a combat engineer officer. Mr. Reilly served as a member of the board of trustees and as chair of the audit committee of Perkins School for the Blind, a non-profit institution headquartered in Boston, Massachusetts for nine years until November 2018, and currently serves as a member of the finance and audit committee for The Clergy Health and Retirement Trust of the Archdiocese of Boston. Since November 2014, Mr. Reilly has served on the board of directors and as chair of the audit committee of AquaVenture Holdings Limited (NYSE:WAAS). From November 2012 to December 2013, Mr. Reilly also served as a consultant to a Fortune 500 company related to finance, controls and governance issues at its subsidiary in India. Mr. Reilly holds a BS in Business Administration from Northeastern University and is a Certified Public Accountant. The board has concluded that Mr. Reilly possesses specific attributes that qualify him to serve as a member of our board of directors and to serve as chair of our audit committee, including a deep understanding of accounting principles and financial reporting rules and regulations, acquired over the course of his career at KPMG LLP and in private industry. In addition, we believe Mr. Reilly has significant experience overseeing, from an independent auditor's perspective, the financial reporting processes of large public companies in a variety of industries with a global presence.

Director Independence

Our board of directors has reviewed the materiality of any relationship that each of our directors has with Aspen Aerogels, either directly or indirectly. Based upon this review, our board has determined that all of our directors other than Donald R. Young, our Chief Executive Officer, are "independent directors" as defined by the New York Stock Exchange.

Committees of the Board of Directors and Meetings

Meeting Attendance. During the fiscal year ended December 31, 2018, there were six meetings of our board of directors, and the various committees of the board met a total of 19 times. No director attended fewer than 75% of the total number of meetings of the board and of committees of the board on which he or she served during fiscal 2018, except for Mr. Mitchell, who attended eleven of the applicable fifteen meetings of the board and committees of the board on which he served that were held during the period. The board has adopted a policy under which each member of the board is strongly encouraged but not required to attend each annual meeting of our stockholders. All of our directors attended the annual meeting of our stockholders held in 2018.

Audit Committee. Our audit committee met six times during fiscal 2018. This committee currently has three members, Richard F. Reilly (chair), Rebecca B. Blalock and Mark L. Noetzel. Our audit committee's role and responsibilities are set forth in the audit committee's written charter and include the authority to retain and terminate the services of our independent registered public accounting firm. In addition, the audit committee reviews our annual and quarterly financial statements, considers matters relating to accounting policy and internal controls and reviews the scope of annual audits. All members of the audit committee satisfy the current independence standards promulgated by the SEC and by the New York Stock Exchange, as such standards apply specifically to members of audit committees. Our board of directors has determined that Mr. Reilly is an "audit committee financial expert," as the SEC has defined that term in Item 407 of Regulation S-K.

Our audit committee is authorized to, among other matters:

- approve and retain the independent registered public accounting firm to conduct the annual audit of our financial statements;
- review the proposed scope and results of the audit;
- review accounting and financial controls with the independent registered public accounting firm and our financial and accounting staff;
- review and approve transactions between us and our directors, officers and affiliates;
- recognize and prevent prohibited non-audit services;
- establish procedures for complaints received by us regarding accounting matters and any other complaints alleging a violation of our code of business conduct and ethics;
- oversee internal audit functions;
- review and evaluate our policies and procedures with respect to risk assessment and risk management; and
- prepare the report of the audit committee that the rules of the SEC require to be included in our annual meeting proxy statement.

Our audit committee typically meets quarterly and with greater frequency as necessary. The agenda for each meeting is set by the chair of the audit committee in consultation with the Chief Executive Officer and Chief Financial Officer. The audit committee meets regularly in executive session. However, from time to time, various members of management, and employees, outside advisors or consultants may be invited by the audit committee to make presentations, to provide financial, background information or advice, or to otherwise participate in audit committee meetings.

Please also see the report of the audit committee set forth elsewhere in this proxy statement.

A copy of the audit committee's written charter is publicly available in the "Investors" section of our website at www.aerogel.com.

Compensation and Leadership Development Committee. Our compensation and leadership development committee (hereafter also referred to as our "compensation committee") met nine times during fiscal 2018. This committee currently has three members, Robert M. Gervis (chair), William P. Noglows and Steven R. Mitchell. Mr. Noglows chaired the compensation committee during fiscal 2018 and until his appointment as the chairman of the Board of Directors on February 27, 2019. Our compensation committee's role and responsibilities are set forth in the compensation committee's written charter and includes reviewing, approving and making recommendations regarding our compensation policies, practices and procedures to ensure that legal and fiduciary responsibilities of the board of directors are carried out and that such policies, practices and procedures contribute to our success. Our compensation committee also administers our 2014 Employee, Director and Consultant Equity Incentive Plan ("2014 Plan") and our employee cash bonus plan. The compensation committee is responsible for the determination of the compensation of our executive officers other than our Chief Executive Officer. The compensation of our Chief Executive Officer is determined by our board of directors upon the recommendation of our compensation committee. All members of the compensation committee qualify as independent under the definition promulgated by the New York Stock Exchange.

Our compensation committee is authorized to, among other matters:

- review and recommend compensation arrangements for management;
- establish and review general compensation policies with the objective to attract and retain superior talent, to reward individual performance and to achieve our financial goals;
- administer our equity incentive plans;
- ensure appropriate leadership development and succession planning is in place;
- oversee the evaluation of management; and
- if applicable, prepare the report of the compensation committee that the rules of the SEC require to be included in our annual meeting proxy statement.

Our compensation committee typically meets quarterly and with greater frequency if necessary. The agenda for each meeting is set by the chair of the compensation committee in consultation with the Chief Executive Officer. The compensation committee meets regularly in executive session. However, from time to time, various members of management and other employees as well as outside advisors or 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 does not participate in and is not present during any deliberations or determinations of the board of directors or the compensation committee regarding his compensation.

The compensation committee has the sole authority to obtain, at the expense of the Company, advice and assistance from compensation consultants, legal counsel, experts and other advisors that the compensation committee deems advisable in the performance of its duties. The compensation committee has the sole authority to approve any such consultants' or advisors' fees and other retention terms. The compensation committee may select any such consultant, counsel, expert or adviser to the compensation committee, only after taking into consideration factors that bear upon the adviser's independence. The compensation committee has engaged Meridian Compensation Partners, LLC ("Meridian") as its compensation consultant since 2014. The compensation committee assessed the independence of Meridian pursuant to SEC rules and other factors and concluded that Meridian's work for the compensation committee does not raise any conflict of interest nor affect its independence.

Generally, the compensation committee's process involves the establishment of corporate goals and objectives for the current year and determination of compensation levels. 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 is conducted by the compensation committee, which recommends any adjustments to his compensation levels and arrangements for approval by the board of directors. 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, total compensation that may become payable to executives in various hypothetical scenarios, executive stock ownership information, Company stock performance data, analyses of historical executive compensation levels and current Company-wide compensation levels and recommendations of the compensation committee's compensation consultant, if any, including analyses of executive compensation paid at other companies.

For 2018, Meridian assisted the compensation committee in fulfilling its responsibilities under its charter, including advising on compensation packages for executive officers, compensation program design and market practices generally. The compensation committee authorized Meridian to interact with management on behalf of the compensation committee, as needed in connection with advising the compensation committee, and Meridian participates in discussions with management and, when appropriate, outside legal counsel with respect to matters under consideration by the compensation committee.

A copy of the compensation committee's written charter is publicly available in the "Investors" section of our website at www.aerogel.com.

Nominating and Governance Committee. Our nominating and governance committee met four times during fiscal 2018 and currently has three members, Rebecca B. Blalock (chair), Robert M. Gervis and Mark L. Noetzel. Mr. Gervis chaired the committee during fiscal 2018 and until his appointment to the chair of the compensation committee on February 27, 2019 and William P. Noglovs served on our nominating and governance committee during fiscal 2018 and until February 27, 2019. The nominating and governance committee's role and responsibilities are set forth in the nominating and governance committee's written charter and include evaluating and making recommendations to the full board as to the size and composition of the board and its committees, evaluating and making recommendations as to potential candidates to serve on our board of directors, and evaluating current board members' performance. All members of the nominating and governance committee qualify as independent under the definition promulgated by the New York Stock Exchange.

Our nominating and governance committee is authorized to, among other matters:

- identify and recommend director nominees for election to the board of directors;
- review and recommend the compensation arrangements for our non-employee directors;
- develop and recommend to the board of directors a set of corporate governance principles applicable to our Company; and
- oversee the evaluation of our board of directors.

Our nominating and governance committee may consider candidates recommended by stockholders as well as from other sources such as other directors or officers, third party search firms or other appropriate sources. Once identified, the nominating and governance committee will evaluate a candidate's qualifications in accordance with our "Criteria for Nomination as a Director" appended to our nominating and governance committee's written charter. Threshold criteria include a candidate's personal integrity and sound judgment, business and professional skills and experience, independence, knowledge of our industry, possible conflicts of interest, diversity, the extent to which the candidate would fill a present need on the board, and concern for the long-term interests of our stockholders.

If a stockholder wishes to propose a candidate for consideration as a nominee for election to our board of directors, it must follow the procedures described in our restated bylaws and in "Stockholder Proposals and Nominations for Director" at the end of this proxy statement. In general, persons recommended by stockholders will be considered in accordance with our "Policies and Procedures for Shareholders Submitting Nominating Recommendations" appended to our nominating and governance committee's written charter. All stockholder recommendations for proposed director nominees must be addressed in writing to the nominating and governance committee, in care of our Secretary, at our principal offices and must be received by the deadlines set forth in this proxy statement under the heading "Stockholder Proposals and Nominations for Director." The recommendation must be accompanied by the following information concerning each stockholder making the recommendation and the beneficial owner, if any, on whose behalf the nominations is made:

- the name and address, of the recommending stockholder, as they appear on the Company's books, and of such beneficial owner, as well as his or her telephone number;
- certain biographical and share ownership information about the stockholder, beneficial owner and any other proponent, including a description of any derivative transactions in the Company's securities;
- any other information relating to such stockholder and beneficial owner, if any, that would be required to be disclosed in a proxy statement or other filings required to be made in connection with the election of directors in a contested election pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended, or the Exchange Act;

- a description of all agreements, arrangements and understandings between such stockholder and beneficial owner, if any, and any other person or persons (including their names) in connection with such stockholder nomination ;
- if the recommending stockholder is not a stockholder of record, a statement from the record holder of the shares (usually a broker or bank) verifying the holdings of the stockholder and a statement from the recommending stockholder of the length of time that the shares have been held. Alternatively, the stockholder may furnish a current Schedule 13D, Schedule 13G, Form 3, Form 4 or Form 5 filed with the SEC reflecting the holdings of the stockholder, together with a statement of the length of time that the shares have been held; and
- a statement from the stockholder as to whether the stockholder has a good faith intention to continue to hold the reported shares through the date of our next annual meeting of stockholders.

