

UNITED STATES

WASHINGTON, D.C. 20549

TO

FORM S-8

REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

POLARITYTE, INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware **06-1529524**
(State or Other Jurisdiction of *(I.R.S. Employer*
Incorporation or Organization) *Identification Number)*

123 Wright Brothers Drive, Salt Lake City, UT 84116

(Address of Principal Executive Offices, Including Zip Code)

POLARITYTE, INC., 2019 EMPLOYEE STOCK PURCHASE PLAN

POLARITYTE, INC., 2019 EQUITY INCENTIVE PLAN

(Full Title of the Plan)

Mark E. Lehman

Chief Legal Officer

PolarityTE, Inc.

123 Wright Brothers Drive, Salt Lake City, UT 84116

(385) 266-3151

(Name, address, including zip code, and telephone number, including area code, of agent for service)

With a copy to:

Bradley A. Bugdanowitz

Goodwin Procter LLP

Three Embarcadero Center, 28th Floor, San Francisco, CA 94111

(415) 733-6000

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer []	Accelerated filer [X]
Non-accelerated filer []	Smaller reporting company [X]
	Emerging growth company []

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. []

Incorporating by reference the Registration Statement on Form S-8, File No. 333-225264.

EXPLANATORY NOTE

This Post-Effective Amendment No. 1 (the “Amendment”) to the Registration Statement on Form S-8, File No. 333-227721 (the “Initial Registration Statement”) is being filed by PolarityTE, Inc. (the “Company”) with the U.S. Securities and Exchange Commission (the “Commission”) under the Securities Act of 1933, as amended (the “Securities Act”), solely for the purpose of filing the reoffer prospectus that forms a part of this Amendment (the “Prospectus”) relating to the reoffer and resale on a continuous or delayed basis by the persons listed in the Prospectus (the “Selling Stockholders”), of up to 919,195 shares of the Company’s common stock, par value \$0.001 per share (the “Common Stock”), acquired or to be acquired by the Selling Stockholders pursuant to the Company’s 2019 Equity Incentive Plan.

Pursuant to General Instruction E of Form S-8, the contents of the Initial Registration Statement filed with the Commission on October 5, 2018, are hereby incorporated by reference, including each of the documents filed by us with the Commission and incorporated or deemed incorporated by reference in the Initial Registration Statement. All filing fees for the Initial Registration Statement have been paid. The Initial Registration Statement and this Amendment are collectively referred to as the “Registration Statement.”

Pursuant to Rule 429(a) of the Securities Act, the reoffer prospectus is a combined prospectus that is being filed as part of this Registration Statement and the prior registration statement on Form S-8 filed May 29, 2018, File No. 333-225264 (the “Prior Registration Statement”). The Prior Registration Statement and prospectus included therein, covers the reoffer and resale on a continuous or delayed basis by certain Selling Stockholders certain shares of the Company’s Common Stock, acquired or to be acquired by such Selling Stockholders pursuant to the Company’s 2017 Equity Incentive Plan, as amended, of which 3,461,000 shares remain unsold and are subject to this combined prospectus. Pursuant to Rule 429(b) of the Securities Act, this Registration Statement constitutes a post-effective amendment to the Prior Registration Statement. All filing fees for the Prior Registration Statement have been paid.

The reoffer prospectus was prepared in accordance with General Instruction C of Form S-8 and in accordance with the requirements of Part I of Form S-3. It may be used for reoffers and resales on a continuous or a delayed basis in the future of Common Stock defined as “restricted securities” and “control securities” under Instruction C to Form S-8 acquired by “affiliates” (as the term is defined in Rule 405 of the Securities Act) pursuant to the exercise of stock options, restricted stock unit awards, restricted stock awards, or other awards under the 2019 Equity Incentive Plan and 2017 Equity Incentive Plan registered under the Registration Statement and Prior Registration Statement.

PART I

INFORMATION REQUIRED IN THE 10(a) PROSPECTUS

Item 1. Plan Information.

The Registration Statement registers 500,000 shares of common stock issuable under the PolarityTE, Inc., 2019 Employee Stock Purchase Plan (the “Purchase Plan”), and 3,000,000 shares issuable as awards under the PolarityTE, Inc., 2019 Equity Incentive Plan (the “Incentive Plan”). The Purchase Plan and the Incentive Plan are collectively referred to herein as the “Plans.” The Company will provide each recipient (the “Recipients”) of a grant under the Plans with documents that contain information related to the Plans, and other information including, but not limited to, the disclosure required by Item 1 of Form S-8, which information is not required to be and is not being filed as a part of this Registration Statement or as prospectuses or prospectus supplements pursuant to Rule 424 under the Securities Act of 1933, as amended (the “Securities Act”). The foregoing information and the documents incorporated by reference in response to Item 3 of Part II of this Registration Statement, taken together, constitute a prospectus that meets the requirements of Section 10(a) of the Securities Act. A Section 10(a) prospectus will be given to each Recipient who receives common stock awards covered by this Registration Statement, in accordance with Rule 428(b)(1) under the Securities Act.

