DAIS ANALYTIC CORP Form POS AM June 25, 2010 Table of Contents

As filed with the Securities and Exchange Commission on June 24, 2010

Registration No. 333- 152940

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST EFFECTIVE AMENDMENT NO. 1 TO FORM S-1/A REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

DAIS ANALYTIC CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

New York (State or other jurisdiction of

3990 (Primary Standard Industrial 14-1760865 (I.R.S. Employer

incorporation or organization)

Classification Code Number)

Identification Number)

State of New York Secretary of State,

Department of State

One Commerce Plaza

11552 Prosperous Drive

99 Washington Avenue, 6th Floor,

Odessa, FL 33556

Albany, New York 12231

Telephone: (727) 375-8484

Telephone: (518) 473-2492

Facsimile: (727) 375-8485 (Address, Including Zip Code, and Telephone Number,

Facsimile: (518) 474-1418 (Name, Address, Including Zip Code and Telephone Number,

Including Area Code, of Principal Executive

Including Area Code, of Agent for Service)

Offices)

Copies to:

David Selengut, Esq.

Ellenoff Grossman & Schole LLP

150 East 42nd Street, 11th Floor

New York, New York 10017

(212) 370-1300

APPROXIMATE DATE OF PROPOSED SALE TO THE PUBLIC: From time to time after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the Securities Act), other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. "

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

Large accelerated filer " Accelerated filer Non-accelerated filer " (Do not check if a smaller reporting company) Smaller reporting company

REGISTRATION FEE PAID WITH ORIGINAL REGISTRATION STATEMENT. NO ADDITIONAL FEE DUE.

THE COMPANY HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE COMPANY SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933, AS AMENDED, OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

The information in this prospectus is not complete and may be changed. Neither we nor the selling shareholders may sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and neither we nor the selling shareholders are soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Table of Contents

Explanatory Note

The Registrant hereby files this post-effective amendment number one to its Registration Statement on Form S-1 (No. 333-152940) declared effective on November 12, 2008 to include the Registrant s audited financial statements for the year ended December 31, 2009 and the Registrant s unaudited financial statements for the quarter ended March 31, 2010 and to update the selling security holders table to reflect shares sold under the effective prospectus up to May 10, 2010, based on the records of the Registrant. All filing fees payable in connection with the registration of the securities covered hereby were previously paid in connection with the filing of the original registration statement.

The information in this prospectus is not complete and may be changed. Neither we nor the selling stockholders may sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and neither we nor the selling stockholders are soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

This Post Effective Amendment No. 1 on Form S-1/A amends the Registration Statement on Form S-1 that was filed by the Registrant. The prospectus contained in this Post-Effective Amendment will, upon effectiveness of the Post-Effective Amendment, supersede any prior prospectuses filed pursuant to Rule 424(b). All filing fees payable in connection with the registration of the securities covered hereby were previously paid in connection with the filing of the original registration statement.

SUBJECT TO COMPLETION, DATED JUNE 24, 2010

PROSPECTUS

12,233,494 Shares of Common Stock

DAIS ANALYTIC CORPORATION

This prospectus covers the resale of up to 12,233,494 shares of common stock, \$0.01 par value, (the Common Stock) of Dais Analytic Corporation, a New York Corporation (the Company), Dais Analytic, we use, our shall refer to Dais Analytic Corporation) by the selling shareholders (the Selling Shareholders) identified in this prospectus under the section titled Selling Shareholders. Of the 12,233,494 shares of Common Stock being registered, 1,541,286 shares are currently outstanding, 307,391 shares are issuable upon the conversion by Selling Shareholders of certain secured convertible notes and 10,384,817 shares are issuable upon exercise by Selling Shareholders of certain warrants.

We have paid all expenses, except for the brokerage expenses, fees, discounts and commissions, which will all be paid by the Selling Shareholders, incurred in connection with the offering described in this prospectus. Our Common Stock is more fully described in the section of this prospectus entitled Description of Securities.

We will not receive any proceeds from the sale of the shares of common stock. We will not receive any proceeds upon conversion of the notes. Of the warrants, warrants representing shares contain both cash and cashless exercise provisions. If all of the warrants are exercised for cash (and assuming there are no adjustments to the purchase price prior to exercise) we will receive approximately \$2,775,480 in gross proceeds. Cash proceeds we receive from the exercise of the warrants will be used for general corporate purposes, including working capital. We have agreed to bear all expenses of registration of the common stock offered hereby.

Our common stock is quoted on Over the Counter Bulletin Board under the trading symbol DLYT. The last reported sales price of the common stock as reported on the OTCBB on June 18, 2010, was \$0.245per share.

The Selling Shareholders may sell the shares of common stock that are part of this offering at prevailing market prices or privately negotiated prices. See Plan of Distribution. Several of the Selling Shareholders are broker-dealers or affiliates of broker-dealers. The Selling Shareholders may be deemed underwriters within the meaning of the Securities Act of 1933, as amended (the Securities Act), in connection with the sale of their common stock under this prospectus.

Our executive offices are located at 11552 Prosperous Drive, Odessa Florida. Our telephone number is (727) 375-8484 and our facsimile number is (727) 375-8485. Our home page on the Internet may be found at www.daisanalytic.com. Information found on our website is not part of this prospectus.

An investment in the shares of our common stock being offered by this prospectus involves a high degree of risk. You should read the <u>Risk Factors</u> section beginning on page 11 before you decide to purchase any shares of our common stock.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THE PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is June 24, 2010.

TABLE OF CONTENTS

	Page
	No.
Cautionary Statement Regarding Forward-Looking Statements	1
Prospectus Summary	2
Risk Factors	11
<u>Use of Proceeds</u>	27
Description of Business	27
<u>Properties</u>	38
Legal Proceedings	38
Directors, Executive Officers, Promoters and Control Persons	38
Executive Compensation	42
Security Ownership of Management and Certain Beneficial Owners	48
Certain Relationships and Related Transactions	50
Management s Discussion and Analysis of Financial Condition and Results of Operation	51
Market for Common Equity	61
Description of Securities Being Registered	64
Selling Shareholders	65
Plan of Distribution	71
Interests of Named Experts and Counsel	73
Indemnification, Limitation on Liability and Disclosure of Commission Position on Indemnification for Securities Act	73
Where You Can Find Further Information	73
<u>Legal Matters</u>	74
<u>Experts</u>	74
Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	74
Index to Financial Statements	75

CAUTIONARY STATEMENT REGARDING

FORWARD-LOOKING STATEMENTS

This prospectus, including the sections titled Prospectus Summary and Risk Factors and other sections, contains certain statements that constitute forward-looking statements . These forward-looking statements include certain statements regarding intent, belief or current expectations about matters (including statements as to beliefs, expectations, anticipations, Intentions or similar words). Forward-looking statements are also statements that are not statements of historical fact. Because these statements are based on factors that involve risks and uncertainties, actual results may differ materially from those expressed or implied by the forward-looking statements. These factors include, among others:

our ability to achieve and maintain profitability;
the price volatility of the Common Stock;
the historically low trading volume of the Common Stock;
our ability to manage and fund our growth;
the short period of time we have employed certain of our executive officers;
our ability to attract and retain qualified personnel;
litigation;
our ability to compete with current and future competitors;
our short operating history;
our ability to obtain additional financing;
general economic and business conditions;
our ability to continue as a going concern;
our ability to do business overseas;

other risks and uncertainties included in the section of this document titled Risk Factors; and

other factors discussed in our other filings made with the Commission.

The subsequent forward-looking statements relating to the matters described in this document and attributable to us or to persons acting on our behalf are expressly qualified in their entirety by such factors. Actual events or results may differ materially from those discussed in forward-looking statements as a result of various factors, including, without limitation, the risks outlined under Risk Factors and matters described in this Prospectus generally. In light of these risks and uncertainties, there can be no assurance that the forward-looking statements contained in this Prospectus will in fact occur. We have no obligation to publicly update or revise these forward-looking statements to reflect new information, future events, or otherwise, except as required by applicable Federal securities laws, and we caution you not to place undue reliance on these forward looking statements.