The recommendation must be accompanied by the following information concerning the proposed nominee:

- a description of all direct and indirect compensation and other arrangements during the past three years, and any other material relationships, between such stockholder and beneficial owner, if any, and their respective affiliates, on the one hand, and each proposed nominee, and his or her respective affiliates, on the other hand, including, any agreements or understandings regarding the nomination and all information that would be required to be disclosed pursuant to Item 401, 403 and 404 of Regulation S-K promulgated under the Securities Act of 1933, as amended, or the Securities Act, if the stockholder making the nomination and any beneficial owner on whose behalf the nomination is made, if any, or any affiliate or associate thereof, were the “registrant” for purposes of such rule and the nominee were a director or executive officer of such registrant;
- to the extent known by the stockholder, the name and address of any other securityholder of the Company who owns, beneficially or of record, any securities of the Company and who supports any nominee proposed by such stockholder;
- a description of all relationships between the proposed nominee and any of our competitors, customers, suppliers, labor unions or other persons with special interests regarding the Company;
- certain biographical information and contact information of the proposed nominee;
- all other information relating to such person that would be required to be disclosed in solicitations of proxies for election of such nominees as directors, or is otherwise required, in each case, pursuant to Regulation 14A under the Exchange Act (including such person’s written consent to being named in the proxy statement as a nominee and to serving as a director if elected) ; and
- additional disclosures relating to stockholder nominees for directors, including completed questionnaires and any other disclosures required by our Bylaws.

The recommending stockholder must also furnish a statement supporting its view that the proposed nominee possesses the minimum qualifications prescribed by the committee for nominees, and describing the contributions that the nominee would be expected to make to the board and to the governance of the Company. The recommending stockholder must state whether, in its view, the proposed nominee, if elected, would represent all stockholders and not serve for the purpose of advancing or favoring any particular stockholder or other constituency of the Company. The recommendation must be accompanied by the written consent of the proposed nominee: (a) to be considered by the committee and interviewed if the committee chooses to do so in its discretion, and (b) if nominated and elected, to serve as a director.

If a recommendation is submitted by a group of two or more stockholders, the information regarding recommending stockholders set forth above must be submitted with respect to each stockholder in the group.

Our nominating and governance committee has not adopted a formal diversity policy in connection with the consideration of director nominations or the selection of nominees. However, the nominating and governance committee considers issues of diversity among its members in identifying and considering nominees for director, and will strive where appropriate to achieve a diverse balance of backgrounds, perspectives, experience, age, gender, ethnicity and national origin on the board of directors and its committees.

A copy of the nominating and governance committee’s written charter and our corporate governance guidelines are publicly available on the Investors section of our website at www.aerogel.com.

Compensation Committee Interlocks and Insider Participation

During our last fiscal year, the members of our compensation committee included William P. Noglows (chair), Steven R. Mitchell and Robert M. Gervis. No member of our compensation committee has at any time been an employee of ours. None of our executive officers serves as a member of another entity's board of directors or compensation committee that has one or more executive officers serving as a member of our board of directors or compensation committee.

Board Leadership Structure and Role in Risk Oversight

The positions of Chairman of the Board and Chief Executive Officer are presently separated at our Company. We believe that separating these positions allows our Chief Executive Officer to focus on our day-to-day business, while allowing our Chairman of the Board to lead the board of directors in its fundamental role of providing advice to, and independent oversight of, management. Our board of directors recognizes the time, effort and energy that the Chief Executive Officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our Chairman, particularly as the board of directors' oversight responsibilities continue to grow. Our board of directors also believes that this structure ensures a greater role for the independent directors in the oversight of our Company and active participation of the independent directors in setting agendas and establishing priorities and procedures for the work of our board of directors. Our board of directors believes its administration of its risk oversight function has not affected its leadership structure.

Our board administers its risk oversight function directly and through its committees. The audit committee receives regular reports from members of senior management on areas of material risk to the Company, including operational, financial, legal, regulatory, strategic and reputational risks. As part of its charter, our audit committee regularly discusses with management our major risk exposures, their potential financial impact on our Company and the steps we take to manage them. In addition, our compensation committee assists the board in fulfilling its oversight responsibilities with respect to the management and risks arising from our compensation policies and programs. Our nominating and governance committee assists the board in fulfilling its oversight responsibilities with respect to the management of risks associated with board organization, membership and structure, succession planning for our directors and executive officers and corporate governance.

Stockholder Communications to the Board

Generally, stockholders and other interested parties who have questions or concerns should contact our Investor Relations team at 508-691-1111. However, any stockholders and other interested parties who wish to address questions regarding our business directly with the board of directors, or any individual director, must prepare the communication in written form and mail or hand deliver the same to the following address:

ATTN: SECURITY HOLDER COMMUNICATION

Board of Directors
Aspen Aerogels, Inc.
30 Forbes Road, Building B
Northborough, MA 01532

Such communications should not exceed 500 words in length and must be accompanied by the following information:

- a statement of the (i) type and amount of the securities of the Company that the person holds or (ii) a description of the person's interest in the Company;
- any special interest, meaning an interest not in the capacity as a stockholder of the Company, that the person has in the subject matter of the communication; and
- the address, telephone number and e-mail address, if any, of the person submitting the communication.

The following types of communications are not appropriate for delivery to directors under these procedures:

- communications regarding individual grievances or other interests that are personal to the party submitting the communication and could not reasonably be construed to be of concern to security holders or other constituencies of the Company (such as employees, members of the communities in which we operate our businesses, customers and suppliers) generally;
- communications that advocate engaging in illegal activities;
- communications that, under community standards, contain offensive, scurrilous or abusive content; and
- communications that have no rational relevance to the business or operations of the Company.

Communications will be distributed to the board, or to any individual director or directors as appropriate, depending on the facts and circumstances outlined in the communications. Items that are unrelated to the duties and responsibilities of the board may be excluded, such as:

- junk mail and mass mailings;
- resumes and other forms of job inquiries;
- surveys; and
- solicitations or advertisements.

In addition, any material that is unduly hostile, threatening, or illegal in nature may be excluded, in which case it will be made available to any outside director upon request.

Executive Officers

The following table sets forth certain information regarding our executive officers who are not also directors, as of April 22, 2019. We have employment agreements with our Chief Executive Officer and the following executive officers.

Name	Age	Position
Jeffrey A. Ball	51	Vice President, Operations
Kelley W. Conte	54	Vice President, Human Resources
John F. Fairbanks	58	Vice President, Chief Financial Officer and Treasurer
George L. Gould, Ph.D.	56	Chief Technology Officer
Corby C. Whitaker	49	Senior Vice President, Sales and Marketing
Gregg R. Landes	49	Vice President, Strategic Development & Operational Excellence

Jeffrey A. Ball has been our Vice President, Operations since August 2015. Mr. Ball joined us in January 2013 as Vice President, Engineering. Prior to joining us, Mr. Ball was Vice President of Global Capital Project Management for Genzyme, a Sanofi Company. Spanning over 20 years, Mr. Ball has held leadership roles in manufacturing, engineering and capital management in the chemical, pharmaceutical and biotech industries both in the United States and abroad. Mr. Ball holds Bachelor of Science & Master of Science degrees in Chemical Engineering from Bucknell University and Villanova University, respectively.

Kelley W. Conte has been our Vice President, Human Resources, since September 2015. Prior to joining Aspen Aerogels, Ms. Conte was a Senior Director, Human Resources at EMC Corporation where she was the global head of HR for the Enterprise Storage Division, as well as a global lead for the company-wide deployment of a cloud based HRIS solution. Ms. Conte has over 30 years of experience as an HR leader in both large and small companies across the high tech and financial services industries. She holds a BS in Business Management with a concentration in Human Resources from Fairfield University.

John F. Fairbanks has been our Vice President, Chief Financial Officer and Treasurer since October 2006. Prior to joining us, Mr. Fairbanks was a Senior Vice President of New England Business Service, Inc., (“NEBS”), and served as Treasurer, Chief Financial Officer and in several senior operating roles for NEBS during his tenure. Immediately prior to joining NEBS, Mr. Fairbanks was Vice President and Treasurer of M/A-Com, Inc. Mr. Fairbanks holds a BA in Economics from Middlebury College and an MBA in Finance from the Wharton School at University of Pennsylvania.

George L. Gould, Ph.D. has been with us since our inception in 2001 and has served as our Chief Technology Officer since May 2018. Prior to this role, Dr. Gould served in a variety of positions with us, most recently as our Vice President, Research and Development from April 2011 to May 2018, Director, Research and Development from February 2009 to April 2011 and Director, Research from June 2005 to February 2009. Prior to joining us, Dr. Gould was employed by Aspen Systems, Inc., the company from which our company was spun-off in 2001. Prior to joining Aspen Systems, Dr. Gould was a chemistry professor at University of Illinois at Chicago. Dr. Gould holds a B.A. in Chemistry from the College of Wooster and a Ph.D. in Inorganic Chemistry from Yale University and he carried out his post-doctoral training at Brookhaven National Laboratory.

Gregg R. Landes has been with us since September 2016 and has served as Vice President, Strategic Development and Operational Excellence since May 2018. Mr. Landes has previously served in a variety of positions with us, as our Vice President, Innovation and Strategic Development from February 2018 to May 2018 and our Vice President, Finance and Corporate Development from September 2016 to February 2018. Prior to joining us, Mr. Landes was a principal at the consulting firm, Tetra Tech, Inc., where he focused on LNG and Environmental Bankruptcy trusts from July 2013 to August 2016. Prior to Tetra Tech, Mr. Landes was employed by Hess Corporation where he served as Vice President, Business Development for Hess LNG from June 2007 to July 2013. Prior to Hess Corporation, Mr. Landes worked in a broad range of senior financial and business leadership roles for Cabot

Corporation. Mr. Landes holds a BSBA in Finance from the University of Florida and an MBA from the F.W. Olin Graduate School of Business at Babson College.