Item 2. Registrant Information and Employee Plan Annual Information.

We will provide to each Recipient a written statement advising of the availability of documents incorporated by reference in Item 3 of Part II of this Registration Statement (which documents are incorporated by reference in this Section 10(a) prospectus) and of documents required to be delivered pursuant to Rule 428(b) under the Securities Act without charge and upon written or oral request by contacting:

Mark E. Lehman

Chief Legal Officer

PolarityTE, Inc.

123 Wright Brothers Drive

Salt Lake City, UT 84116

Reoffer Prospectus

POLARITYTE, INC.

4,380,195 Shares of Common Stock

This prospectus relates to the reoffer and resale of up to 4,380,195 shares of common stock, par value \$0.001 per share (the “Common Stock”) of PolarityTE, Inc. (the “Company”) that may be reoffered or resold, from time to time, by certain Selling Stockholders (the “Selling Stockholders”) described in this reoffer prospectus, all of whom are deemed to be our “affiliates,” as that term is defined in Rule 405 under the Securities Act of 1933, as amended (the “Securities Act”), and that have been acquired or may hereafter be acquired pursuant to the PolarityTE, Inc. 2019 Equity Incentive Plan or the PolarityTE, Inc. 2017 Equity Incentive Plan, as amended (collectively the “Plans”). The names of the Selling Stockholders and the number of shares of Common Stock available to be resold are set forth below under the caption “Selling Stockholders” to the extent we presently have such information. However, other affiliate Selling Stockholders may elect to sell shares under this reoffer prospectus as they receive them from time to time in the future in which case, as their names and amounts of shares to be reoffered become known, we will supplement this reoffer prospectus with that information. See “Selling Stockholders” beginning on page 7.

The Selling Stockholders may sell the shares of Common Stock, from time to time, as they may determine through public or private transactions or through other means described in the section entitled “Plan of Distribution” at prevailing market prices on The Nasdaq Capital Market, at prices different than prevailing market prices or at privately negotiated prices. The Selling Stockholders may sell the shares of Common Stock directly, or may sell them through brokers or dealers.

We will not receive any of the proceeds from the sale of these shares of Common Stock by the Selling Stockholders. We have agreed to pay all expenses relating to the registration of these shares of Common Stock. The Selling Stockholders will pay any brokerage commissions or similar charges incurred in connection with the sale of these shares of Common Stock.

Our Common Stock is traded on The Nasdaq Capital Market under the symbol “PTE.” On February 7, 2019, the last reported sales price of our Common Stock on The Nasdaq Capital Market was \$ 16.54 per share.

Investing in our Common Stock involves risks. See “Risk Factors” beginning on page 7 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined whether this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is February 8 , 2019.

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You should rely only on the information contained in this prospectus or any related prospectus supplement. We have not authorized anyone to provide you with different information. If anyone provides you with different or inconsistent information, you should not rely on it. The information contained in this prospectus or incorporated by reference herein is accurate only on the date of this prospectus. Our business, financial condition, results of operations and prospects may have changed since such date. Other than as required under the federal securities laws, we undertake no obligation to publicly update or revise such information, whether as a result of new information, future events or any other reason.

This prospectus is not an offer to sell, nor is it an offer to buy, these securities in any jurisdiction where the offer or sale is not permitted.

As used in this prospectus the terms “we”, “us”, “our”, “the Company”, and “PolarityTE” mean PolarityTE, Inc., a Delaware corporation, and our wholly owned Nevada subsidiaries (direct and indirect), PolarityTE, Inc., PolarityTE MD, Inc., PolarityTE RD, Inc., Utah CRO Services, Inc., IBEX Preclinical Research, Inc., and IBEX Property LLC, unless otherwise indicated or required by the context.

PolarityTE, the PolarityTE Logo, POLARITYRD, POLARITYIS, POLARITYRX, “WELCOME TO THE SHIFT”, WHERE SELF REGENERATES SELF, COMPLEX SIMPLICITY, IBEX, SkinTE, OsteoTE, CartTE, AdipoTE, MyoTE, NeuralTE, AngioTE, LiverTE, UroTE, and BowelTE are all trademarks or registered trademarks of PolarityTE. Solely for convenience, the trademarks and trade names in this prospectus may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that we will not assert, to the fullest extent under applicable law, our rights thereto.

PROSPECTUS SUMMARY

The following summary highlights selected information contained in this prospectus. This summary does not contain all the information you should consider before investing in the securities. Before making an investment decision, you should read the entire prospectus carefully.