1

PROSPECTUS SUMMARY

This section highlights selected information only and may not contain all of the information that may be important to you. 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, including the section entitled Risk Factors beginning on page 11 and the financial statements and notes to the financial statements beginning on page 76.

The Offering

We are registering 12,233,494 shares of common stock for sale by Selling Shareholders. Of the 12,233,494 shares of common stock being registered, 1,541,286 shares are currently outstanding, 307,391 are issuable upon the conversion by Selling Shareholders of certain secured convertible notes and 10,384,817 shares are issuable upon exercise by Selling Shareholders of certain warrants. Specifically, the shares of common stock being registered herein are as follows:

10,848,677 shares of common stock comprised of 1,541,286 shares of common stock issued and 307,391 shares of common stock issuable upon the conversion of 9% secured convertible notes and 9,000,000 shares of common stock issuable upon exercise of certain outstanding warrants issued in connection with the Financing as hereinafter defined on page 7.

401,333 shares of common stock issuable upon the exercise of warrants issued to the placement agent, Legend Merchant Group, Inc., their sub-placement agent, and their affiliates and employees in connection with the Financing.

392,308 shares of common stock underlying warrants issued to Richardson & Patel LLP, our legal counsel, in connection with performance of legal services. Warrants issued to Richardson & Patel LLP are identical to the cashless warrants issued to the placement agent in the Financing. 200,000 of these warrants have an exercise price of \$0.25 per warrant share and the remaining 192,308 have an exercise price of \$0.26 per warrant share.

428,677 shares of common stock issuable upon exercise of certain outstanding warrants in connection with the Additional Financing as hereinafter defined on page 10.

50,000 shares of common stock issuable upon exercise of certain outstanding warrants to the Robb Charitable Trust in connection with the Robb Trust Note.

112,499 shares of common stock issuable upon exercise of certain outstanding warrants in connection with the Daily Financing as hereinafter defined on page 10.

Securities offered 12,233,494 shares of common stock for sale by Selling Shareholders. Of the shares of common stock

being registered, 1,541,286 shares are currently outstanding, 307,391 are issuable upon the conversion by Selling Shareholders of certain secured convertible notes and 10,384,817 shares are issuable upon

exercise by Selling Shareholders of certain warrants.

Common stock outstanding before the offering

Approximately 29,636,717 shares, which do not include common shares underlying unexercised warrants, notes, options or other convertible securities.

Table of Contents 10

2

Common stock to be outstanding after the offering

40,328,925 (including shares of common stock underlying convertible notes and warrants and assuming conversion of notes and exercise of warrants).

Intended use of the net proceeds of this offering

Of the warrants, warrants representing 9,793,641 shares contain both cash and cashless exercise provisions of which 9,601,333 have an exercise price of \$0.25 and 192,308 have an exercise price of \$.26. The remaining warrants representing 591,176 shares of common stock are exercisable for \$0.55 per share. If all of the warrants representing 10,384,817 shares are exercised for cash (and assuming there are no adjustments to the purchase price prior to exercise) we will receive approximately \$2,775,480 in gross proceeds. We will not receive the proceeds of the common stock sold by the Selling Shareholders. We will receive no proceeds from the conversion of secured convertible notes. The proceeds received from the exercise of warrants will be used for working capital and general corporate purposes.

Risk factors

The offering involves a high degree of risk; see Risk Factors beginning on page 11 of this prospectus for a discussion of the risks and uncertainties in connection with investing in this offering.

OTC Bulletin Board Trading Symbol

DLYT

Our Business

Dais Analytic Corporation (the Company), a New York corporation, has developed and is commercializing applications using its nano-structure polymer technology. The first commercial product is an energy recovery ventilator (ERV) (cores and systems) for use in commercial Heating, Ventilating, and Air Conditioning (HVAC) applications. In addition to direct sales, the Company licenses its nano-structured polymer technology to strategic partners in the aforementioned application and is in various stages of development with regard to other applications employing its base technologies.

History

We were incorporated as a New York corporation on April 8, 1993 as Dais Corporation . We subsequently changed our name to Dais Analytic Corporation on December 13, 1999. We were formed to develop new, cost-effective polymer materials for various applications, including providing a lower cost membrane material for Polymer Electrolyte Membrane (PEM) fuel cells. We believe our research on materials science has yielded technological advances in the field of selective ion transport polymer materials.

In December 1999, we purchased the assets of Analytic Power Corporation, which was founded in 1984 to provide fuel cell and fuel processor design and consulting services, systems integration and analysis services to develop integrated fuel cell power systems, and we were re-named Dais Analytic Corporation. Analytic Power Corporation developed a portfolio of fuel cell and related fuel cell component technologies, including fuel cell stack designs, a membrane electrode assembly process, and natural gas, propane, diesel and ammonia fuel processors for use in creating integrated fuel cell systems.

Table of Contents

In March 2002, we sold substantially all of our fuel cell assets to a large U.S. oil company for a combination of cash and the assumption by such company of certain of our obligations. After we sold a substantial portion of our fuel cell assets, we focused on expanding our nano-structured polymer platform, having already identified the Energy Recovery Ventilator (ERV) application as our first commercial product.

Products

ConsERV

We currently sell one product, our ConsERV product, a HVAC energy conservation product which should, according to various tests, save an average of up to 30% on HVAC operating costs and allow HVAC equipment to be up to 30% smaller, reducing peak energy usage by up to 20% while simultaneously improving indoor air quality. This product makes HVAC systems operate more efficiently and results, in many cases, in energy and cost savings. ConsERV attaches onto existing HVAC systems, typically in commercial buildings, to provide ventilation within the structure. It pre-conditions the incoming air by passing through our nano-technology polymer which has been formed into a filter of sorts. The nano-technology filter uses the stale building air that must be simultaneously exhausted to transfer heat and moisture into or out of the incoming air. For summer air conditioning, the core removes some of the heat and humidity from the incoming air, transferring it to the exhaust air stream thereby, under certain conditions, saving energy. For winter heating, the core transfers a portion of the heat and humidity into the incoming air from the exhaust air stream thereby often saving energy.

Our ConsERV product is the primary focus of our resources and commercialization efforts. When compared to similar competitive products, we believe based on test results conducted by the Air-Conditioning, Heating and Refrigeration Institute (AHRI,) leading industry association, ConsERV is twice as effective in managing latent and sensible heat. We expect ConsERV to continue to be our focused commercial product through 2010 with a growing emphasis moving the development of the NanoClear and NanoAir technologies towards commercialization.

Our Other Nano-Structured Products

We are devoting varying amounts of time to other uses of our nano-structured products in ways which are not disruptive to the key ConsERV effort. To date, insignificant revenues have been generated from these non-ConsERV related applications.

These product applications and activities include:

Water Clean-up or NanoClear: We expect that this application will function to remove quantities of salt and other impurities from water to produce potable water using an environmentally friendly design that would use less energy and be less expensive than current methods. We have developed a functional table-top demonstration unit which highlights the basics of how this system works using the Company s nano-structured materials to produce potable water. This demonstration unit is being used as the basis for the product s next planned inflexion point: a 10m3 (26,500 gallons per day) pilot plant projected to be set up at a local County waste water treatment facility. The NanoClear product is currently in the late stages of prototype development.

Water Based packaged HVAC system or NanoAir: We expect this application would function to dehumidify and cool air in warm weather, or humidify and heat in cold weather. This NanoAir application may be capable of replacing a traditional refrigerant loop based heating/cooling system. The Company has a small prototype showing fundamental heating, cooling, humidification, and dehumidification operation of this evolving product. The NanoAir product is in the middle to late stages of prototype development.

4

Air-Conditioning, Heating, and Refrigeration Institute (AHRI) May 2008 test results. This study is publicly available and was not prepared for our benefit or funded by us.

Table of Contents

Ultra-capacitor: Based on initial tests conducted by a third party, we believe that by applying a combination of our nano-materials we may be able to construct a device which stores energy similar to a battery with projected increases in energy density and lifetimes. We believe the key application for such a device would be in transportation. We have not invested significant resources to date in the development of this product.