Corby C. Whitaker has been our Senior Vice President, Sales and Marketing since joining us in February 2012. Prior to that, Mr. Whitaker worked in senior sales, marketing and business development leadership roles in the energy, renewable energy, building materials and industrial equipment industries. From July 2010 to December 2011, Mr. Whitaker was Vice President, Sales at Solyndra LLC and from December 2007 to July 2010, Mr. Whitaker served as Vice President, Global Sales at United Solar Ovonic LLC, each a solar technology company. Prior to that, from March 2004 to December 2007, Mr. Whitaker served as Director of Sales at Johns Manville, a building materials company. Mr. Whitaker holds a B.S. in mechanical engineering from Texas A&M University.

EXECUTIVE OFFICER AND DIRECTOR COMPENSATION

Summary Compensation Table

The following table shows the total compensation paid or accrued during the last two fiscal years ended December 31, 2018 and 2017 to (1) our President and Chief Executive Officer, and (2) the next two most highly compensated executive officers who earned more than \$100,000 during the fiscal year ended December 31, 2018 and were serving as executive officers as of such date.

Name and Principal Position	Year	Salary (\$)	Stock Awards (\$ (1))	Option Awards (\$ (1))	Non-Equity Incentive Plan Compensation (\$ (4))	All Other Compensation (\$ (5))	Total (\$)
Donald R. Young <i>President and Chief Executive Officer</i>	2018	510,390	352,498	465,442 (3)	51,500	22,558	1,402,387
	2017	494,697	356,250 (2)	119,852 (2)	440,501	2,700	1,414,000
John F. Fairbanks <i>Vice President, Chief Financial Officer and Treasurer</i>	2018	300,005	149,997	150,079	16,500	2,654	619,234
	2017	295,584	149,996	150,041	132,148	14,141	741,910
Corby C. Whitaker <i>Senior Vice President, Sales and Marketing</i>	2018	329,966	117,498	117,562	18,222	15,492	598,740
	2017	315,525	110,000	110,030	152,883	26,592	715,030

- (1) Except as described in footnote 2, these amounts represent the aggregate grant date fair value for these awards computed in accordance with FASB ASC Topic 718. Valuation assumptions are described in Note 12 to our consolidated financial statements included in our Annual Report in Form 10-K for the fiscal year ended December 31, 2018 filed with the SEC on March 7, 2019.
- (2) The performance-based vesting conditions of Mr. Young's SEIG Restricted Shares and SEIG Performance Option were modified in August 2017. See below under "– Narrative Disclosure to Summary Compensation Table – 2017 and 2018 Modifications to 2015 Special Equity Incentive Grants." In connection with the modification of the performance-based vesting condition of Mr. Young's SEIG Restricted Shares in 2017, the achievement of the performance-based vesting condition of the SEIG Restricted Shares was determined to be probable and, accordingly, the incremental fair value of this modification was determined to be \$356,250. In addition, in connection with the 2017 modification of the performance-based vesting conditions of Mr. Young's SEIG Performance Option, and in accordance with FASB ASC Topic 718, the incremental fair value of this modification based on a Monte Carlo simulation was determined to be \$119,852.
- (3) In November 2018, we entered into a new executive agreement with Mr. Young with change in control provisions that modified Mr. Young's SEIG Performance Option effective January 1, 2019. See below under "– Narrative Disclosure to Summary Compensation Table – 2017 and 2018 Modifications to 2015 Special Equity Incentive Grants." In connection with this modification and in accordance with FASB ASC Topic 718, the incremental fair value of this modification based on a Monte Carlo simulation was determined to be \$112,753.
- (4) Represents the amount awarded to the named executive officer for 2018 and 2017, respectively, under the Aspen Aerogels, Inc. Bonus Plan.
- (5) Represents the sum of (i) cash payments to the named executive officer in lieu of vacation pursuant to Company policy and (ii) Company matching contributions to our 401(k) match in the amounts of \$2,750, \$2,654 and \$2,750 in 2018 and \$2,700, \$2,603 and \$2,700 in 2017 for Messrs. Young, Fairbanks and Whitaker, respectively.

Narrative Disclosure to Summary Compensation Table

Employment Arrangements with Our Named Executive Officers

Donald R. Young

In December 2015, we entered into an amended and restated executive agreement with Mr. Young effective January 1, 2016 with a three year term ("2015 CEO Agreement"). In November 2018, we entered into an executive agreement with Mr. Young effective January 1, 2019 with a three year term ("2018 CEO Agreement"), which agreement replaced the expired 2015 CEO Agreement. Mr. Young serves as our Chief Executive Officer on an at-will basis. Pursuant to the 2015 CEO Agreement, effective April 1, 2017, Mr. Young's annual base salary was increased from \$480,000 to \$500,000 per year and Mr. Young was eligible to receive an annual performance-based bonus for fiscal 2017 as determined by our board of directors with a target of 100% of his year-end base salary. Effective April 7, 2018, Mr. Young's base salary was increased to \$515,000 per year and Mr. Young was eligible to receive an annual performance-based bonus for fiscal 2018 as determined by our board of directors with a target of 100% of his year-end base salary. Pursuant to the 2018 CEO Agreement, Mr. Young's annual base salary for fiscal 2019 remained at \$515,000 per year and Mr. Young was eligible to receive an annual performance-based bonus as determined by our board of directors with a target of

100% of his year-end base salary. Mr. Young's base salary may be increased, but not decreased, at the discretion of our board of directors.

Mr. Young is entitled to certain benefits in connection with a termination of his employment or a change of control as discussed below under “— Potential Payments Upon Termination or Change of Control.”

Other Named Executive Officers

In December 2015, we entered into amended and restated executive agreements with Messrs. Fairbanks and Whitaker effective January 1, 2016 with three year terms (“2015 Executive Agreements”). In December 2018, we entered into executive agreements with Messrs. Fairbanks and Whitaker effective January 1, 2019 with three-year terms (“2018 Executive Agreements”), which agreements replaced the expired 2015 Executive Agreements. Messrs. Fairbanks and Whitaker serve as executive officers on an at-will basis. Pursuant to the 2015 Executive Agreements, and effective April 8, 2017, Mr. Fairbanks' annual base salary was increased from \$283,371 to \$300,000 and Mr. Whitaker's annual base salary was set at \$315,525. Mr. Fairbanks' target bonus was set at 50% and Mr. Whitaker's target bonus was set at 55% of their respective year-end base salaries for fiscal 2017. Effective April 7, 2018, Mr. Whitaker's annual base salary was increased to \$331,301. In December 2017, Mr. Fairbanks' and Mr. Whitaker's target bonuses for fiscal 2018 were set at 55% of their respective year-end base salaries. Pursuant to the 2018 Executive Agreements, the annual base salaries of Messrs. Fairbanks and Whitaker were set at \$300,005 and \$331,301, respectively, and they are eligible to receive an annual performance based bonus as determined by our board of directors or a committee thereof with a target bonus of 55% of their respective year-end base salaries. The annual base salaries set forth in these agreements may be increased, but not decreased, at the discretion of our board of directors.

Messrs. Fairbanks and Whitaker are entitled to certain benefits in connection with a termination of their employment or a change of control as discussed below under “— Potential Payments Upon Termination or Change of Control.”

Employment, Confidentiality and Non-Competition Agreements

Each of our named executive officers has also entered into an employment, confidentiality and non-competition agreement. Among other things, this agreement obligates each named executive officer to refrain from disclosing any of our proprietary information received during the course of employment and to assign to us any inventions conceived or developed during the course of employment. Additionally, following termination of employment, each of our named executive officers is prohibited from (i) competing with us for a period of one year and (ii) soliciting or interfering with our business relationship with any of our existing clients, customers, business partners or employees for a period of two years.

2017 and 2018 Modifications to 2015 Special Equity Incentive Grants

On December 11, 2015, our board of directors granted to Mr. Young, (i) 78,125 shares of restricted common stock which will vest based on the achievement of a Company performance target for fiscal year 2020 (the “SEIG Restricted Shares”), (ii) a nonqualified stock option to purchase 84,745 shares of common stock which will vest in full on the third anniversary of the grant date (the “SEIG Time-Based Option”); and (iii) a nonqualified stock option to purchase 370,181 shares of common stock of which 131,578 of the shares will vest and become exercisable on the third anniversary of the grant date provided that the 30 day volume weighted average price of the Company's common stock on the New York Stock Exchange (the “VWAP”) shall be at least \$7.68 for at least 60 consecutive trading days during such three-year period; 122,324 of the shares will vest and become exercisable on the fourth anniversary of the grant date provided that the VWAP shall be at least \$8.32 for at least 60 consecutive trading days during such four-year period; and the remaining 116,279 of the shares will vest and become exercisable on the fifth anniversary of the grant date provided that the VWAP shall be at least \$8.96 for at least 60 consecutive trading days during such five-year period (the “SEIG Performance Option”).

In August 2017, in order to better align Mr. Young's incentives with our then current goals, particularly given the constrained capital investment and low activity levels in the global energy infrastructure markets at that time, our decision to delay the board approved Plant Two project and its related financing to better align the capacity expansion with our assessment of demand for the 2018 to 2020 period, and our decision to file patent infringement suits, our board of directors reduced the Company performance target for fiscal year 2020 with respect to the SEIG Restricted Shares and extended by one year each of the time periods during which Mr. Young might achieve the price targets on the vesting of his SEIG Performance Option that were set to expire on the third anniversary of the grant date (131,578 shares, \$7.68 target) and on the fourth anniversary of the grant date (122,324 shares, \$8.32 target).

The SEIG Time-Based Option and the SEIG Performance Option were granted with an exercise price equal to \$6.40, which price was above the fair market value of our common stock on the date of grant and was equal to the 30 day VWAP on the grant date. The stock options will vest provided Mr. Young continues to provide services to the Company on the applicable vesting date.