PolarityTE - Welcome to the SHIFT

PolarityTE, Inc., headquartered in Salt Lake City, Utah, is a young and growing commercial-stage, biotechnology company founded in 2016 - and we believe the first of its kind. We are focused on the design and development of novel technology platforms that promote the regeneration of complex, cellular-derived tissue substrates and the propagation of self-organizing composite systems. We have developed, and will continue to evolve these technologies and platforms through uniquely targeted and yet comprehensive approaches to the interactome. The interactome is the complete set of physical interactions between molecules within a cell that underlies most genotype-to-phenotype relationships and modulates nearly all complex biological pathways and cellular networks seen in living systems. Understanding this, we believe that to effectively deliver our advanced technologies to patients we must not simply deliver products, but rather robust platform systems and evolving technology foundations that are intelligent, multi-functional, and able to adapt and evolve. Over the last year we have established and advanced three of our pipeline programs consisting of our core “TE” program, (which includes our first commercial product, SkinTE), our Related Technology Derivative program (“RTD”), and our Advanced Research Center program (“ARC”).

Vision

We aspire to be a global biotechnology company that provides superior, tangible, and pragmatic platform technologies that provide superior results to patients, while reducing costs and promoting improved health economics for patients, providers, and payors. We believe this can be accomplished through our pursuit of complex simplicity, which embodies the development of robust cell/tissue-derived therapies that can be efficiently produced and deployed. PolarityTE is committed to delivering transformative technology that positively impacts humanity.

PolarityTE was founded by a dedicated group of doctors and scientists from The Johns Hopkins University School of Medicine, who left to become part of something bigger. Something that could transform the future of medicine. We believe that living systems require more than a simple singular input (for example a growth factor, stem cell, or nano-particle), to produce a complex output. Therefore, we took a different direction and developed multi-tiered platform technologies that propagate the necessary complex substrate required for regenerating fully-functional tissue, such as skin, bone, cartilage, muscle, blood vessels, and neural elements, as well as solid and hollow organ composite tissue systems. We have engineered and developed our regenerative materials and core tissue substrate technology

platforms to allow us to induce, maintain, and promote the integrated polarity, organized assembly, and interface development of cells and tissues, so that they replicate regenerative healing in the body and are not seen as foreign by the immune system.

The core technology of TE products is minimally polarized functional units (“MPFUs”) consisting of self-complexing intelligent regenerative materials (“SCIRM”). SCIRM within an MPFU form polarizing, multi-cellular aggregates that act as an intrinsic, regenerative bio-reactor capable of expanding, proliferating, and synthesizing cells, materials, factors, or systems necessary for regenerating full-thickness, three-dimensional tissue. The TE products we develop begin with the patient’s own tissue to produce SCIRM that address the specific tissue or system needed for the patient’s care. Our product pipeline focuses on the development of regenerative products for a variety of tissue types and organ systems that are commonly altered, injured, or destroyed by a variety of diseases, pathologies, traumatic events, and medical interventions.

SkinTE, our first tissue product, was registered with the United States Food and Drug Administration (FDA) in August 2017, and is now commercially available for the repair, reconstruction, replacement, and regeneration of skin in patients who have a need for treatment of acute or chronic wounds, burns, surgical reconstruction events, scar revision, or removal of dysfunctional skin grafts. We are pursuing a regional plan for commercial rollout that began in late October 2018, and at the beginning of January 2019 we had 24 sales representatives in the field marketing SkinTE.

OsteoTE is designed to utilize the patient's bone to repair, reconstruct, replace, supplement, or regenerate bone damage or defects. We registered OsteoTE with the FDA in December 2018. We are preparing for the first application of the product in a clinical setting, which we are endeavoring to achieve in the first half of 2019.

Human cells, tissues and cellular and tissue-based products ("HCT/Ps") are governed by specific FDA regulations that provide for a registration pathway that is different than the pathway for traditional drug candidates. SkinTE and OsteoTE are both registered as HCT/Ps under Section 361 of the Public Health Service Act.

We have a number of additional TE products under development, including the following:

AdipoTE to optimize the delivery of autologous fat beyond the capabilities of current fat transfer techniques utilized in procedures on, among others, the breast, buttocks, and face;

AngioTE to address vascular regeneration including microscopic capillary networks all the way up to great vessel replacement;

NeuralTE for peripheral nerve injuries of the extremities, as well as for patients with neuromas or chronic compression due to joint replacements, migraines, craniofacial injuries, carpal tunnel syndrome, and those who have undergone hernia or abdominal-based procedures;

UroTE targeting the delivery of autologous urogenital epithelium and submucosa across a spectrum of diseases and processes, including urethral strictures, urethral creation, bladder reconstruction, and ureter reconstruction;

LiverTE to address numerous causes of liver failure, including NASH, fibrosis/cirrhosis, surgical resection of the liver; and

BowelTE to deliver an optimized autologous construct to aid in the regeneration of bowel tissue.