As previously mentioned, aside from our ConsERV product, the Company has three additional products under development. The Company intends to sell polymer membrane or polymer membrane incorporated into an application appropriate form, or to license the application. We do not intend to build and market the entire product. The three product applications include:

Application	Current Stage 3 rd Stage Alpha/Beta	Estimated Funding Required to Commercialize ¹	Estimated Time to Market (post funding)	
Water Clean-up (NanoClean) A process using a low temperature, low pressure approach to process brackish and salt water into potable water.		\$8 Million	12 3	0 months
Advanced Heating, Ventilating, and Air Conditioning (NanoAir) A process using the nano-technology materials that may create an advanced heating, ventilating, and air-conditioning system.	3rd Stage Alpha/Beta	\$6 Million	12 2	4 months
Ultracapacitor if fully developed, may have a greater energy density and power per pound than traditional capacitors or the batteries on the market today.	Base materials testing underway by third party to confirm the effectiveness of the Company s materials in the application.	\$12 Million	36 4	8 months
	Current activities are moving us closer to the optimization of materials. An alpha prototype would then be required.			

The Company has identified other potential products for its materials and processes. Some have basic data to support the needed functionality and market differentiation of a product based on using our nano-technology based inventions. Such applications include immersion coatings and performance fabrics. These other products are based, in part, upon the known functionality of the Company s materials and processes.

5

¹ This step is defined as completing pilot or beta site performance and benchmark testing, obtaining (if needed) industry certification(s), and securing initial fundamentals to scale for production.

Patents

We own the rights to seven U.S. patents, five pending U.S. patent applications, and one Patent Cooperation Treaty (PCT) application. National stage applications based on the PCT application have been filed in the U.S., China and Europe. In addition, we co-own two PCT applications with Aegis Biosciences LLC, a biomaterials drug delivery technology company. National stage applications based on one of the co-owned PCT applications have been filed in the U.S., China and Europe, and a National stage application based on the other co-owned PCT application has been filed in the U.S. and China. These patents relate to, or are applications of, our nano-structured polymer materials that perform functions such as ion exchange and modification of surface properties. The polymers are selectively permeable to polar materials, such as water, in molecular form. Selective permeability allows these materials to function as a nano-filter in various transfer applications. These materials are made from base polymer resins available from a number of commercial firms worldwide and possess what we believe to be some unique and controllable properties, such as:

Selectivity: Based on our research, we believe that when the polymer is made there are small channels created that are 5 to 30 nanometers in diameter. There are two types of these channels: hydrophilic (water permeable), and hydrophobic (water impermeable). The channels can be chemically tuned to be highly selective for the ions or molecules they transfer. The high selectivity of the polymer can be adjusted to efficiently transfer water molecules from one face to the other using these channels.

High transfer rate: Based on in-house testing protocols and related results, we have found that the channels created when casting the materials into a nano-structured membrane have a transfer rate of water, or flux, greater than 90% of an equivalent area of an open tube. This feature is fundamental to the material s ability to transfer moisture at the molecular level while substantially allowing or disallowing the transfer of certain other substances at a molecular level.

Unique surface characteristic: The materials offer a surface characteristic that we believe inhibits the growth of bacteria, fungus and algae and prevents adhesives from attaching.

The molecular selectivity, transfer rate and surface coating properties, coupled with our ability to produce the nano-structured materials at what we believe is an affordable price, distinguishes our technology and value-added products. By incorporating our nano-structured materials into existing products, we strive to address current real-world market needs by offering what we believe to be higher efficiencies and improved price performance. For example, there are other energy recovery mechanisms available for HVAC that use coated paper or desiccant technology instead of our nano-structured polymer materials.

Licensing

While we have earned licensing revenue under agreements licensing our technology in the past, we may not receive any material revenue from these agreements in the near or foreseeable future.

6

Going Concern Status

For the three months ended March 31, 2010, the Company incurred a net loss of \$520,038. As of March 31, 2010, the Company has an accumulated deficit of \$32,682,189, negative working capital of \$2,972,405 and a stockholder s deficit of \$3,058,161 and is currently in default on promissory notes in the aggregate principal amount of \$150,000. In view of these matters, there is substantial doubt that the Company will continue as a going concern. The recoverability of recorded property and equipment, intangible assets, and other asset amounts shown in the accompanying financial statements is dependent upon the Company s ability to continue as a going concern and to achieve a level of profitability.

Our ability to continue as a going concern is also highly dependent on our ability to obtain additional sources of cash flow sufficient to fund our working capital requirements, including repayment of our debt obligations. We intend to finance our operations, including the repayment of notes payable, primarily through private sales of debt and equity securities, licensing revenues, and sales of non-core uses of our technology. Any failure by us to timely secure the cash flow adequate to fund our debt obligations and ongoing operations will have a materially adverse consequence on our financial condition, results of operations and cash flows. However, there can be no assurance that the Company will be successful in its efforts.

Principal Offices

Our principal office is located at 11552 Prosperous Drive, Odessa, FL 33556.

Financing Transactions

All shares of common stock being registered including shares underlying convertible notes and warrants were issued to the Selling Shareholders in private transactions. The financing transactions were entered into by the Company for the purpose of raising capital to fund the company s operations. Proceeds were applied towards working capital and general corporate purposes. Specifically, the various transactions underlying the shares of common stock being registered herein were as follows:

Financing

From December 2007 to January 2008, we issued (i) 9% secured convertible promissory notes in an aggregate principal amount of \$2,950,000 (the principal amount of which may be converted into 14,750,000 shares of common stock, par value \$.01 per share) and (ii) warrants to purchase up to 14,750,000 shares of common stock at an exercise price of \$.25 per share (the Financing). Aggregate gross proceeds to the Company from this Financing were \$2,950,000. The notes issued in the Financing matured 12 months from the date of issuance and permitted conversion of all principal and interest into common stock at the option of the holder any time prior to the maturity date at a conversion price of \$0.20 per share. The notes include standard default provisions and price protection with regards to issuance by the Company of common stock and common stock equivalents. The Company is also not permitted to consolidate or merge with or into another entity so long as the notes are outstanding. The notes do not contain any forced conversion or redemption features. The warrants issued in the Financing have a five-year term, cashless exercise provisions and anti-dilution protection. The anti-dilution protection in the warrants includes protection for stock dividends or splits, reclassification or capital reorganization as well as protection with regards to additional issuances of common stock or common stock equivalents. During the term each warrant holder has, upon full conversion or payment prior to the maturity date (as defined in the note), the right to exercise the warrant for all warrant shares. However, until such pay-off or full conversion of the note each holder is limited to the extent to which such holder may exercise the warrant to the same percentage to which the holder has converted the note. The exercise price under the warrants is \$0.25 per share of common stock. The Company is registering the majority of the shares of common stock underlying the warrants that would be exercisable provided the holder s note is or was f

7

The Company is obligated to register the shares of common stock underlying the convertible principal amount of the convertible notes and warrants issued in this Financing pursuant to the Registration Rights Agreement entered into with investors in this Financing. Under the Registration Rights Agreement between the Company and the investors in the Financing, if (a) the registration statement is not filed on or prior to the 45th day following the completion of the first conversion of the notes, or (b) the registration statement is not declared effective by the Commission on or prior to the date that is 180 days following the filing date, or (c) the registration statement is filed with and declared effective by the Securities Exchange Commission but thereafter ceases to be effective as to all registrable securities at any time prior to the expiration of the date that is the earlier of (i) the date when all registrable securities have been sold or (ii) the date on which the registrable securities may be sold without any restriction pursuant to Rule 144(k) or (d) following the date that the shares of common stock initially commence trading or quotation, trading in the Common Stock shall be suspended or if the common stock is no longer quoted on or delisted from the principal exchange on which the common stock is then traded for any reason for more than 10 business days in the aggregate, the Company shall be required to pay an amount as liquidated damages to each note holder, payable in cash, equal to 1.5% of the amount of the note holder s initial investment in the notes for each calendar month or portion thereof thereafter from the date of the triggering event until the applicable event is cured; provided, however, that in no event shall the amount of liquidated damages payable at any time and from time to time to any note holder exceed an aggregate of 8% of the amount of the note holder s initial investment in the notes. The Company is not liable for liquidated damages under the Registration Rights Agreement as to any registrable securities which are not permitted by the Securities Exchange Commission to be included in a registration statement because of its application of Rule 415 until such time as other provisions of the Registration Rights Agreement are triggered. In the case of limitation due to Rule 415, liquidated damages shall be calculated to only apply to the percentage of registrable securities which are permitted by the Securities Exchange Commission to be included in the registration statement. In no event shall any liquidated damages be payable with respect to the warrants or the shares of common stock issuable upon exercise thereof. No liquidated damages have been paid under this provision as of the date of this filing.