Pursuant to 2018 CEO Agreement, certain modifications were made to vesting of outstanding stock options and stock-based awards (other than the Restricted Stock Agreement made December 11, 2015 as amended on August 2, 2017) in connection with change of control and certain termination of employment events. Upon a change of control, if a successor corporation does not assume the SEIG Time-Based Option and SEIG Performance Option awards, they shall immediately accelerate and become fully vested and exercisable, subject to any permitted action by our board of directors upon a change of control under our applicable equity plan to terminate the stock options and any share price hurdles in the SEIG Performance Option will be deemed to have been met. Furthermore, if within 24 months after the occurrence of a change of control, we terminate Mr. Young's employment without cause or he terminates his employment for good reason, the SEIG Performance Option and SEIG Time-Based Option will fully vest and become exercisable as of the date of termination subject to any permitted action by our board of directors upon a change of control under our applicable equity plan to terminate the stock options upon a change of control.

Upon a change of control, all of the SEIG Restricted Shares will be deemed to have been "earned" but will not be deemed vested until December 31, 2020. However, if within 24 months after the occurrence of a change of control, Mr. Young is terminated by the Company without cause or terminates for good reason, then the SEIG Restricted Shares will vest as of the date of termination. Furthermore, if in connection with a change of control, the SEIG Restricted Shares are not substituted for other securities, then the SEIG Restricted Shares will vest as of the date of the change of control.

2017 Equity Awards

On February 28, 2017, Messrs. Fairbanks and Whitaker were each granted stock options and RSUs. Specifically, Mr. Fairbanks was granted an option to purchase 71,238 shares of our common stock at an exercise price of \$4.14 per share and 36,231 RSUs and Mr. Whitaker was granted an option to purchase 52,241 shares of our common stock at an exercise price of \$4.14 per share and 26,570 RSUs. The stock options and RSUs vest in equal annual installments over a three year period from the date of grant. The stock options will expire 10 years from the date of grant.

2018 Equity Awards

On February 28, 2018, Messrs. Young, Fairbanks and Whitaker were each granted stock options and RSUs. Specifically, Mr. Young was granted an option to purchase 158,206 shares of our common stock at an exercise price of \$4.60 per share and 76,630 RSUs. Mr. Fairbanks was granted an option to purchase 67,321 shares of our common stock at an exercise price of \$4.60 per share and 32,608 RSUs and Mr. Whitaker was granted an option to purchase 52,735 shares of our common stock at an exercise price of \$4.60 per share and 25,543 RSUs. The stock options and RSUs vest in equal annual installments over a three year period from the date of grant. The stock options will expire 10 years from the date of grant.

2019 Equity Awards

On February 27, 2019, Messrs. Young, Fairbanks and Whitaker were each granted stock options and RSUs. Specifically, Mr. Young was granted an option to purchase 195,478 shares of our common stock at an exercise price of \$3.63 per share and 97,107 RSUs. Mr. Fairbanks was granted an option to purchase 83,182 shares of our common stock at an exercise price of \$3.63 per share and 41,322 RSUs and Mr. Whitaker was granted an option to purchase 65,159 shares of our common stock at an exercise price of \$3.63 per share and 32,369 RSUs. The stock options and RSUs vest in equal annual installments over a three year period from the date of grant. The stock options will expire 10 years from the date of grant.

Cash Bonus Plan

Upon the recommendation of our compensation committee, our board of directors initially approved our employee cash bonus plan in April 2012. The plan is administered by the compensation committee. The plan provides that participants are eligible to receive a cash bonus over a performance period based on goals established by the administrator which may include attaining revenue goals, an adjusted EBITDA goal, an individual goal or such other performance goals established by the administrator from time to time. Each participant receives a participant letter setting forth a percentage allocation of a target award based upon a percentage of base salary or set forth as a dollar amount. The participation letters also set forth minimum threshold achievement levels applicable to each goal and may set forth additional payments above the target award amount in the event that one or more goals are exceeded. Following completion of the performance period, the administrator determines the level of performance achieved for each goal and approves and certifies the amount of the cash payments to be made.

If a participant voluntarily terminates employment during a performance period, the participant will not be eligible for a payment, except as otherwise provided in the participant's employment agreement, if any. If a participant is terminated by us other than for cause or retires, as set forth in any retirement policy then in effect, the participant will receive a prorated payout based on the date of termination of employment and achievement of the goals at such time as payment is otherwise made to the other participants under the plan. The plan provides that participants shall receive the cash bonus payment earned, if any, no later than March 15 of the

calendar year immediately following the performance period. The administrator may revise or terminate the plan at any time; but no amendment or termination shall be effective without the consent of a participant if it would adversely impact the economic benefit of an outstanding award thereunder.

2017 Bonus Awards and Payments

Upon the recommendation of our compensation committee, our board of directors approved the target bonus amounts and goals under the bonus plan for fiscal 2017 for Mr. Young on December 15, 2016. Our compensation committee approved the target bonus amounts and goals under the bonus plan for fiscal 2017 for Messrs. Fairbanks and Whitaker on December 14, 2016. Each named executive officer's 2017 bonus award amount, calculated as a percentage of year-end base salary, was based on achieving and exceeding certain performance metrics. For 2017, these performance metrics were revenue, adjusted EBITDA and the launch of a new product, Pyrogel HPS, and the achievement of a related sales goal. Calculation of the achievement of the adjusted EBITDA target was made in a manner that excluded the impact of costs related to intellectual property enforcement and certain other strategic activities in 2017. For revenue and adjusted EBITDA, the 2017 performance metrics specified a threshold value that must be achieved before any bonus amount would be paid under that metric, a target value associated with a target bonus amount, and an incentive component if the target value was exceeded. In addition, the bonus amount was to be reduced or increased by a specified amount based upon relative achievement of the performance milestone. The target bonus amounts for fiscal 2017 for Messrs. Young, Fairbanks and Whitaker, expressed as a percentage of their year-end base salary, were 100%, 50% and 55%, respectively. The maximum bonus that could be earned was limited to 225% of the target bonus amount. As a result of achieving and exceeding the 2017 performance thresholds, our compensation committee recommended and our board of directors approved, as necessary, bonus payments for fiscal 2017 under our cash bonus plan to Messrs. Young, Fairbanks and Whitaker of \$440,501, \$132,148 and \$152,883, respectively.

2018 Bonus Awards and Payments

Upon the recommendation of our compensation committee, our board of directors approved the target bonus amounts and goals under the bonus plan for fiscal 2018 for Mr. Young on February 28, 2018. Our compensation committee approved the target bonus amounts and goals under the bonus plan for fiscal 2018 for Messrs. Fairbanks and Whitaker on December 14, 2017. Each named executive officer's 2018 bonus award amount, calculated as a percentage of year-end base salary, was based on achieving and exceeding certain performance metrics. For 2018, these performance metrics were revenue and adjusted EBITDA. Calculation of the achievement of the adjusted EBITDA target was made in a manner that excluded the impact of any costs associated with intellectual property enforcement and certain other strategic activities incurred in 2018 as determined by our board of directors or compensation committee. For revenue and adjusted EBITDA, the 2018 performance metrics specified a threshold value that must be achieved before any bonus amount would be paid under that metric, a target value associated with a target bonus amount, and an incentive amount if the target value was exceeded. In addition, a component of the bonus, expressed as a percentage of the target bonus amount may be added to or deducted from otherwise earned bonus based upon the relative achievement, or lack thereof, of certain additional performance goals related to new business creation ("2018 Additional Goals"), as determined by our board of directors or our compensation committee. The target bonus amounts for fiscal 2018 for Messrs. Young, Fairbanks and Whitaker, expressed as a percentage of their year-end base salary, were 100%, 55% and 55%, respectively. The maximum bonus that could have been earned was limited to 225% of the target bonus amount. While the bonus that could have been earned based on target bonus amount was not paid due to lack of achievement of the established thresholds for revenue and adjusted EBITDA, our compensation committee determined that the 2018 Additional Goals were achieved. Accordingly, our compensation committee recommended and our board of directors approved, as necessary, bonus payments for fiscal 2018 under our cash bonus plan to Messrs. Young, Fairbanks and Whitaker of \$51,500, \$16,500 and \$18,222, respectively.

2019 Bonus Awards

Upon the recommendation of our compensation committee, our board of directors approved the target bonus amounts and goals under the bonus plan for fiscal 2019 for Mr. Young on February 27, 2019. Our compensation committee approved the target bonus amounts and goals under the bonus plan for fiscal 2019 for Messrs. Fairbanks and Whitaker on December 12, 2018. Each named executive officer's 2019 bonus award amount, calculated as a percentage of year-end base salary, will be based on achieving and exceeding certain performance metrics. For 2019, these performance metrics are revenue and adjusted EBITDA. Calculation of the achievement of the adjusted EBITDA target will be made in a manner that will exclude the impact of any costs associated with intellectual property enforcement and certain other strategic activities incurred in 2019, if so determined by our board of directors or compensation committee. For revenue and adjusted EBITDA, the 2019 performance metrics specify a threshold value that must be achieved before any bonus amount will be paid under that metric, a target value associated with a target bonus amount, and an incentive amount if the target value is exceeded. In addition, a component of the bonus, expressed as a percentage of the target bonus amount may be added to or deducted from otherwise earned bonus based upon the relative achievement, or lack thereof, of certain additional performance goals, as determined by our board of directors or our compensation committee. The target bonus amounts for fiscal 2019 for Messrs. Young, Fairbanks and Whitaker, expressed as a percentage of their year-end base salary, are 100%, 55% and 55%, respectively. The maximum bonus that can be earned is limited to 225% of the target bonus.

Outstanding Equity Awards at 2018 Fiscal Year-End

The following table shows grants of stock options and grants of unvested stock awards outstanding on the last day of the fiscal year ended December 31, 2018, including both awards subject to performance conditions and non-performance-based awards, to each of the executive officers named in the Summary Compensation Table.