RTD and ARC represent research and development of new science and product opportunities based on what we learned while developing the TE platform. RTD is focused on altered state analytes for the generation of composite materials that can be utilized for the augmentation, modulation, and regulation of cell and tissue-derived systems. ARC is focused on the design and development of gene transfer, small molecule synthesis, composite therapeutics, and alteration of self-propagating cell/tissue-derived bioreactors.

We have significant research facilities and a well-educated and skilled team of scientists and researchers. These resources are highly beneficial to the work we are doing on our TE products and in RTD and ARC. We also offer research services to unrelated third parties on a contract basis, which we offer under the trademark POLARITYRD. Contract research services help us defray the costs of maintaining a first-rate research facility and allow us to meet companies pursuing new technologies that may be opportunities for collaborative or strategic relationships going forward.

Company Background

Our principal executive offices are located at 123 Wright Brothers Drive, Salt Lake City, UT 84116 and our telephone number is (800) 560-3983. Our website address is www.polarityte.com.

On December 1, 2016, Majesco Acquisition Corp., a Nevada corporation and wholly-owned subsidiary of Majesco Entertainment Company, a Delaware corporation (“Majesco DE”) entered into an Agreement and Plan of Reorganization with PolarityTE, Inc., a Nevada corporation (“PolarityTE NV”) and Dr. Denver Lough, the owner of 100% of the issued and outstanding shares of capital stock of PolarityTE NV. The asset acquisition was subject to shareholder approval, which was received on March 10, 2017, and the transaction closed on April 7, 2017. In January 2017, Majesco DE changed its name to “PolarityTE, Inc.” (“PolarityTE”). Majesco Acquisition Corp. was then merged with PolarityTE NV, which remains a subsidiary of PolarityTE. Majesco Acquisition Corp. II, formed in November 2016 under Majesco Entertainment Company, changed its name to “PolarityTE MD, Inc.,” and remains a wholly-owned subsidiary of PolarityTE.

THIS OFFERING

Use of proceeds We will not receive any proceeds from the sale of the shares of Common Stock offered in this prospectus, other than proceeds from the exercise of the stock options.

Risk Factors The purchase of our Common Stock involves a high degree of risk. You should carefully review and consider “Risk Factors” beginning on page 7 .

NASDAQ Symbol PTE

Shares of Common Stock outstanding as of February 5, 2019 21,653,524

Shares being offered by the Selling Stockholders 4,380,195 ⁽¹⁾

Shares of Common Stock to be outstanding after the offering 25,834,274⁽²⁾

(1) The shares offered by the Selling Stockholders include 185,445 shares issued as restricted stock awards and 14,000 shares issued on exercise of stock options under the Plans, all of which are also included in the number of shares of common stock outstanding as of February 5, 2019.

(2) Assumes vesting of all restricted stock units and exercise of all stock options held by the Selling Stockholders as of February 5, 2019, and the issuance of 4,180,750 shares of Common Stock pursuant thereto.

RISK FACTORS

Investing in our Common Stock involves a high degree of risk. Before making an investment decision, you should consider carefully the risks, uncertainties and other factors described under “Risk Factors” in our most recent Annual Report on Form 10-K, as supplemented and updated by subsequent quarterly reports on Form 10-Q and current reports on Form 8-K that we have filed or will file with the U.S. Securities and Exchange Commission (the “Commission”), which are incorporated by reference into this prospectus. Our business, affairs, prospects, assets, financial condition, results of operations and cash flows could be materially and adversely affected by these risks. For more information about our Commission filings, please see “Additional Information Available to You.”

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains “forward-looking statements,” which represent our current expectations or beliefs including, but not limited to, statements concerning our operations, performance, financial condition and growth. For this purpose, any statements contained in this prospectus that are not statements of historical fact are forward-looking statements. Without limiting the generality of the foregoing, words such as “may”, “anticipate”, “intend”, “could”, “estimate”, “continue” or the negative or other comparable terminology are intended to identify forward-looking statements. These statements by their nature involve substantial risks and uncertainties, such as the timing or success of commercialization of our products; the initiation, timing, progress, and results of our preclinical and clinical studies; the scope of protection we can establish and maintain for intellectual property rights covering our product candidates and technology; estimates of our expenses, future revenues, and capital requirements; our ability to comply with regulations applicable to the manufacture, marketing, sale and distribution of our products; our need for, and ability to obtain, additional financing in the future; and, other forward-looking statements made in our filings with the Commission. Should one or more of these risks or uncertainties materialize or should the underlying assumptions prove incorrect, actual outcomes and results could differ materially from those indicated in the forward-looking statements.

Any forward-looking statement speaks only as of the date on which such statement is made, and we do not undertake any obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time and it is not possible for management to predict all such factors, nor can it assess the impact of each such factor on the business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements.