Pursuant to the terms of the Financing and the Security Agreement entered into in connection with the Financing, we granted investors a first priority security interest in our patents and certain patent applications. The following are each an event of default under the Security Agreement: (a) any material misrepresentation relating to the Security Agreement or the convertible notes on our part, (b) any material noncompliance with or nonperformance of our obligations under the notes or the Security Agreement, (c) if we make (i) an assignment for the benefit of creditors, or are subject to (ii) an attachment or receivership of assets that is not dissolved, or (iii) are subject to the institution of Bankruptcy proceedings, whether voluntary or involuntary, and (d) any event of default under the Notes. Should an event of default occur, the secured parties are required to provide us with written notice detailing the event of default. We have 60 days from receipt of said notice to cure such default. Should we fail to cure within the prescribed time period, the secured parties may at any time thereafter declare the notes in default and all obligations secured thereby immediately due and payable and shall have the remedies of a secured party under the Uniform Commercial Code. There are no other liens currently in effect against such patents or patent applications. The Company is obligated to register the shares of common stock underlying the convertible principal amount of the convertible notes and warrants issued in this Financing pursuant to a registration rights agreement entered into with investors in this Financing.

8

Table of Contents

Between December 11, 2008 and January 21, 2009, all amounts due under the Convertible Notes matured and became due and payable in full. We have from time to time proposed and are currently proposing that holders of matured Convertible Notes either (i) convert their notes into shares at this time in exchange for additional warrants or (ii) extend the maturity of the Convertible Notes and continue to accrue interest.

During the year ended December 31, 2009, eighteen holders converted the principal balance of \$2,350,000 plus accrued interest of \$361,600 on their Convertible Notes into 13,553,822 shares of common stock. Some of the said note holders converted their Convertible Notes during periods in which we were offering an additional warrant as an inducement to convert. Under said offers, we issued additional warrants to purchase 1,665,000 shares of common stock, exercisable immediately at \$0.25 per share and valued at \$126,367 (using the Black-Scholes pricing model), and 575,000 warrants, exercisable immediately at \$0.75 per share valued at \$286,641 (using the Black-Scholes pricing model) which was recorded as interest expense during the twelve months ended December 31, 2009.

During 2009, four investors holding Convertible Notes with an aggregate outstanding principal balance of approximately \$450,000 at December 31, 2008 notified the Company that they were asserting their rights to receive payment of the principal and interest pursuant to the terms of the Convertible Notes. In June of 2009, three of these investors, holding an aggregate principal note balance of \$250,000, entered into a confession of judgment with the Company. Under that agreement, the three investors had the right, should the Company fail to pay all principal and interest due pursuant to their Convertible Notes on or before September 11, 2009, to file the confession of judgment with the court and seek to secure a judgment against the Company in the amount of all principal and interest due under their Convertible Notes together with the reasonable cost and expense of collection. All interest and principal related to the three Convertible Notes, \$289,803 in the aggregate, was paid in full by the Company on or before September 11, 2009. In July of 2009, the fourth investor, holding a Convertible Note in the principal amount of \$200,000, agreed to extend said note to September 2009. In November of 2009, this investor and the Company modified the Convertible note to extend the maturity date of said note to July 2010, pay the principal amount due in eight monthly installments commencing December of 2009, end the accrual of interest as of November 20, 2009 and convert the \$34,861 in interest due under the Convertible Note as of November 20, 2009 into 170,137 shares of Company s common stock. As of March 31, 2010 the outstanding principal balance of said extended loan was \$100,000. On April 15,2010 the Company paid \$25,000 of the principal amount outstanding on this note and on April 20,2010 this investor converted his remaining balance of \$75,000 into 375,000 shares of common stock based on a per share conversion rate of \$0.20.

As of June15, 2010, \$150,000 of principal on the Convertible Notes was outstanding and remains currently in default and due and payable in full.

1,400,000 shares of common stock issuable upon the exercise of warrants were issued to the placement agent, Legend Merchant Group, Inc. (Legend), the sub-placement agent of the Convertible Note financing, and their affiliates and employees in connection with the financing. Legend received a cash commission equal to 8% of the gross proceeds raised by Legend in the aggregate of \$224,000, \$34,000 of which was paid to Aegis Capital Corp., a sub placement agent. Legend also received warrants to purchase the number of shares of common stock equal to 10% of the number of warrant shares issued to the convertible note holders, for an aggregate of 1,400,000.

Legend transferred some of its holdings under the warrant to its affiliates, employees and sub-placement agent, who further transferred some of its holdings to its employees. Warrants issued to Legend and its sub-placement agent are substantially the same as the cashless warrants issued in the financing with the exception that the amount that may be exercised is tied to the percentage converted notes bears to the total of all notes issued. Upon payment or conversion in full of all notes the warrant may be exercised as to the total number of set shares underlying the warrant. The Company is registering the maximum number of warrant shares that would be issuable upon exercise of Legend s remaining outstanding warrants if all notes issued in the Financing were converted or paid in full.

9

Additional Financing

3,686,960 shares of common stock comprised of 3,258,323 shares of common stock issued and 428,677 shares of common stock issuable upon exercise of certain outstanding warrants were issued in connection with our October 2005 to February 2007 offering of secured convertible promissory notes (the Additional Financing). Aggregate proceeds to the Company from the original offering of the secured convertible promissory notes underlying this Additional Financing transaction were \$1,265,547. The warrants issued in the Additional Financing have a five-year term and anti-dilution protection for stock dividends or splits, mergers, consolidation, reclassification, capital reorganization or a sale of substantially all of the Company s assets. The exercise price is \$0.55 per share of common stock and they do not provide for cashless exercise. These warrants are exercisable as follows: (a) one third of the total number of warrant shares on or after the six month anniversary of the issuance date, (b) an additional one third of the total number of warrant shares on or after the one year anniversary of the issuance date, and (c) in full commencing on or after the 18 month anniversary of the issuance date. If the per share market value of the Company s common stock is \$1.50 per share or greater for ten consecutive trading days (subject to adjustment to reflect stock splits, stock dividends, recapitalizations and the like), the Company may require the holder to exercise the warrant and purchase all warrant shares ten business days of Company issuing notice to the holder or the warrant will automatically terminate. The warrants do not contain any redemption features. Investors in the Additional Financing have no registration rights.

Robb Trust Note

489,293 shares of common stock comprised of 439,293 shares of common stock and 50,000 shares of common stock issuable upon exercise of certain outstanding warrants to the Robb Charitable Trust were issued in connection with an unsecured promissory note dated May 22, 2007 (the Robb Trust Note). Aggregate proceeds to the Company from this financing transaction were \$200,000. Warrants issued to the Robb Charitable Trust are identical to warrants issued in the Additional Financing. Pursuant to an amendment to the promissory note dated January 20, 2008, the parties agreed that one half of the interest and principal would be repaid with the Company s common stock at a price of \$0.25 per share with the remainder payable in cash. Investors in the Robb Trust Note financing have no registration rights.

Daily Financing

930,680 shares of common stock comprised of 818,181 shares of common stock issued and 112,499 shares of common stock issuable upon exercise of certain outstanding warrants in connection with our December 2006 to March 2007 offering of common stock and warrants were issued to various trust and family members of the Daily family (the Daily Financing). Aggregate proceeds to the Company from this financing transaction were \$450,000. Warrants issued in the Daily Financing are identical to warrants issued in the Additional Financing with the exception that said warrants may be exercised immediately without limitation and have no provision for Company to compel exercise based on Company s stock price. Investors in the Daily Financing have no registration rights.