Name	Option Awards					Stock Awards			
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$ (4))	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$ (5))
Donald R. Young	— (13)	158,206 (13)		\$ 4.60	2/29/2028				
	84,745 (6)	— (6)	370,181 (6)	\$ 6.40	12/11/2025				
	108,105 (5)	— (5)		\$ 7.54	3/11/2025				
	259,671 (1)	— (1)		\$ 10.78	9/10/2024				
	33,783 (2)	—		\$ 74.23	8/07/2023				
	63 (3)	—		\$ 1,814.43	11/11/2019				
						76,630 (12)	\$ 163,222	78,125 (7)	\$ 166,406
John F. Fairbanks	— (13)	67,321 (13)		\$ 4.60	2/29/2028				
	23,746 (10)	47,492 (10)		\$ 4.14	2/28/2027				
	44,877 (8)	22,439 (8)		\$ 3.99	3/01/2026				
	30,029 (5)	— (5)		\$ 7.54	3/11/2025				
	99,268 (1)	— (1)		\$ 10.78	9/10/2024				
	8,106	—		\$ 74.23	8/07/2023				
						32,608 (12)	\$ 69,455		
						24,154 (11)	\$ 51,448		
						11,487 (9)	\$ 24,467		
Corby C. Whitaker	— (13)	52,735 (13)		\$ 4.60	2/27/2028				
	17,413 (10)	34,828 (10)		\$ 4.14	2/28/2027				
	35,901 (8)	17,951 (8)		\$ 3.99	3/01/2026				
	26,425 (5)	— (5)		\$ 7.54	3/11/2025				
	66,154 (1)	— (1)		\$ 10.78	9/10/2024				
	5,404	—		\$ 74.23	8/07/2023				
						25,543 (12)	\$ 54,407		
						17,714 (11)	\$ 37,731		
						9,190 (9)	\$ 19,575		

- (1) These options to purchase shares of our common stock were granted on September 10, 2014 and vest as to 25% of the shares on each anniversary of the grant date until September 10, 2018.
- (2) Includes options to purchase 726 shares of our common stock transferred to Mr. Young's children in December 2013.
- (3) Consists of options to purchase 15 shares of our common stock transferred to Mr. Young's children in 2010, 2011 and 2012, and options to purchase 48 shares of our common stock transferred to the Young Family Trust in 2012.
- (4) The market values of RSUs and restricted stock are determined by multiplying the number of shares by \$2.13, the closing price of our common stock on the NYSE on December 31, 2018.
- (5) These options to purchase shares of our common stock were granted on March 11, 2015 and vest as to one-third of the shares on each anniversary of the grant date until March 11, 2018.

- (6) These options to purchase shares of our common stock were granted on December 11, 2015. 84,745 of the shares became exercisable on December 11, 2018. In addition, 131,578 of the shares will become exercisable on the fourth anniversary of the grant date provided that the 30 trading day volume weighted average price of our common stock on the New York Stock Exchange (VWAP) is at least \$7.68 for at least 60 consecutive trading days during such four -year period; 122,324 of the shares will become exercisable on the fifth anniversary of the grant date provided that the VWAP is at least \$8.32 for at least 60 consecutive trading days during such five -year period; and an additional 116,279 of the shares will become exercisable on the fifth anniversary of the grant date provided that the VWAP is at least \$8.96 for at least 60 consecutive trading days during such five-year period.
- (7) These restricted shares will vest in the first quarter of 2021 if we achieve a specified performance target for fiscal year 2020 as determined by our compensation committee.
- (8) These options to purchase shares of our common stock were granted on March 1, 2016 and vest as to one-third of the shares on each anniversary of the grant date until March 1, 2019.
- (9) Represents awards of RSUs granted on March 1, 2016, which vest as to one-third of the shares on each anniversary of the grant date until March 1, 2019.
- (10) These options to purchase shares of our common stock were granted on February 28, 2017 and vest as to one-third of the shares on each anniversary of the grant date until February 28, 2020.
- (11) Represents awards of RSUs granted on February 28, 2017, which vest as to one-third of the shares on each anniversary of the grant date until February 28, 2020.
- (12) Represents awards of RSUs granted on February 28, 2018, which vest as to one-third of the shares on each anniversary of the grant date until February 28, 2021.
- (13) These options to purchase shares of our common stock were granted on February 28, 2018 and vest as to one-third of the shares on each anniversary of the grant date until February 28, 2021.

Severance and Retirement Benefits

Potential Payments Upon Termination or Change of Control

We have agreed to provide severance and change of control payments and benefits to our named executive officers under specified circumstances, as described below.

Donald R. Young – Chief Executive Officer

Pursuant to the terms of 2018 CEO Agreement, effective January 1, 2019, upon termination by the Company without cause or termination by Mr. Young for good reason (a “Qualifying Termination”) prior to a change of control, in addition to any accrued benefits and previously earned performance bonus, he is entitled to receive upon execution of a release, an amount equal to two times the sum of his annual base salary and his performance bonus target, each as then in effect. Mr. Young is also entitled to a pro rata portion of the performance bonus based on the number of months worked in the year of termination, any accrued but unpaid performance bonus for the prior fiscal year, 24 months of COBRA health care insurance benefits, six months of outplacement services and accelerated vesting by three months of substantially all of his stock-based awards and option grants then outstanding, which options shall remain exercisable for at least one year following such Qualifying Termination. Upon a Qualifying Termination that occurs within 24 months after the occurrence of a change of control (a “CIC Qualifying Termination”), Mr. Young will be entitled to a pro rata portion of the performance bonus based on the number of months worked in the year of termination, any accrued but unpaid performance bonus for the prior fiscal year, 24 months of COBRA health care insurance benefits, six months of outplacement services, complete accelerated vesting of substantially all of Mr. Young’s stock-based awards and option grants then outstanding, which stock options shall be exercisable for at least one year following such CIC Qualifying Termination and (i) if the CIC Qualifying Termination occurs during the Performance Period (defined below), two and one-half times the sum of his annual base salary and his performance bonus target, each as then in effect and (ii) if the CIC Qualifying Termination occurs after the Performance Period, two times the sum of his annual base salary and his performance bonus target, each as then in effect.

Pursuant to the 2018 CEO Agreement, Mr. Young is also entitled to a performance bonus as a percentage of net proceeds in connection with a change of control(as defined in the 2018 CEO Agreement) if the closing price per share of our common stock on the date of such change of control exceeds \$6.00 (“CoC Bonus”). The percentage varies from 4% to 6.5% depending on closing price per share at the time of the change of control, and generally will be paid at the same time and in the same form and proportion of consideration as the proceeds paid to the Company or its equity holders as a result of the change of control. In order to be eligible for the CoC Bonus, the change of control must occur prior to January 2, 2021, which period may be extended by our board of directors in its discretion (the “Performance Period”). In order to receive the CoC Bonus, Mr. Young must be employed by the Company on the effective date of the change of control or have been terminated without cause during the six-month period prior to the change of control. Additionally, any stock options or stock-based awards (other than those under the Restricted Stock Agreement made December 11, 2015 as amended on August 2, 2017) outstanding at the time of any change of control and not assumed by a successor corporation will accelerate and fully vest and become exercisable upon the change of control, subject to any permitted action by our

board of directors upon a change of control under our applicable equity plan to terminate the stock options or other stock-based awards upon a change of control. Performance price hurdles in any performance-based options will be deemed to have been met if such options are not assumed by the successor corporation in a change of control or in the event of a Qualifying Termination after a change of control.

The terms “cause,” “good reason” and “change of control” in our executive agreement with Mr. Young are described below under “— Other Named Executive Officers.”

Other Named Executive Officers

Pursuant to the terms of the 2018 Executive Agreements effective January 1, 2019 with Messrs. Fairbanks and Whitaker, respectively, upon termination by the Company not for cause or termination by the executive for good reason prior to a change of control, the executive is entitled to receive upon execution of a release, an amount equal to the sum of his annual base salary then in effect and his performance bonus target then in effect, a pro rata portion of his performance bonus target based on the number of months worked in the year of termination, any accrued but unpaid performance bonus for the prior fiscal year, 12 months of COBRA health care insurance benefits and six months of outplacement service. For any such termination within 24 months from a change of control, the executive is entitled to receive an amount equal to two times his annual base salary and his performance bonus target then in effect, a pro rata portion of the performance bonus based on the number of months worked in the year of termination, any accrued but unpaid performance bonus for the prior fiscal year, 24 months of COBRA health insurance benefits and six months of outplacement services.

In case of a change of control, any outstanding stock options or other stock-based awards not assumed by our successor in a change of control shall immediately accelerate and become fully vested and exercisable, subject to any permitted action by our board of directors upon a change of control under our applicable equity plan to terminate the stock options or other stock-based awards upon a change of control as long as such acceleration does not result in violation of Section 409A of the Code.

Upon termination by the Company not for cause or termination by the executive for good reason, vesting of any outstanding stock options or stock-based awards will be accelerated by three months and any vested stock options will be exercisable for one year from the date of termination subject to any permitted action by our board of directors upon a change of control, or other merger, sale, dissolution or liquidation under our applicable equity plan to terminate the stock options or other stock-based awards upon a change of control. For any such termination within 24 months from a change of control, any vesting of any outstanding stock options or other stock based award will accelerate and become fully vested and exercisable as of the date of termination and subject to any permitted action by our board of directors upon a change of control under our applicable equity plan to terminate the stock options or other stock-based awards upon a change of control, any such vested stock option shall be exercisable for not less than one year from the date of termination.

Section 280G of the Code denies a company a tax deduction for certain payments made to an executive in connection with a change of control if the payments exceed a certain amount. Section 4999 of the Code imposes on the executive an additional excise tax on those payments. If the aggregate of the payments and benefits that Mr. Fairbanks or Mr. Whitaker receives pursuant to his executive agreement or pursuant to any other plan or agreement with us are subject to the excise tax imposed by Section 4999 of the Code, under the executive’s executive agreement, we are required to reduce the amount of the aggregate payments so that they are not subject to Section 4999 of Code unless the aggregate value of the payments and benefits to the executive on an after tax basis would be greater than if they are not reduced.

“**Cause**” is defined under all of the executive agreements of our named executive officers as (i) willful misconduct, dishonesty, fraud or breach of fiduciary duty to the Company; (ii) deliberate disregard of the lawful rules or policies of the Company, failure to perform assigned duties, or breach of an employment or other agreement with the Company, which results in direct or indirect loss, damage or injury to the Company; (iii) the unauthorized disclosure of any trade secret or confidential information of the Company; (iv) the commission of an act which constitutes unfair competition with the Company or which induces any customer or supplier to breach a contract with the Company; (v) conduct substantially prejudicial to the business of the Company; or (vi) the indictment of executive for any felony involving deceit, dishonesty or fraud, or any criminal conduct by the executive that would reasonably be expected to result in material injury or reputational harm to the Company. For purposes of this paragraph, whether or not the executive has committed an act or omission of the type referred to in subparagraphs (i) through (vi) above will be determined by the board of directors in its reasonable, good faith discretion, based upon the facts known to the board of directors at the relevant time.