DETERMINATION OF OFFERING PRICE

The Selling Stockholders may sell the common shares issued to them from time-to-time at prices and at terms then prevailing or at prices related to the then current market price, or in negotiated transactions.

USE OF PROCEEDS

The shares of Common Stock offered hereby are being registered for the account of the Selling Stockholders named in this prospectus. As a result, all proceeds from sales of the Common Stock will go to the Selling Stockholders and we will not receive any proceeds from the resale of Common Stock by the Selling Stockholders. We will receive proceeds from the exercise of the options; however, no assurance can be given as to when, or if any, of the options may be exercised. If any options are exercised, the proceeds derived therefrom will be used for working capital and general corporate purposes.

SELLING STOCKHOLDERS

The table below sets forth information concerning the resale of the shares of Common Stock by the Selling Stockholders. We will not receive any proceeds from the resale of the Common Stock by the Selling Stockholders other than the proceeds from the exercise of the options. Assuming all the shares registered below are sold by the Selling Stockholders, none of the Selling Stockholders will continue to own any shares of our Common Stock issued to them pursuant to the Plans, including shares of Common Stock issuable upon exercise of options issued pursuant to the Plans. The following table sets forth the name of each person who is offering the resale of shares of Common Stock by this prospectus, the number of shares of Common Stock beneficially owned by each person, the number of shares of Common Stock that may be sold in this offering and the number of shares of Common Stock each person will own after the offering, assuming they sell all shares offered.

We are advised by the Selling Stockholders that they do not have a present intention of selling shares of the Company's Common Stock.

We will, from time to time, supplement this prospectus to reflect grants under the Plan and/or to name grantees who are officers and/or directors as Selling Stockholders.

Name	Number of Shares of Common Stock Beneficially Owned Prior to Offering (1)(2)	Shares of Common Stock Offered in this Offering	Shares of Common Stock Beneficially Owned After this Offering (1)(2)	Percentage of Common Stock Beneficially Owned After this Offering (1)(3)
Willie C. Bogan	11,093	42,644	-0-	-0-
Peter A. Cohen	61,093	42,644	50,000	0.2
Jeff Dyer	146,687	177,644	8,552	nil
Rainer Erdtmann	136,375	63,268	114,180	0.5
Steve Gorlin	112,135	122,644	-0-	-0-
Minnie Baylor-Henry	-0-	28,304	-0-	-0-
Cameron J. Hoyler	235,208	200,000	125,000	0.6
Denver Lough	8,408,333	1,710,000	7,050,000	30.2
Paul Mann	159,583	473,779	20,000	nil
Jon Mogford	114,070	123,268	-0-	-0-
David Seaburg	25,000	350,000	10,000	nil
Edward Swanson	943,892	1,046,000	2,059	nil

(1) The number and percentage of shares beneficially owned is determined in accordance with Rule 13d-3 of the Securities Exchange Act of 1934, as amended, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rule, beneficial ownership includes any shares as to which the Selling Stockholder has sole or shared voting power or investment power and any shares that the Selling Stockholder has the right to acquire within 60 days from February 8 , 2019. “*Shares Beneficially Owned Upon Completion of this Offering*” assumes the sale of all the Common Stock offered by this prospectus and no other purchases or sales of our Common Stock by the Selling stockholders.

(2) Includes shares that are issuable upon exercise of stock options and vesting of restricted stock units issued pursuant to the Plans, some of which are not, and will not become vested within 60 days from February 8 , 2019, and are not included in the calculation of “*Shares Beneficially Owned Prior to this Offering.*”

(3) Applicable percentage ownership is based on 21,653,524 shares of Common Stock outstanding as of February 5, 2019, together with securities exercisable or convertible into shares of Common Stock within 60 days of February 8 , 2019, for each person listed, including, for purposes of the shares beneficially owned prior to the offering, the shares offered for resale pursuant to this prospectus.

PLAN OF DISTRIBUTION

Timing of Sales

The Selling Stockholders may offer and sell the shares covered by this prospectus at various times. The Selling Stockholders will act independently of our Company in making decisions with respect to the timing, manner and size of each sale.

No Known Agreements to Resell the Shares

To our knowledge, no Selling Stockholder has any agreement or understanding, directly or indirectly, with any person to resell the shares of Common Stock covered by this prospectus.

Offering Price

The sales price offered by the Selling Stockholders to the public may be:

the market price prevailing at the time of sale;

a price related to such prevailing market price; or

such other price as the Selling Stockholders determine from time to time.

Manner of Sale

The shares of Common Stock may be sold by means of one or more of the following methods:

a block trade in which the broker-dealer so engaged will attempt to sell the common shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;

purchases by a broker-dealer as principal and resale by that broker-dealer for its account pursuant to this prospectus;

ordinary brokerage transactions in which the broker solicits purchasers;

through options, swaps or derivatives;

in transactions to cover short sales;

privately negotiated transactions; or

in a combination of any of the above methods.