Unless otherwise specified, the issuances of the securities in the above described transactions were exempt from registration under Section 4(2) and Regulation D of the Securities Act. The Company made this determination based on the representations of the Selling Shareholders, which included, in pertinent part, that such shareholders were either (a) accredited investors within the meaning of Rule 501 of Regulation D promulgated under the Securities Act or (b) had a pre-existing or personal relationship with the Company. Each Selling Shareholder further represented that he or she was acquiring our common stock for investment purposes not with a view to the resale or distribution thereof and understood that the shares of our common stock may not be sold or otherwise disposed of without registration under the Securities Act or an applicable exemption therefrom. A legend was included on all offering materials and documents which stated that the shares have not been registered under the Securities Act and may not be offered or sold unless the shares are registered under the Securities Act, or an exemption from the registration requirements of the Securities Act is available.

10

RISK FACTORS

You should carefully consider the risks described below before making an investment decision. Our business, financial condition, results of operations or cash flows could be materially adversely affected by any of these risks. The valuation for the Company could also decline due to any of these risks, and you may lose all or part of your investment. This document also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of several factors, including the risks faced by us described below and elsewhere in this prospectus. In assessing these risks, you should also refer to the other information contained in this prospectus, including our financial statements and related notes.

Risks Related to Our Business

\$150,000 of our 9% convertible secured promissory notes have matured and we are currently in default on these notes, which may cause us to go out of business if judgments are obtained.

As of March 31, 2010, as a result of the Financing transaction, the Company had 3 note holders holding \$250,000 in principal amount 9% convertible secured promissory notes together with the interest thereon outstanding. In April of 2010, one of the note holders, whose note at March 31, 2010 accounted for \$100,000 of the aforementioned aggregate principal amount, was paid \$25,000 of the outstanding principal and opted to converted the remaining \$75,000 of principal into 375,000 shares of our common stock. The two remaining notes have matured and remain outstanding. As of the date hereof the aggregate principal amount outstanding with respect to the two matured notes is \$150,000. The Company has from time to time proposed and is currently proposing that holders of matured notes either (i) convert their notes into shares at this time in exchange for additional warrants or (ii) extend the maturity of the Convertible Notes and continue to accrue interest. If we are unable to reach an agreement with all the note holders and the note holders elect to obtain a judgment against the company, we may be forced out of business. The Company will find it difficult to continue its business, including financing its operations, where a default continues.

We may be unable to repay or secure an extension on the \$2,170,000 in unsecured promissory notes outstanding as of the date hereof.

The Company does not currently have and does not expect to attain adequate funds for repayment of these notes from its current operations. Although the Company intends to continue to finance its operations, including the repayment of these unsecured notes, primarily through private sales of debt and equity securities, it may not be able to secure additional financing to repay the notes on acceptable terms, if at all. Further, many of these notes contain a limitation on the amount of debt the Company can incur prior to repayment of the note. Hence, unless the note holders waive the debt limit we may not be able to avail ourselves of sufficient financing should it be available. Further many of these notes provide the holders with the option of participating in any additional financing we may undertake which could substantially dilute existing shareholders. If we are unable to secure financing to repay the notes we will seek to re-negotiate the notes. However, there is no guarantee that all note holders will accept any offer we may make and some or all of the note holders may request additional concessions from the Company for any accommodation we do secure. Any such additional consideration would likely be offered to all such note holders. Any terms we may be able to secure may not be favorable to the Company. Unfavorable terms would adversely impact our business, financial condition and/or results of operations. In the event we are unable to secure additional financing sufficient to pay the notes prior to the maturity date and we are not able to renegotiate the terms of the notes the note holders will have the option to either foreclose, which would have material adverse consequences on our business operations, financial condition, results of operations and cash flows and possibly result in the failure of our business or they may opt to convert the principal and interest outstanding under their notes into any debt, equity or equity linked security which Company issued after the date of the note, in accordance with the same terms as the subsequent financing, which could result in substantial dilution to existing shareholders.

11

Table of Contents

We may lose all our patents and the majority of our patent applications if we are unable to repay or convert the principal and interest on the outstanding 9% secured convertible notes issued in the Financing transaction or obtain an agreement for extension of the maturity dates.

The Company may not have adequate funds to repay the \$150,000 of Convertible Notes currently outstanding and does not expect to attain adequate funds for repayment from operations. The notes are secured by all of the Company s patents and the majority of the Company s patent applications. Our success depends, to a significant extent, on the technology that is incorporated in our product and the underlying patents and patent applications securing the notes. The Company intends to continue to finance its operations, including the repayment of these notes, primarily through private sales of debt and equity securities. The Company may not be able to secure additional financing to repay the notes on acceptable terms, if at all. There is no guarantee that all note holders will accept any offer the Company will make with regard to extending or converting these notes. Further, some note holders may request additional concessions from the Company in return for extending or converting their note. Any such additional consideration would likely be offered to all note holders. Any re-negotiated terms we may be able to secure may not be favorable to the Company. Unfavorable terms, in either a financing transaction or debt renegotiation, would adversely impact our business, financial condition and/or results of operations. In the event (i) we are unable to secure additional financing sufficient to pay these notes, (ii) the notes are not converted into shares of our common stock, or (iii) we are not able to renegotiate the terms of these Convertible Notes, note holders will have the option to foreclose on all of our patents and those patent applications securing the notes, which would likely result in the failure of our business.

If we fail to raise additional capital we will be unable to continue our business.

Our commercialization and development efforts to date have consumed and will continue to require substantial amounts of capital in connection with our nano-technology material based products (including but not limited to ConsERV), water desalination, immersion coatings, and performance fabrics). Our channel penetration and product development programs require substantial capital outlays in order to reach full product commercialization. As we enter into more advanced product development we will need significant funding to complete product development and to pursue product commercialization.

Additionally, our auditors have expressed substantial doubt about our ability to continue as a going concern. Our ability to continue our business and our research, development and testing activities and commercialize our products in development is highly dependent on our ability to obtain additional sources of financing, including entering into and maintaining collaborative arrangements with third parties who have the resources to fund such activities. Any future financing may result in substantial dilution to existing shareholders, and future debt financing, if available, may include restrictive covenants or may require us to grant a lender security interest in our assets not already subject to an existing security interest. To the extent that we attempt to raise additional funds through third party collaborations and/or licensing arrangements, we may be required to relinquish some rights to our technologies or products currently in various stages of development, or grant licenses or other rights on terms that are not favorable to us. Any failure by us to timely procure additional financing or investment adequate to repay our outstanding promissory notes, including but not limited to the \$150,000 in Convertible Notes and the \$2,170,000 in unsecured promissory notes, and to fund our ongoing operations, including planned product development initiatives, clinical studies and commercialization efforts, will have material adverse consequences on our business operations, financial condition, results of operations and cash flows.

12

Table of Contents

We have a history of operating losses, and we expect our operating losses to continue for the foreseeable future and we may not continue as a going concern.

We have incurred substantial losses since we were funded in 1993 and have not achieved profitability in any year to date. We have only one product developed and marketed, ConsERV, and anticipate all other products will take at least 12 to 48 months to develop. We expect our operating losses to continue for the foreseeable future as we continue to expend substantial resources to expand the ConsERV business while working to bring additional products to the market including research and development, design and testing, obtaining third party validations, identifying and securing collaborative partnerships, and executing to enter into strategic relationships. Furthermore, even if we achieve our projection of selling a greater number of ConsERV units in 2010, we anticipate that we will continue to incur losses until we can cost-effectively produce and sell our products to a wider market. Our accumulated deficit was \$32,682,189 as of March 31, 2010. The reports from Cross, Fernandez and Riley, LLP, our independent registered public accounting firm, related to our December 31, 2009 financial statements contains their opinion that our net losses from operations, negative working capital and stockholder s deficit raised substantial doubt about our ability to continue as a going concern. There has been no change in the Company s position relative to the foregoing statements. It is possible that we will never generate sufficient revenue to achieve and sustain profitability. Even if we achieve profitability, we may not be able to sustain or increase profitability.

The Company financed its operations since inception primarily through private sales of its common and preferred stock, issuance of convertible promissory notes; issuance of unsecured promissory notes, cash received in connection with exercise of warrants, license agreements and the sale of certain fuel cell assets in 2002. As of March 31, 2010, the Company had \$1,957,652 of current assets.