“**Good Reason**” is defined under all of the executive agreements of our named executive officers as (i) any material breach by the Company of the executive agreement; (ii) a material reduction or material adverse change in the executive’s current duties, responsibilities and authority, without his consent; (iii) the demand by the Company for the executive to relocate or commute more than 40 miles from Northborough, Massachusetts without his consent; or (iv) any reduction by the Company in the executive’s base salary or the executive’s performance bonus target without his consent, except for across-the-board compensation reductions based on

the Company's financial performance similarly affecting all or substantially all senior management employees of the Company. For purposes of this paragraph, whether or not the executive has good reason to terminate his employment by the Company pursuant to subparagraphs (i) through (iv) above will be determined by the board of directors in its reasonable, good faith discretion, based upon the facts known to the board of directors at the relevant time. Any termination for Good Reason by the executive requires the executive to notify the Company within 60 days of the first occurrence of a condition, allow the Company to cure such condition within 30 days of the notice and the executive to terminate the employment within 60 days of the cure period.

"Change of Control" is defined under all of the executive agreements of our named executive officers as the first to occur of any of the following events: (i) the consummation of a reorganization, merger, consolidation or other similar transaction of the Company with or into any other person or group (within the meaning of Section 13(d)(3) of the Securities Exchange Act of 1934, as amended) in which holders of the Company's voting securities immediately prior to such reorganization, merger, consolidation or other similar transaction will not, directly or indirectly, continue to hold at least a majority of the outstanding voting securities of the Company; (ii) a sale, lease, exchange or other transfer (in one transaction or a related series of transactions) of all or substantially all of the Company's assets; (iii) the acquisition by any person or any group of such quantity of the Company's voting securities as causes such person or group (other than a person or group who is a shareholder of the Company on the effective date of the executive agreement) to own beneficially, directly or indirectly, as of the time immediately after such transaction or series of transactions, 50% or more of the combined voting power of the voting securities of the Company other than as a result of (a) an acquisition of securities directly from the Company or (b) an acquisition of securities by the Company which by reducing the voting securities outstanding increases the proportionate voting power represented by the voting securities owned by any such person or group to 50% or more of the combined voting power of such voting securities; or (iv) a change in the composition of the board of directors within a two (2) year period such that a majority of the members of the board are not continuing directors. As used in this paragraph, the term "continuing directors" shall mean as of any date of determination, any member of the board who (a) was a member of the board immediately after the effective date of the executive agreement, or (b) was nominated for election or elected to the board with the approval of, or whose election to the board was ratified by, at least a majority of the continuing directors who were members of the board at the time of that nomination or election; provided however, that in no case shall (1) the public offering and sale of Company's common stock by its shareholders pursuant to a registered secondary offering or (2) the voluntary or involuntary bankruptcy of the Company constitute a Change of Control.

401(k) Retirement Plan

We maintain a 401(k) retirement plan that is intended to be a tax-qualified defined contribution plan under Section 401(k) of the Code. In general, all of our employees who have attained 21 years of age are eligible to participate upon commencement of their employment, if they are permanent employees, and upon completion of a service requirement not exceeding one year for part-time and temporary employees. The 401(k) plan includes a salary deferral arrangement pursuant to which participants may elect to reduce their current compensation by up to the Internal Revenue Service prescribed limit, equal to \$18,000 in 2017 and \$18,500 in 2018, plus \$6,000 for individuals aged 50 and over in each of 2017 and 2018, and have the amount of the reduction contributed to the 401(k) plan. In 2017 and 2018, we matched and plan to continue to match \$0.25 for every \$1 of employee 401(k) contributions up to 4% of the employee's base salary. This 401(k) match is available to all employees eligible to participate in our 401(k) retirement plan, including our named executive officers.

Director Compensation

The following table sets forth the total compensation paid or accrued during the fiscal year ended December 31, 2018 to each of our current and former non-employee directors. Directors who are employed by us are not compensated for their service on our board of directors.

Name	Fees Earned or Paid in Cash (\$)	Stock Awards (\$)(1)	Stock Options (\$)(1)	Total (\$)
Rebecca B. Blalock	42,500	50,998	34,021	127,519
Robert M. Gervis	48,000	50,998	34,021	133,019
Steven R. Mitchell	40,000	50,998	34,021	125,019
Mark L. Noetzel	81,500	50,998	34,021	166,519
William P. Noglows	49,000	50,998	34,021	134,019
Richard F. Reilly	50,000	50,998	34,021	135,019

(1) Represents restricted stock awards and options to purchase shares of our common stock granted on June 20, 2018 and expected to vest on June 18, 2019. These amounts represent the grant date fair value of these awards computed in accordance with FASB

ASC Topic 718. Valuation assumptions are described in Note 13 to our consolidated financial statements included in our Annual Report in Form 10-K for the fiscal year ended December 31, 2018 filed with the SEC on March 7, 2019.

As of December 31, 2018, the aggregate number of shares subject to outstanding equity awards held by our non-employee directors was:

Name	Number of Stock Options Held at Fiscal Year-End	Number of Shares of Restricted Stock Held at Fiscal Year-End
Rebecca B. Blalock	45,335	9,677
Robert M. Gervis	57,895	9,677
Steven R. Mitchell	55,563	9,677
Mark L. Noetzel	58,331	9,677
William P. Noglows	55,584	9,677
Richard F. Reilly	57,963	9,677

Non-Employee Director Compensation Policy

In May 2014, our board of directors adopted the non-employee director compensation policy, or our director compensation policy, that became effective following the completion of our initial public offering on June 18, 2014 and was amended in June 2015 and then subsequently on June 20, 2018. The policy is designed to seek to ensure that the compensation aligns our non-employee directors' interests with the long-term interests of our stockholders, that the structure of the compensation is simple, transparent and easy for stockholders to understand and that our non-employee directors are fairly compensated. Pursuant to our director compensation policy, during each year of a non-employee director's tenure, the director will receive (i) a grant of restricted stock, (ii) a grant of options, and (iii) cash fees for their service on the board of directors and committees of the board. Directors who are also our employees, such as Mr. Young, will not receive additional compensation for their services as directors.

We will grant each non-employee director (i) restricted shares of the Company's common stock and (ii) an option to buy shares of common stock equal in value in the aggregate to \$85,000, which we refer to as the Annual Grant, under the 2014 Plan, each year on or about the time of the meeting of our board of directors following our annual meeting of stockholders, provided that if there has been no annual meeting of stockholders held by the first day of the third fiscal quarter of such year, each non-employee director will receive the Annual Grant on the first day of the third fiscal quarter of such year. The number of shares of common stock to be granted to each independent director as their Annual Grant will be calculated using the closing price on such date of our common stock on the New York Stock Exchange or such other national securities exchange as our common stock is then traded. The number of shares underlying the options will be calculated based on the fair market value of such options based on applicable valuation methods. Such granted value may be split between restricted shares of common stock and stock options as determined by our board of directors in accordance with the policy. For any new non-employee director joining our board of directors after the grant of the Annual Grant in any given year, such non-employee director will receive a grant of restricted shares of our common stock on the first day of his or her service on our board of directors equal to the pro rata share of that year's Annual Grant calculated by multiplying the number of days of such year that the such new director will serve by the quotient of \$85,000 divided by 365. Such granted value may be split between restricted shares of common stock and stock options as determined by our board of directors in accordance with the policy.

The following annual cash fees are paid to our non-employee directors for service on our board of directors, audit committee, compensation committee and nominating and governance committee, as applicable.

Board of Directors or Committee of Board of Directors	Annual Retainer Amount for Chair (in lieu of the annual retainer amount for a member)	Annual Retainer Amount for Member
Board of Directors	\$ 70,000	\$ 35,000
Audit Committee	\$ 15,000	\$ 7,500
Compensation Committee	\$ 10,000	\$ 5,000
Nominating and Governance Committee	\$ 8,000	\$ 4,000

If we hold more than 12 board meetings in a calendar year, each non-employee director will receive a fee of \$1,500 for each additional board meeting attended in person and a fee of \$1,000 for each additional board meeting attended by telephone or by other means of communication. If we hold more than 12 meetings of the audit committee in a calendar year, each member of such committee will receive a fee of \$1,500 for each additional committee meeting attended in person and a fee of \$1,000 for each additional committee meeting attended by telephone or by other means of communication. If we hold more than eight meetings of either of the compensation committee or the nominating and governance committee in a calendar year, each member of such committee will receive a fee of \$1,500 for each additional committee meeting attended in person and a fee of \$1,000 for each additional committee meeting attended by telephone or by other means of communication. The cash payments are paid quarterly in arrears at the end of each fiscal quarter. We have reimbursed and will continue to reimburse our non-employee directors for their reasonable expenses incurred in attending meetings of our board of directors and committees of the board of directors. Beginning in fiscal 2019, the sum of the grant date fair value of all awards made in any fiscal year pursuant to the 2014 Plan to any non-employee director, together with cash compensation earned by the non-employee director, shall not exceed \$500,000.

EQUITY COMPENSATION PLAN INFORMATION

The following table provides certain aggregate information with respect to all of the Company's equity compensation plans in effect as of December 31, 2018.

<u>Plan category</u>	<u>(a)</u>		<u>(b)</u>		<u>(c)</u>
	Number of securities to be issued upon exercise of outstanding options, warrants and rights		Weighted-average exercise price of outstanding options, warrants and rights		Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders (1)	3,869,679	(1)	\$ 7.23		1,815,982 (2)
Equity compensation plans not approved by security holders	—		—		—
Total	3,869,679	(1)	\$ 7.23		1,815,982 (2)

- (1) Consists of options to purchase 2,904,715 shares of our common stock outstanding under the 2014 Plan, 875,227 shares of our common stock subject to RSUs outstanding under the 2014 Plan, and options to purchase 89,736 shares of our common stock outstanding under the 2001 Equity Incentive Plan, as amended (the "2001 Plan"), at December 31, 2018.
- (2) Consists of 1,815,982 shares reserved under the 2014 Plan as of December 31, 2018. Does not include an additional 479,470 shares of our common stock reserved for issuance under the 2014 Plan effective January 1, 2019 pursuant to the "evergreen" provision of the 2014 Plan. The 2001 Plan was terminated in connection with our initial public offering in June 2014. As a result of such termination, no additional awards may be granted under the 2001 Plan, but equity awards previously granted under the 2001 Plan will remain outstanding and continue to be governed by the terms of the 2001 Plan.