The Selling Stockholders may sell their shares of Common Stock directly to purchasers or may use brokers, dealers, underwriters or agents to sell their shares. Brokers or dealers engaged by the Selling Stockholders may arrange for other brokers or dealers to participate. Brokers or dealers may receive commissions, discounts or concessions from the Selling Stockholders, or, if any such broker-dealer acts as agent for the purchaser of shares of Common Stock, from the purchaser in amounts to be negotiated immediately prior to the sale. The compensation received by brokers or dealers may, but is not expected to, exceed that which is customary for the types of transactions involved.

Broker-dealers may agree with a Selling Stockholder to sell a specified number of shares of Common Stock at a stipulated price per share, and, to the extent the broker-dealer is unable to do so acting as agent for a Selling Stockholder, to purchase as principal any unsold shares of Common Stock at the price required to fulfill the broker-dealer commitment to the Selling Stockholder.

Broker-dealers who acquire, as principal, shares of Common Stock from a Selling Stockholder, may resell the shares from time to time in transactions, which may involve block transactions and sales to and through other broker-dealers, including transactions of the nature described above, on The Nasdaq Capital Market or otherwise at prices and on terms then prevailing at the time of sale, at prices then related to the then-current market price or in negotiated transactions. In connection with resales of the shares, broker-dealers may pay to or receive from the purchasers of shares commissions as described above.

If our Selling Stockholders enter into arrangements with brokers or dealers, as described above, we are obligated to file a post-effective amendment to this registration statement disclosing such arrangements, including the names of any broker-dealers acting as underwriters.

The Selling Stockholders and any broker-dealers or agents that participate with the Selling Stockholders in the sale of shares of Common Stock may be deemed to be “underwriters” within the meaning of the Securities Act. In that event, any commissions received by broker-dealers or agents and any profit on the resale of the shares of Common Stock purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

We will make copies of this prospectus available to the Selling Stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act.

Sales Pursuant to Rule 144

Any shares of Common Stock covered by this prospectus that qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than pursuant to this prospectus.

Accordingly, during such times as a Selling Stockholder may be deemed to be engaged in a distribution of the shares of Common Stock and, therefore, deemed to be an underwriter, the Selling Stockholder must comply with applicable law and, among other things:

may not engage in any stabilization activities in connection with our Common Stock;

may not cover short sales by purchasing shares while the distribution is taking place; and

may not bid for or purchase any of our securities or attempt to induce any person to purchase any of our securities other than as permitted under the Exchange Act.

State Securities Laws

Under the securities laws of some states, the shares of Common Stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of Common Stock may not be sold unless the shares have been registered or qualified for sale in the state or an exemption from registration or qualification is available and is complied with.

Expenses of Registration

We are bearing all costs relating to the registration of the common stock. These expenses are estimated to be \$20,000, including, but not limited to, legal, accounting, printing and mailing fees. The Selling Stockholders, however, will pay any commissions or other fees payable to brokers or dealers in connection with any sale of the shares of Common Stock.

LEGAL MATTERS

Certain legal matters relating to this offering will be passed upon for us by Goodwin Procter LLP, San Francisco, California.

EXPERTS

The consolidated balance sheets of PolarityTE, Inc. and Subsidiaries as of October 31, 2018 and 2017, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the years then ended, have been audited by EisnerAmper LLP, independent registered public accounting firm, as stated in their reports that are incorporated herein by reference, which reports (1) express an unqualified opinion on the financial statements, and (2) express an adverse opinion on the effectiveness of internal control over financial reporting. Such financial statements have been incorporated herein by reference in reliance on the reports of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports and other information with the Commission. You can review our electronically filed reports, proxy and information statements on the Commission's web site at <http://www.sec.gov/> or on our website at <https://www.polarityte.com/investor/sec-filings>. Information included on our web site is not part of this reoffer prospectus.

We have filed with the Commission a registration statement on Form S-8, as amended, under the Securities Act, with respect to the shares of Common Stock offered by the Selling Stockholders pursuant to this prospectus. This prospectus, which constitutes part of the registration statement, does not contain all the information set forth in the registration statement or the exhibits and schedules that are part of the registration statement. Some items included in the registration statement are omitted from the prospectus in accordance with the rules and regulations of the Commission. For further information with respect to us and the Common Stock offered under this prospectus, we refer you to the registration statement and the accompanying exhibits.