Even if the Company is successful in raising additional equity capital to fund its operations, the Company will still be required to raise an additional substantial amount of capital in the future to fund its development initiatives and to achieve profitability. The Company s ability to fund its future operating requirements will depend on many factors, including the following:

ability to obtain funding from third parties;

progress on research and development programs;

time and costs required to gain third party approvals;

costs of manufacturing, marketing and distributing its products;

costs of filing, prosecuting and enforcing patents, patent applications, patent claims and trademarks;

13

status of competing products; and

market acceptance and third-party reimbursement of its products, if successfully developed.

In the event the lease on our corporate office and production space is terminated, we may not be able to acquire a lease on another suitable property, or a lease on a suitable property at a comparable cost.

The lease on our corporate office and production space may be terminated upon 30 days prior written notice by either party. If this lease is terminated, we may not be able to acquire another lease for another suitable property or a lease on a suitable property at a comparable cost in a timely manner, which could materially disrupt our operations. Even if we are able to relocate into another suitable property at a comparable cost in a timely manner, we would incur significant moving expenses.

Our future indebtedness could adversely affect our financial health.

We have and may continue to incur a significant amount of indebtedness to finance our operations and growth. Any such indebtedness could result in negative consequences to us, including:

increasing our vulnerability to general adverse economic and industry conditions;

requiring a portion of our cash flow from operations be used for the payment of interest on our debt, thereby reducing our ability to use our cash flow to fund working capital, capital expenditures and general corporate requirements;

limiting our ability to obtain additional financing to fund future working capital, capital expenditures and general corporate requirements;

limiting our flexibility in planning for, or reacting to, changes in our business;

placing us at a competitive disadvantage to competitors who have less indebtedness; and

as the majority of our assets are pledged to current debt holders, the failure to meet the terms and conditions of the debt instruments, or a failure to timely rearrange the current terms and conditions of the notes, if so required, will result in the Company having no access to certain portions of its own technology.

The recent economic downturn has affected, and is likely to continue to adversely affect, our operations and financial condition potentially impacting our ability to continue as a going concern.

The recent economic downturn has resulted in a reduction in new construction and less than favorable credit markets, both of which may adversely affect the Company. Certain vendors from which we currently secure parts for our ConsERV product have and may continue to either reduce or eliminate payment terms. Hence, more capital is required to secure parts necessary to produce our products. In addition, our products are often incorporated in new construction which has experienced a decided down turn in project starts over the past year and such trend is expected for 2010. Although the portion of new construction most affected is home sales, which represents a minority of our sales, commercial construction has also experienced a reduction in starts with some projects being delayed and possibly eliminated. If the commercial construction market stagnates or decreases in volume or project size, our operations and financial condition could be negatively impacted. Expenditures under the United States economic stimulus plan appear to have targeted energy products. ConsERV may qualify under said program and the Company may potentially benefit from such program. However, when and if we will experience any increase in sales or investment due to this program is uncertain. In the interim, we may need additional capital to address these external conditions. An internal program to reduce personnel costs including the reduction of some salaries and limited furloughs was undertaken in 2009. Such a program may impact our ability to retain personnel and produce our products; however, we do not expect the impact of our internal program to be significant or long in duration. As

noted above, we intend to continue to finance operations, including the repayment of all outstanding debt, including but not limited to the Convertible Notes and unsecured promissory notes, primarily through private sales of debt and equity securities. In light of the recent economic downturn the Company may not be able to secure additional financing on acceptable terms, if at all. Unfavorable terms for a financing transaction would adversely impact our business, financial condition and/or results of operations. In the event we are unable to secure additional financing our business may fail.

14

Table of Contents

If we fail to successfully address the challenges, risks and uncertainties associated with operating as a public company, our business, results of operations and financial condition would be materially harmed.

We have and will continue to incur a significant increase in costs as a result of operating as a public company, and our management has and will be required to devote substantial time to new compliance initiatives. Until November of 2008 we had never operated as a public company. In preparation for and since reporting as a public company, we have and expect to continue to incur significant legal, accounting and other expenses that we did not incur as a non-reporting company. In addition, the Sarbanes-Oxley Act of 2002 (the Sarbanes-Oxley Act), as well as new rules subsequently implemented by the Securities and Exchange Commission (the SEC) and various stock exchanges, has imposed many new requirements on public companies, including requiring changes in corporate governance practices. Our management and other personnel have and will continue to devote a substantial amount of time to these new compliance procedures.

We have and will continue to incur significant increased costs as a result of operation as a public company, and our management has and will continue to be required to devote substantial time to new compliance initiatives.

As a public company, we are now subject to the reporting requirements of the Securities and Exchange Act of 1934, as amended (the Exchange Act), the Sarbanes-Oxley Act and the rules promulgated by the SEC and the NASDAQ Global Market in response to the Sarbanes-Oxley Act. The requirements of these rules and regulations have and will continue to significantly increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly and may strain our systems and resources. The Exchange Act requires, among other things, that we file annual, quarterly and current reports with respect to our business and financial condition. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal controls for financial reporting. In particular, commencing in 2010, we must perform system and process evaluation and testing of our internal controls over financial reporting to allow management and our independent registered public accounting firm to report on the effectiveness of our internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our testing, or the subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses. We expect to incur significant expense and devote substantial management effort toward ensuring compliance with Section 404. As a result, management s attention may be diverted from other business concerns, which could have a material adverse effect on our business, financial condition and results of operations.

Furthermore, we currently do not have an internal audit function, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. If we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal controls that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by SEC or other regulatory authorities, which would entail expenditure of additional financial and management resources.

15

Table of Contents

These rules and regulations could also make it more difficult for us to attract and retain qualified independent members of our Board of Directors. Additionally, we have found these rules and regulations make it more difficult and more expensive for us to obtain director and officer liability insurance. We have, and may be required once again, to accept reduced policy limits and/or coverage or incur substantially higher costs to obtain the same or similar coverage.

Our ConsERV product is in small volume production, we have no long term experience manufacturing our products on a commercial basis and may not be able to achieve cost effective large volume production.

Our ConsERV product is built in small volumes. Our ability to achieve commercial production of that product is subject to significant uncertainties, including: completion of necessary product automation, developing experience in manufacturing and assembly on a large commercial scale; assuring the availability of raw materials and key component parts from third party suppliers; and developing effective means of marketing and selling our product.

We are in the process of assembling our ConsERV product at our facility in Odessa, Florida. Initial production costs of this product line are high with no or a lower than desired profit margin. As a result, we believe we will need to reduce unit production costs, including the nano-structured materials themselves made to our specifications by third parties, over time in order to offer our products at a profitable basis on a commercial scale. Our ability to achieve cost reductions in all areas of nano-structured materials and value added products depends on entering into suitable manufacturing relationships with component suppliers, as well as increasing sales volumes so that we can achieve economies of scale. A failure to achieve a lower cost structure through economies of scale and improvements in engineering and manufacturing in a timely manner would have a material adverse effect on our business and financial results. There can be no assurance that we will obtain higher production levels or that the anticipated sales prices of our products will ever allow an adequate profit margin.

We may not be able to meet our product development and commercialization milestones.

We have established internal product and commercialization milestones and dates for achieving development goals related to technology and design improvements of our products. To achieve these milestones we must complete substantial additional research, development and testing of our products and technologies. Except for our ConsERV product, we anticipate that it will take at least 12 to 48 months to develop and ready for scaled production our other products. Product development and testing are subject to unanticipated and significant delays, expenses and technical or other problems. We cannot guarantee that we will successfully achieve our milestones. Our business strategy depends on acceptance by key market participants and end-users of our products.

Our plans and ability to achieve profitability depend on acceptance by key market participants, such as vendors and marketing partners, and potential end-users of our products. We continue to educate designers and manufacturers of HVAC equipment with respect to our ConsERV product. More generally, the commercialization of our products may also be adversely affected by many factors that are out of our control, including:

willingness of market participants to try a new product and the perceptions of these market participants of the safety, reliability and functionality of our products;

emergence of newer, possibly more effective technologies;

future cost and availability of the raw materials and components needed to manufacture and use our products;

16

Table of Contents

cost competitiveness of our products; and

adoption of new regulatory or industry standards which may adversely affect the use or cost of our products. Accordingly, we cannot predict with any certainty that there will be acceptance of our products on a scale sufficient to support development of mass markets for those products.