REPORT OF AUD IT COMMITTEE

The audit committee of the board of directors, which consists entirely of directors who meet the independence and experience requirements of the New York Stock Exchange, has furnished the following report:

The audit committee assists the board in overseeing and monitoring the integrity of our financial reporting process, compliance with legal and regulatory requirements and the quality of internal and external audit processes. This committee's role and responsibilities are set forth in our charter adopted by the board, which is available on the "Investors" section of our website at www.aerogel.com. This committee reviews and reassesses our charter annually and recommends any changes to the board for approval. The audit committee is responsible for overseeing our overall financial reporting process, and for the appointment, compensation, retention, and oversight of the work of KPMG LLP, our independent registered public accounting firm. As described in more detail under the heading "Board Leadership Structure and Role in Risk Oversight" on page 13, in consultation with management, the audit committee assists in assessing and addressing our enterprise risks. Furthermore, our audit committee has established procedures for and reviews complaints received by us regarding accounting matters and other complaints alleging a violation of our code of business conduct and ethics.

The audit committee discussed our internal controls over financial reporting and management's assessment of the effectiveness of those controls with management. The audit committee also reviewed related-party transactions, if any. In fulfilling its responsibilities for the financial statements for the fiscal year ended December 31, 2018, the audit committee took the following actions:

- Reviewed and discussed the audited financial statements for the fiscal year ended December 31, 2018 with management and KPMG LLP, our independent registered public accounting firm;
- Discussed with KPMG LLP the matters required to be discussed in accordance with Audit Standard No. 1301 – Communications with Audit Committees; and
- Received written disclosures and the letter from KPMG LLP regarding its independence as required by applicable requirements of the Public Company Accounting Oversight Board regarding KPMG LLP's communications with the audit committee and the audit committee further discussed with KPMG LLP their independence. The audit committee also considered the status of pending litigation, taxation matters and other areas of oversight relating to the financial reporting and audit process that the committee determined appropriate.

Based on the audit committee's review of the audited financial statements and discussions with management and KPMG LLP, the audit committee recommended to the board that the audited financial statements be included in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018 for filing with the SEC.

Members of the Audit Committee of Aspen Aerogels, Inc.
Richard F. Reilly (Chair)
Rebecca B. Blalock
Mark L. Noetzel

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Our records reflect that all reports which were required to be filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, as amended, were filed on a timely basis, except that one Form 4 covering one transaction to report the withholding of shares to satisfy minimum statutory tax withholding requirements in connection with vesting of RSUs on March 11, 2018, was filed late by a day by each of Jeffrey Alan Ball, John F. Fairbanks, George L. Gould and Corby C. Whitaker.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

Our audit committee reviews and approves in advance all related-party transactions. In addition to the director and executive officer compensation arrangements discussed above in “Executive Officer and Director Compensation,” during the fiscal year ended December 31, 2018, we have engaged in the following transactions in which the amount involved exceeded \$120,000 and in which any director, executive officer or holder of more than 5% of our voting securities, whom we refer to as our principal stockholders, or affiliates or immediately family members of our directors, executive officers and principal stockholders, had or will have a material interest. We believe that all of these transactions were on terms as favorable as could have been obtained from unrelated third parties.

One of our directors was previously affiliated with one our principal stockholders as indicated in the table below:

Director	Affiliation with Principal Stockholder
Steven R. Mitchell	Chief Executive Officer of Argonaut Private Equity, L.P, the former manager of GKFF Ventures I, LLC until January 2013.

Indemnification Agreements

We have entered into indemnification agreements with each of our non-employee directors and will enter into similar agreements with certain officers. The indemnification agreements and our restated certificate of incorporation and restated bylaws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law.

Registration Rights

Pursuant to our registration rights agreement to which certain of our principal stockholders, directors and executive officers are parties, including GKFF Ventures I, LLC; Donald R. Young, our President, Chief Executive Officer and one of our directors; and John F. Fairbanks, our Vice President, Chief Financial Officer and Treasurer, are entitled to registration rights with respect to the shares of common stock held by them. These shares include substantially all of the shares held by GKFF Ventures I, LLC; and certain shares held by P. Ramsay Battin, our former director; Donald R. Young, our President, Chief Executive Officer and one of our directors; and John F. Fairbanks, our Vice President, Chief Financial Officer and Treasurer. We are generally required to pay all expenses incurred in connection with registrations effected in connection with the following rights, excluding underwriting discounts. All registration rights described below will terminate at the earlier of (1) the seventh anniversary of the completion of our initial public offering, or June 18, 2021, (2) such shares have been registered under the Securities Act, such registration statement has been declared effective and the shares have been disposed of pursuant to such effective registration statement, and (3) with respect to any holder of registrable shares that (together with its affiliates) holds less than 1% of our common stock (on an as-if-converted to common stock basis), when such holder can sell all of such shares without limitation under Rule 144 promulgated under the Securities Act during any 90 day period. On November 8, 2017, we filed a registration statement on Form S-3 with the SEC, which was declared effective on November 20, 2017, registering for resale an aggregate of 6,620,452 shares of our common stock, including shares held by our principal stockholder, GKFF Ventures I, LLC, and our former principal stockholder, Reservoir Capital Partners, L.P. and affiliated funds, which we were required to file under the registration rights agreement pursuant to the “ – Form S-3 rights” section below. The shares registered on this registration statement also included 7,727 shares of common stock held by each of our directors Robert R. Gervis, Mark L. Noetzel, William P. Noglows, Richard R. Reilly and Steven R. Mitchell.

Demand rights. Subject to specified limitations, the holders representing at least a majority of these registrable shares then outstanding may require that we register all or a portion of these securities for sale under the Securities Act, which we refer to as a demand registration, if the anticipated aggregate offering price of such securities is at least \$10,000,000. We may be required to effect up to two such registrations at our expense and up to two such registrations at the holders’ expense. Stockholders with these registration rights who are not part of an initial registration demand are entitled to notice and are entitled to include their shares of common stock in the registration. Under certain circumstances, the underwriters, if any, may limit the number of shares included in any such registration.

Piggyback rights. If we propose to register any of our equity securities under the Securities Act, other than in connection with (i) a registration relating solely to our employee benefit plans, or (ii) a registration relating solely to a business combination or merger

involving us, the holders of these registrable shares are entitled to notice of such registration and are entitled to include their shares of common stock in the registration. Under certain circumstances, the underwriters, if any, may limit the number of shares included in any such registration.

Form S-3 rights. So long as we remain eligible to file registration statements on Form S-3, subject to specified limitations, the holders of these registrable shares may require us to register all or a portion of their registrable shares on Form S-3, if the anticipated aggregate offering price of such securities is at least \$2,000,000. Such requests for registration will not be considered a demand registration pursuant to the “— Demand rights” section above. We are not required to (i) effect more than two such registrations in any 12-month period or (ii) keep effective at any one time more than one registration statement on Form S-3 with respect to the registrable shares. Stockholders with these registration rights who are not part of an initial registration demand are entitled to notice and are entitled to include their shares of common stock in the registration. Under certain circumstances, the underwriters, if any, may limit the number of shares included in any such registration.

Policy for Approval of Related Person Transactions

Pursuant to the written charter of our audit committee, the audit committee is responsible for reviewing, discussing with management and the independent auditors and approving, (i) prior to our entry into any such transaction, all transactions in which we are a participant and in which any parties related to us, including our executive officers, our directors, beneficial owners of more than 5% of our securities, immediate family members of the foregoing persons and any other persons whom our board of directors determines may be considered related parties under Item 404 of Regulation S-K, has or will have a direct or indirect material interest, or (ii) courses of dealing with related parties that are significant in size or involve terms or other aspects that differ from those that would likely be negotiated with independent parties. Approval of such related party transaction may, at the discretion of our audit committee, be conditioned upon our and/or the related person at issue taking any actions that our audit committee in its judgment determines to be necessary or appropriate. In the event that a member of our audit committee has an interest in the related party transaction under discussion, such member must abstain from voting on the transaction. Such member may, if so requested by the chair of the audit committee, participate in some or all of the discussions about the related party transaction in question.

ELECTION OF DIRECTORS
(Notice Item 1)

On February 27, 2019, the board of directors nominated Mark L. Noetzel and William P. Noglows for election at the annual meeting. The board of directors currently consists of seven members, classified into three classes as follows: Mark L. Noetzel and William P. Noglows constitute the Class II directors with a term ending at the 2019 annual meeting of stockholders; Steven R. Mitchell, Richard F. Reilly and Donald R. Young constitute the Class III directors with a term ending at the annual meeting of stockholders to be held in 2020; and Rebecca B. Blalock and Robert M. Gervis constitute the Class I directors with a term ending at the 2021 annual meeting of stockholders. At each annual meeting of stockholders, directors are elected for a full term of three years to succeed those directors whose terms are expiring.

The board of directors has voted to nominate Mark L. Noetzel and William P. Noglows for election at the 2019 annual meeting for a term of three years to serve until the annual meeting of stockholders to be held in 2022, and until their respective successors are elected and qualified. The Class III directors (Messrs. Mitchell, Reilly and Young) and Class I directors (Rebecca B. Blalock and Robert M. Gervis) will serve until the annual meetings of stockholders to be held in 2020 and 2021, respectively, and until their respective successors are elected and qualified.

Unless authority to vote for any of these nominees is withheld, the shares represented by the enclosed proxy will be voted **FOR** the election of Mark L. Noetzel and William P. Noglows as directors. In the event that either nominee becomes unable or unwilling to serve, the shares represented by the enclosed proxy will be voted for the election of such other person as the board of directors may recommend in that nominee's place. We have no reason to believe that either nominee will be unable or unwilling to serve as a director.

A plurality of the shares voted for each nominee at the annual meeting is required to elect each nominee as a director.

THE BOARD OF DIRECTORS RECOMMENDS THE ELECTION OF MARK L. NOETZEL AND WILLIAM P. NOGLOWS AS DIRECTORS, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR THEREOF UNLESS A STOCKHOLDER HAS INDICATED OTHERWISE ON THE PROXY.