INCORPORATION BY REFERENCE

The Commission allows us to incorporate by reference the information and reports we file with it, which means that we can disclose important information to you by referring you to these documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the Commission will automatically update and supersede the information already incorporated by reference. We are incorporating by reference the documents listed below, which we have already filed with the Commission, and any future filings we make with the Commission under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including all filings made after the date of the filing of this registration statement and prior to the effectiveness of this registration statement, except as to any portion of any future report or document that is not deemed filed under such provisions, after the date of this prospectus and prior to the termination of this offering:

Our Annual Report on Form 10-K for the year ended October 31, 2018 filed with the Commission on January 14, 2019;

Our Current Reports on Form 8-K filed with the Commission on December 11, 2018, and January 29, 2019; and

The description of our common stock contained in our Registration Statement on Form 8-A filed with the Commission on January 21, 2005 (File No. 000-51128), including any amendment or report filed to update such description.

Upon request, we will provide, without charge, to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, a copy of the documents incorporated by reference into this prospectus but not delivered with the prospectus. You may request a copy of these filings, and any exhibits we have specifically incorporated by reference as an exhibit in this prospectus, at no cost by writing or telephoning us at the following address:

PolarityTE, Inc.

123 Wright Brothers Drive

Salt Lake City, Utah 84116

You may also access these documents, free of charge on the Commission's website at www.sec.gov or on our website at www.polarityte.com. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider any information on, or that can be accessed from, our website as part of this prospectus or any accompanying prospectus supplement.

This prospectus is part of a registration statement we filed with the Commission. We have incorporated exhibits into this registration statement. You should read the exhibits carefully for provisions that may be important to you.

You should rely only on the information incorporated by reference or provided in this prospectus or any prospectus supplement. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information in this prospectus or in the documents incorporated by reference is accurate as of any date other than the date on the front of this prospectus or those documents.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 3. INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

The following documents previously filed by the Company with the Securities and Exchange Commission (“Commission”) pursuant to the Securities Exchange Act of 1934, as amended (the “Exchange Act”), are incorporated herein by reference:

Our Annual Report on Form 10-K for the year ended October 31, 2018 filed with the Commission on January 14, 2019;

Our Current Reports on Form 8-K filed with the Commission December 11, 2018, and January 29, 2019; and

The description of our common stock contained in our Registration Statement on Form 8-A filed with the Commission on January 21, 2005 (File No. 000-51128), including any amendment or report filed to update such description.

All documents subsequently filed with the Commission pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the filing of a post-effective amendment that indicates all securities offered have been sold or that deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing, excluding any portion of any report or document that is not deemed filed under such provisions.

Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document, which also is or is deemed to be incorporated by reference herein, modifies or supersedes such statement. Any such statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement. Under no circumstances will any information filed under items 2.02 or 7.01 of Form 8-K be deemed to be incorporated by reference, unless such Form 8-K expressly provides to the contrary.

ITEM 4. DESCRIPTION OF SECURITIES

Not applicable.

ITEM 5. INTERESTS OF NAMED EXPERTS AND COUNSEL

Not applicable.

ITEM 6. INDEMNIFICATION OF DIRECTORS AND OFFICERS

The Company's restated certificate of incorporation and restated bylaws provide that each person who was or is made a party or is threatened to be made a party to or is otherwise involved (including, without limitation, as a witness) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was a director or an officer of the Company or is or was serving at the Company's request as a director, officer, or trustee of another corporation, or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan, whether the basis of such proceeding is alleged action in an official capacity as a director, officer or trustee or in any other capacity while serving as a director, officer or trustee, shall be indemnified and held harmless by the Company to the fullest extent authorized by the Delaware General Corporation Law (the "DGCL") against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such.

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Section 145 of the DGCL permits a corporation to indemnify any director or officer of the corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with any action, suit or proceeding brought by reason of the fact that such person is or was a director or officer of the corporation, if such person acted in good faith and in a manner that he reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, if he or she had no reason to believe his or her conduct was unlawful. In a derivative action, (*i.e.*., one brought by or on behalf of the corporation), indemnification may be provided only for expenses actually and reasonably incurred by any director or officer in connection with the defense or settlement of such an action or suit if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification shall be provided if such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the court in which the action or suit was brought shall determine that the defendant is fairly and reasonably entitled to indemnity for such expenses despite such adjudication of liability.

Pursuant to Section 102(b)(7) of the DGCL, Article Ninth of the Company's restated certificate of incorporation eliminates the liability of a director to the Company or its stockholders for monetary damages for such a breach of fiduciary duty as a director, except for liabilities arising:

- from any breach of the director's duty of loyalty to the Company's stockholders;

- from acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;

- under Section 174 of the DGCL; and

- from any transaction from which the director derived an improper personal benefit.

The Company carries insurance policies insuring its directors and officers against certain liabilities that they may incur in their capacity as directors and officers.