We are dependent on third party suppliers and vendors for the supply of key components for our products.

We are dependent on third parties to manufacture the key components needed for our nano-structured based materials and value added products made with these materials. Accordingly, a supplier s failure to supply components in a timely manner, or to supply components that meet our quality, quantity and cost requirements, technical specifications, or the inability to obtain alternative sources of these components on a timely basis or on terms acceptable to us, would create delays in production of our products or increase unit costs of production. Certain of the components contain proprietary products of our suppliers, or the processes used by our suppliers to manufacture these components are proprietary. If we are required to replace any of our suppliers, while we should be able to obtain comparable components from alternative suppliers at comparable costs, this would create a delay in production. If we experience such delays or our third party suppliers and vendors fail to supply us with components that meet our quality, quantity, or cost standards, we may lose our customers or be subject to product liability claims. Our applications require extensive commercial testing and will take long periods of time to commercialize.

Our nano-structured materials and associated applications need to undergo extensive testing before becoming commercial products. Consequently, the commercialization of our products could be delayed significantly or rendered impractical. Moreover, much of the commercial process testing will be dependent on the efforts of others. Any failure in a manufacturing step or an assembly process may render a given application or our nano-structured material(s) unsuitable or impractical for commercialization. Testing and required development of the manufacturing process will take time and effort.

We have not devoted any significant resources towards the marketing and sale of our products, we expect to face intense competition in the markets in which we do business, and expect to rely, to a significant extent, on the marketing and sales efforts of third parties that we do not control.

To date, we primarily focused on the sale of the ConsERV and, since we have only sold limited quantities of our products, we have limited experience in the marketing and sale of products on a commercial basis. We expect that the marketing and sale of the ConsERV product will continue to be conducted by a combination of independent manufactures representatives, third-party strategic partners, distributors, or OEMs. Consequently, commercial success of our products will be dependent largely on the efforts of others. We intend to enter into additional strategic marketing and distribution agreements or other collaborative relationships to market and sell our nano-structured materials and value added product. However, we may not be able to identify or establish appropriate relationships in the future. Even if we enter into these types of relationships, we cannot assure you that the distributors or OEMs with which we form relationships will focus adequate resources on selling our products or will be successful in selling them. In addition, our chosen third-party distributors or OEMs may require us to provide volume price discounts and other allowances, customize our products or provide other concessions which could reduce the potential profitability of these relationships. To the extent any strategic relationships that we establish are exclusive, we may not be able to enter into other arrangements at a time when the distributor with which we form a relationship is not successful in selling our products or has reduced its commitment to marketing our products. Failure to develop sufficient distribution and marketing relationships, the failure of our distributors and other third parties in assisting us with the marketing and distribution of our products may adversely affect our financial condition and results of operations.

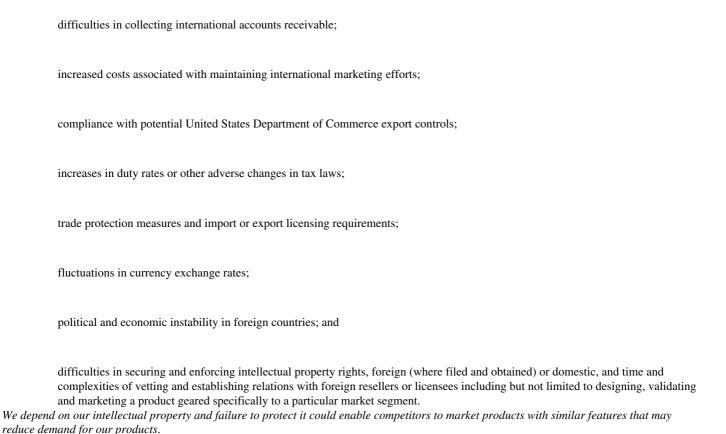
17

Table of Contents

We will face intense competition in the markets for our nano-structured materials and value-added products made from these materials. We will compete directly with currently available products, some of which may be less expensive. The companies that make these other products may have established sales relationships and more name-brand recognition in the market than we do. In addition, some of those companies may have significantly greater financial, marketing, manufacturing and other resources.

Our future results could be harmed by economic, political, regulatory and other risks associated with international sales and operations.

We intend to market, distribute and service our products on an international basis and expect to derive a significant portion of our revenue in coming years from international sales. If we fail to successfully sell our products internationally, our ability to increase our future revenue and grow our business would be impaired. We have limited experience developing, and no experience manufacturing, our products to comply with the commercial, regulatory and legal requirements of international markets. Our success in those markets will depend on our ability to secure relationships with foreign resellers and our ability to manufacture products that meet foreign regulatory and commercial requirements. In addition, our planned international operations could be harmed by a variety of factors, including but not limited to:



We currently have seven United States patents, six patent applications and co-own two patent applications, some of which apply to the composition and structure of a family of ion conducting polymers and membranes. These patents and patent applications often make reference to applications for, and in some instances, are application patents relating to materials we are developing. Our patent applications may or may not mature into issued patents.

Our success depends, to a significant extent, on the technology that is incorporated in our product. Although some of the inventions which we have obtained or applied for patent protection are no longer suitable for use with our planned products, we believe that some of the other inventions covered by the patents and patent applications are important to the success of our products. If we are unable to protect our intellectual property, competitors could use our intellectual property to market products similar to our products, which could reduce demand for our products. We may be unable to prevent unauthorized parties from attempting to copy or otherwise obtain and use our products or technology. Policing unauthorized use of our technology is difficult, and we may not be able to prevent misappropriation of our technology, particularly in

foreign countries where the laws may not protect our intellectual property as fully as those in the United States. Others may circumvent trade secrets, trademarks and copyrights that we own or may own. Any such infringements, or any alleged infringements, could have a material adverse effect on our business, results of operations, and financial condition.

18

Table of Contents

Any of the United States patents or foreign patents owned by us or subsequently issued to us may be invalidated, circumvented, challenged or rendered unenforceable. We may not be issued any patents as a result of our pending and future patent applications and any patents we are issued may not have the claim coverage sought by us or necessary to prevent others from introducing similar products. Any litigation surrounding our patent rights could force us to divert significant financial and other important resources away from our business operations.

Some of our intellectual property is not covered by any patent or patent application. We seek to protect this proprietary intellectual property, which includes intellectual property that may not be patented or patentable, in part by confidentiality agreements with our distributors and employees. These agreements afford only limited protection and may not provide us with adequate remedies for any breach or prevent other persons or institutions from asserting rights to intellectual property arising out of these relationships. In addition, we cannot assure you that these agreements will not be breached, that we will have adequate remedies for any such breach or that the parties to such agreements will not assert rights to intellectual property arising out of these relationships.

The members of our scientific advisory board are employed by entities other than us, some of which may compete with us. While we intend to enter into non-competition agreements with our scientific advisors, if any of them were to consult with or become employed by any of our competitors, our business could be negatively affected.

We have entered into agreements with various third parties that may affect our intellectual property rights.

We have entered into agreements with various third parties in connection with the development of various applications for our technology. Those agreements generally provide for the third party to own any resulting intellectual property rights and often provide for the grant of a license to us relating to those rights. We cannot assure you that the terms of those licenses will not limit our ability to apply such rights to specific applications in competition with the relevant third party, which may adversely affect our business.

Our products employ technology that may unknowingly infringe on the proprietary rights of others, and, as a result, we could become liable for significant damages and suffer other harm.

We cannot assure you that our technologies and products do not or will not infringe on the proprietary rights of third parties or that third parties will not assert infringement claims against us in the future. We are aware of some patents in the nano-materials field held by potential competitors and other third parties. We cannot assure you that a third party will not claim infringement by us with respect to these patents, other patents or proprietary rights, or that we would prevail in any such proceeding. Any such infringement claim, whether meritorious or not, could:

be time-consuming;

result in costly litigation or arbitration and the diversion of technical and management personnel, as well as the diversion of financial resources from business operations;

19

Table of Contents

require us to develop non-infringing technology or seek to enter into royalty or licensing agreements; or

require us to cease use of any infringing technology.