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM
(Notice Item 2)

The audit committee has appointed KPMG LLP, as our independent registered public accounting firm, to audit our financial statements for the fiscal year ending December 31, 2019. Our board of directors proposes that the stockholders ratify this appointment. KPMG LLP audited our financial statements for the fiscal year ended December 31, 2018. We expect that representatives of KPMG LLP will be present at the annual meeting, will be able to make a statement if they so desire, and will be available to respond to appropriate questions.

In deciding to appoint KPMG LLP, the audit committee reviewed auditor independence issues and existing commercial relationships with KPMG LLP and concluded that KPMG LLP has no commercial relationship with the Company that would impair its independence in connection with the audit of our financial statements for the fiscal year ending December 31, 2019.

The following table presents fees for professional audit services rendered by KPMG LLP for the audit of the Company's annual financial statements for the years ended December 31, 2018 and 2017, and fees billed for other services rendered by KPMG LLP during those periods.

	2018	2017
Audit fees: (1)	\$ 481,100	\$ 444,000
Audit related fees:	—	—
Tax fees: (2)	37,586	34,000
All other fees:	—	—
Total	<u>\$ 518,686</u>	<u>\$ 478,000</u>

- (1) Audit fees consist of fees for the audit of our annual consolidated financial statements, the review of interim consolidated financial statements included in our quarterly reports on Form 10-Q and other professional services provided in connection with statutory and regulatory filings or engagements. These fees also include expanded audit procedures or consultations with our management as to the accounting or disclosure treatment of transactions or events under the actual or potential impact of final or proposed rules, standards or interpretations by the SEC, Financial Accounting Standards Board or other regulatory or standard-setting bodies.
- (2) Tax fees consisted principally of assistance with matters related to tax compliance and reporting.

Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm

Consistent with SEC policies regarding auditor independence, the audit committee has responsibility for appointing, setting compensation and overseeing the work of our independent registered public accounting firm. In recognition of this responsibility, the audit committee has established a policy to pre-approve all audit and permissible non-audit services provided by our independent registered public accounting firm, including:

1. **Audit** services include audit work performed over the consolidated financial statements, as well as work that generally only an independent registered public accounting firm can reasonably be expected to provide, including comfort letters, statutory audits, and attest services and consultation regarding financial accounting and/or reporting standards.
2. **Audit-Related** services are for assurance and related services that are traditionally performed by an independent registered public accounting firm, including due diligence related to mergers and acquisitions, employee benefit plan audits, and special procedures required to meet certain regulatory requirements.
3. **Tax** services include all services performed by an independent registered public accounting firm's tax personnel except those services specifically related to the audit of the financial statements, and includes fees in the areas of tax compliance, tax planning, and tax advice.
4. **All Other** services are those associated with services not captured in the other categories. The Company generally does not request such services from our independent registered public accounting firm.

Prior to engagement, the audit committee pre-approves these services by category of service. The fees are budgeted and the audit committee requires our independent registered public accounting firm and management to report actual fees versus the budget periodically throughout the year by category of service. During the year, circumstances may arise when it may become necessary to engage our independent registered public accounting firm for additional services not contemplated in the original pre-approval. In those instances, the audit committee requires specific pre-approval before engaging our independent registered public accounting firm.

The audit committee may delegate pre-approval authority to one or more of its members. The member to whom such authority is delegated must report, for informational purposes only, any pre-approval decisions to the audit committee at its next scheduled meeting.

In the event the stockholders do not ratify the appointment of KPMG LLP as our independent registered public accounting firm, the audit committee will reconsider its appointment.

The affirmative vote of a majority of the shares cast affirmatively or negatively at the annual meeting is required to ratify the appointment of the independent registered public accounting firm.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE TO RATIFY THE APPOINTMENT OF KPMG LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE FISCAL YEAR ENDING DECEMBER 31, 2019, AND PROXIES SOLICITED BY THE BOARD WILL BE VOTED IN FAVOR OF SUCH RATIFICATION UNLESS A STOCKHOLDER INDICATES OTHERWISE ON THE PROXY.

CODE OF BUSINESS CONDUCT AND ETHICS

We have adopted a code of business conduct and ethics that applies to all of our employees, including our chief executive officer and chief financial and accounting officers. The text of the code of business conduct and ethics is posted on the “Investors” section of our website at www.aerogel.com. Disclosure regarding any amendments to, or waivers from, provisions of the code that apply to our directors, our principal executive officer or our principal financial officer will be included in a Current Report on Form 8-K within four business days following the date of the amendment or waiver, unless website posting or the issuance of a press release of such amendments or waivers is then permitted by the rules of the New York Stock Exchange.

OTHER MATTERS

The board of directors knows of no other business which will be presented to the annual meeting. If any other business is properly brought before the annual meeting, proxies will be voted in accordance with the judgment of the persons named therein.

STOCKHOLDER PROPOSALS AND NOMINATIONS FOR DIRECTOR

To be considered for inclusion in the proxy statement relating to our 2020 annual meeting of stockholders, we must receive stockholder proposals (other than for director nominations) no later than December 25, 2019. To be considered for presentation at the 2020 annual meeting, although not included in the proxy statement, proposals (including director nominations that are not requested to be included in our proxy statement) must be received no earlier than February 19, 2020 and no later than March 21, 2020. Proposals that are not received in a timely manner will not be voted on at the 2020 annual meeting. If a proposal is received on time, the proxies that management solicits for the meeting may still exercise discretionary voting authority on the proposal under circumstances consistent with the proxy rules of the SEC. All stockholder proposals should be marked for the attention of Secretary, Aspen Aerogels, Inc., 30 Forbes Road, Building B, Northborough, MA 01532.

Northborough, Massachusetts
April 24, 2019

ASPEN AEROGELS, INC.
30 FORBES ROAD, BUILDING B
NORTHBOROUGH, MA 01532

Investor Address Line 1
Investor Address Line 2
Investor Address Line 3
Investor Address Line 4
Investor Address Line 5
John Sample
1234 ANYWHERE STREET
ANY CITY, ON A1A 1A1



VOTE BY INTERNET - www.proxyvote.com
Use the internet to transmit your voting instructions and for electronic delivery of information up until 11:59 P.M. Eastern Daylight Time the day before the meeting date. Have your proxy card in hand when you access the web site and follow the instructions to obtain your records and to create an electronic voting instruction form.

ELECTRONIC DELIVERY OF FUTURE PROXY MATERIALS
If you would like to reduce the costs incurred by our company in making proxy materials, you can consent to receive all future proxy statements, proxy cards and annual reports electronically via email or the Internet. To sign up for electronic delivery, please follow the instructions above to vote using the Internet and, when prompted, indicate that you agree to receive or access proxy materials electronically in future years.

VOTE BY PHONE - 1-800-690-6903
Use any touch-tone telephone to transmit your voting instructions up until 11:59 P.M. Eastern Daylight Time the day before the meeting date. Have your proxy card in hand when you call and then follow the instructions.

VOTE BY MAIL
Mark, sign and date your proxy card and return it in the postage-paid envelope we have provided or return it to Vote Processing, c/o Broadridge, 51 Mercedes Way, Edgewood, NY 11717.

1 OF 2

NAME

THE COMPANY NAME INC. - COMMON
THE COMPANY NAME INC. - CLASS A
THE COMPANY NAME INC. - CLASS B
THE COMPANY NAME INC. - CLASS C
THE COMPANY NAME INC. - CLASS D
THE COMPANY NAME INC. - CLASS E
THE COMPANY NAME INC. - CLASS F
THE COMPANY NAME INC. - 401 K

CONTROL # → 0000000000000000

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PAGE 1 OF 2

TO VOTE, MARK BLOCKS BELOW IN BLUE OR BLACK INK AS FOLLOWS: KEEP THIS PORTION FOR YOUR RECORDS
DETACH AND RETURN THIS PORTION ONLY

THIS PROXY CARD IS VALID ONLY WHEN SIGNED AND DATED.

The Board of Directors recommends you vote FOR the following:

	For All	Withhold All	For All Except
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1. Election of Directors

Nominees

01 Mark L. Noetzel 02 William F. Roglows

The Board of Directors recommends you vote FOR the following proposal:

	For	Against	Abstain
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. The ratification of the appointment of KPMG LLP as Aspen Aerogels, Inc.'s independent registered public accounting firm for the fiscal year ending December 31, 2019.

NOTE: Such other business as may properly come before the meeting or any adjournment or postponement thereof.

For address change/comments, mark here. (see reverse for instructions) Yes No

Please indicate if you plan to attend this meeting

Please sign exactly as your name(s) appear(s) hereon. When signing as attorney, executor, administrator, or other fiduciary, please give full title as such. Joint owners should each sign personally. All holders must sign. If a corporation or partnership, please sign in full corporate or partnership name, by authorized officer.

Investor Address Line 1
Investor Address Line 2
Investor Address Line 3
Investor Address Line 4
Investor Address Line 5
John Sample
1234 ANYWHERE STREET
ANY CITY, ON A1A 1A1

Signature [PLEASE SIGN WITHIN BOX] Date JOB # Signature (Joint Owners) Date SHARES CUSIP # SEQUENCE #

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Important Notice Regarding the Availability of Proxy Materials for the Annual Meeting:
The 2018 Annual Report and 2019 Proxy Statement (as combined document) are available at www.proxyvote.com

ASPEN AEROGELS, INC.
Annual Meeting of Stockholders
June 19, 2019 9:00 AM, EDT
This proxy is solicited by the Board of Directors

The undersigned hereby appoint(s) Donald R. Young and John F. Fairbanks, or either of them with full power to act alone, as proxies, each with the power to appoint his substitute, and hereby authorizes each of them to represent and to vote, as designated on the reverse side of this ballot, all of the shares of common stock of ASPEN AEROGELS, INC. registered in the name provided in this Proxy that the undersigned is/are entitled to vote at the Annual Meeting of Stockholders to be held at 9:00 AM, EDT on June 19, 2019, at the offices of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., One Financial Center, Boston, Massachusetts 02111, and any adjournment or postponement thereof with all the powers the undersigned would have if personally present at the meeting.

This proxy, when properly executed, will be voted in the manner directed herein. If no such direction is made, this proxy will be voted in accordance with the Board of Directors' recommendations.

Address change/comments::

(If you noted any Address Changes and/or Comments above, please mark corresponding box on the reverse side.)

Continued and to be signed on reverse side