The indemnification provisions contained in the DGCL, the Company's certificate of incorporation, and the Company's restated by-laws may discourage stockholders from bringing a lawsuit against the Company's directors and officers for breach of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit the Company or its stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent the Company pays the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. The Company believes that these provisions and the directors' and officers' liability insurance policy are necessary to attract and retain talented and experienced directors and officers.

ITEM 7. EXEMPTION FROM REGISTRATION CLAIMED

Not applicable.

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ITEM 8. EXHIBITS

Exhibit Number	Description of Exhibit
4.1	<u>Restated Certificate of Incorporation of PolarityTE, Inc. (incorporated herein by reference to Exhibit 3.01 to the Company's Quarterly Report on Form 10-Q filed with the Commission on September 15, 2014).</u>
4.2	<u>Restated Bylaws of PolarityTE, Inc. (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed with the Commission on June 17, 2005).</u>
4.3	<u>Certificate of Amendment to Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to our Form 8-K filed with the Commission on July 29, 2016)</u>
4.4	<u>Certificate of Amendment to Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to our Form 8-K filed with the Commission on January 10, 2017)</u>
4.5	<u>Certificate of Elimination to Restated Certificate of Incorporation eliminating the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock and Series F Preferred Stock in the Corporation's Certificate of Incorporation, as amended (incorporated by reference to Exhibit 3.1 to our Form 8-K filed with the Commission on March 7, 2018)</u>
4.6	<u>Amendment No. 1 to Restated Bylaws of PolarityTE, Inc. (incorporated herein by reference to Exhibit 3.1 to the Company's Annual Report on Form 10-K filed with the Commission on January 14, 2019).</u>
5.1	<u>Opinion of Goodwin Procter LLP with respect to the legality of the securities being registered (incorporated herein by reference to Exhibit 5.1 to the initial filing of this Registration Statement on Form S-8 filed with the Commission on October 5, 2018).</u>
23.1	<u>Consent of EisnerAmper LLP*</u>
23.2	<u>Consent of Goodwin Procter LLP (contained in its opinion filed as Exhibit 5.1)</u>
24.1	<u>Powers of Attorney (see page II-6 of this Amendment No. 1 and page II-6 of the initial filing of this Registration Statement on Form S-8 filed with the Commission on October 5, 2018).</u>
99.1	<u>PolarityTE, Inc., 2019 Employee Stock Purchase Plan (incorporated by reference to Exhibit 99.1 to the initial filing of this Registration Statement on Form S-8 filed with the Commission on October 5, 2018)</u>
99.2	<u>PolarityTE, Inc., 2019 Equity Incentive Plan (incorporated by reference to Exhibit 99.2 to the initial filing of this Registration Statement on Form S-8 filed with the Commission on October 5, 2018)</u>
99.3	<u>PolarityTE, Inc., 2017 Equity Incentive Plan (incorporated by reference to Exhibit 10.3 to our Form 8-K filed with the Commission on December 7, 2016)</u>
99.4	

PolarityTE, Inc., Amendment to 2017 Equity Incentive Plan (incorporated herein by reference to the Company's proxy statement filed with the Commission on September 13, 2017).

* Filed herewith

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ITEM 9. UNDERTAKINGS

(a) The undersigned registrant hereby undertakes:

(1) to file, during any period in which offers or sales are being made of the securities registered hereby, a post-effective amendment to this Registration Statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offered range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in this Registration Statement or any material change to such information in this Registration Statement;

provided, however, that Paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)) that are incorporated by reference in the Registration Statement.

(2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) to remove from registration by means of a post-effective amendment any of the securities being registered hereby which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment No. 1 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Salt Lake City, and State of Utah, on the 8 th day of February 2019.

POLARITYTE, INC.

By: */s/ Denver Lough*
Denver Lough
Chief Executive Officer

By: */s/ Paul Mann*
Paul Mann
Chief Financial Officer

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POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to Registration Statement has been signed below by the following persons in the capacities and on the date indicated.

Name	Title	Date
<i>/s/ Denver Lough</i> Denver Lough	Chairman of the Board, Chief Executive and Chief Scientific Officer (Principal Executive Officer)	February 8 , 2019
<i>/s/ Denver Lough</i>	Attorney in Fact for each of the following Directors Jeff Dyer	February 8 , 2019
	Steve Gorlin	
	Jon Mogford	
Denver Lough	Willie C. Bogan	
	Peter A. Cohen	
	Rainer Erdtmann	
	David Seaburg	
<i>/s/ Minnie Baylor-Henry</i> Minnie Baylor-Henry	Director	February 8 , 2019

By her signature above, Minnie Baylor-Henry, constitutes and appoints Denver Lough and Paul Mann and each of them singly, his, her or its true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him, her or it and in his, her or its name, place and stead, in any and all capacities, to sign and file any and all amendments (including post-effective amendments) to this Registration Statement on Form S-8, as amended, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in and about the premises, as fully to all intents and purposes as he, she, or it might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