We may not be successful in developing non-infringing technologies. Royalty or licensing agreements, if required, may not be available on terms acceptable to us, or at all, and could significantly harm our business and operating results. A successful claim of infringement arising from the existence of a submarine patent or another existing patent against us or our failure or inability to license the infringed or similar technology could require us to pay substantial damages and could harm our business. In addition, to the extent we agree to indemnify customers or other third parties against infringement of the intellectual property rights of others, a claim of infringement could disrupt or terminate their ability to use, market or sell our products.

We may not be able to control our warranty exposure, which could increase our expenses.

We currently offer and expect to continue to offer a warranty with respect to our ConsERV product and we expect to offer a warranty with each of our future products. If the cost of warranty claims exceed any reserves we may establish for such claims, our results of operations and financial condition could be adversely affected.

We may be exposed to lawsuits and other claims if our products malfunction, which could increase our expenses, harm our reputation and prevent us from growing our business.

Any liability for damages resulting from malfunctions of our products could be substantial, increase our expenses and prevent us from growing or continuing our business. Potential customers may rely on our products for critical needs, such as backup power. A malfunction of our products could result in warranty claims or other product liability. In addition, a well-publicized actual or perceived problem could adversely affect the market sperception of our products. This could result in a decline in demand for our products, which would reduce revenue and harm our business. Further, since our products are used in devices that are manufactured by other manufacturers, we may be subject to product liability claims even if our products do not malfunction.

Our key employees are critical to our success and the loss of any key employees could impair our ability to execute our strategy and grow our business.

Our future success depends, to a significant extent, on the continued service of our executive officers and other key technical, sales and senior management personnel and their ability to execute our growth strategy, all of whom have non-compete agreements with the Company which may not withstand court review if litigation were to occur. The loss of the services of any of our senior level management or other key employees could harm our business. Our future performance will depend, in part, on our ability to retain management personnel and for our executive officers to work together effectively. Our executive officers may not be successful in carrying out their duties or running our Company. Any dissent among executive officers could impair our ability to make strategic decisions.

The Company has, when required, reduced the salaries of its employees. Such salary reductions may have an adverse effect on our ability to retain key employees.

20

Table of Contents

If we fail to attract, retain and motivate qualified employees, we may be unable to execute our business strategy.

Our future success will depend in part on our ability to attract and retain highly qualified individuals, including researchers, engineers, sales and marketing personnel and management. Competition for these individuals may become intense, and it may become increasingly difficult to attract, assimilate and retain these highly qualified persons. Competitors and others may attempt to recruit our employees. Should we experience attrition or need to augment our staff, the cost of securing personnel may be significantly higher than currently experienced and thus negatively impact our financial position.

Our failure to manage our growth could harm our business.

We may grow in the number of our employees, the size of our physical facilities and the scope of our operations. In addition, we intend to focus greater resource on ConsERV margins, sales/marketing activities and channel expansion, and marketplace education. Any expansion would likely place a significant strain on our senior management team and other internal and external resources. Furthermore, we may be required to hire additional senior management personnel. Our ability to manage growth will depend in part on our ability to continue to enhance our operating, financial and management information systems. Our personnel, systems and controls may be unable to support any growth we may experience and as a result, our financial results would suffer.

Any acquisitions we make could disrupt our business and harm our financial condition.

As part of our growth strategy we may review opportunities to acquire other businesses or technologies that would complement our products, expand the breadth of our target markets or enhance our technical capabilities. Acquisitions entail a number of risks that could materially and adversely affect our business and operating results, including but not limited to:

problems integrating the acquired operations, technologies or products with our existing businesses and products;

constraints arising from increased expenses and working capital requirements;

constraints on our ability to incur debt;

dilution of our stock if we issue additional securities;

disruption of our ongoing business, diversion of capital and distraction of our management;

difficulties in retaining business relationships with suppliers and customers of acquired companies;

difficulties in coordinating and integrating overall business strategies, sales, marketing, research and development efforts;

potential liabilities in businesses and facilities acquired;

difficulties in maintaining corporate cultures, controls, procedures and policies;

difficulties evaluating risks associated with entering markets in which we lack prior experience; and

potential loss of key employees.

Our revenue and operating results may fluctuate significantly as a result of factors outside of our control, which could cause the value of our Company to decline.

Unless and until we establish a predictable sales record for our products, we expect our revenue and operating results to vary significantly from quarter to quarter. As a result, quarterly comparisons of our financial results are not necessarily meaningful and you should not rely on them as an indication, in any manner, of our future performance. In addition, due to our stage of development, we cannot predict our future revenue or results of operations accurately. As a consequence, our operating results may fall below the expectations of investors, which could cause the valuation of our company to decline.

21

Table of Contents

We expect to make significant investments in all areas of our business, particularly in research and product development and in expanding in-house or outsourced manufacturing capability. Because the investments associated with these activities are relatively fixed in the short-term, we may be unable to adjust our spending quickly enough to offset any unexpected shortfall in our revenue growth. In addition, because we are in the early stages of commercializing the ConsERV application and anticipate that it will take at least an additional 12 to 48 months to develop our other products for commercial sales, we expect our order flow to be uneven from period to period.

Risks Related to Our Industry

If our products fail to meet certain technical standards, we could be subject to claims, fines or other penalties and we may be curtailed from conducting our business operations.

Our nano-structured membrane products are designed for specific applications with specific technical objectives and standards. If these membranes, or the hardware device(s) used to make the membranes work, fail to meet those technical objectives and/or standards, we could be liable for potential personal injury, loss of life and damages (including consequential damages). Depending on the nature of the claim, our current insurance policies may not adequately reimburse us for costs incurred by reason of said claims, including, but not limited to, environmental damage claims, and in certain instances, we may not be reimbursed at all. Our business is subject to numerous federal, state and local laws, regulations and policies that govern environmental protection. These laws and regulations have changed frequently in the past and may continue to do so in the future. Our operations may not comply with such changes and we may be required to make significant unanticipated capital and operating expenditures to comply with such changes. If we fail to comply with any such applicable environmental laws and regulations, governmental authorities may seek to impose fines or other penalties on us or to revoke or deny the issuance or renewal of certain permits issued to us. Accordingly, we might be subject to damage claims or penalties, and we may be curtailed from conducting our business operations.

We could be liable for environmental damages resulting from our research, development and manufacturing operations.

Our business may expose us to the potential risk of harmful substances escaping into the environment, resulting in potential personal injury or loss of life, damage to or destruction of property, and natural resource damage. Depending on the nature of the claim, our current insurance policies may not adequately reimburse us for costs incurred in settling environmental damage claims, and in certain instances, we may not be reimbursed at all. Our business may be or become subject to numerous federal, state and local laws, regulations and policies that govern environmental protection. These laws and regulations have changed frequently in the past and may continue to do so in the future. Our operations may not comply with such changes and we may be required to make significant unanticipated capital and operating expenditures to comply with such changes. If we fail to comply with applicable environmental laws and regulations, governmental authorities may seek to impose fines or other penalties on us or to revoke or deny the issuance or renewal of certain permits issued to us. Accordingly, we might be subject to damage claims or penalties, and we may be curtailed from conducting our business operations.

Future government regulation may impair our ability to market and sell our products.

Our current and planned products are potentially subject to federal, state, local and foreign laws and regulations governing, among other things, emissions to air as well as laws relating to occupational health and safety. As these products are introduced commercially, it is possible that governmental authorities will adopt new regulations that will limit or curtail our ability to market and sell such products. We may also incur substantial costs or liabilities in complying with such new governmental regulations. Our potential customers and distributors, some of which operate in highly regulated industries, may also be required to comply with new laws and regulations applicable to products such as ours, which could adversely affect their interest in our products.

22

Table of Contents

Alternatives to our technology could render our systems obsolete prior to commercialization.

Our nano-structured materials and their identified uses are one of a number of products being developed today as potential answers to perceived market needs such as additional water sources, energy and emissions savings with regard to HVAC operation, alternative energy storage and clean power sources. Improvements are also being made to the existing products. Technological advances in all fields and improvements in key targeted application areas with existing or different new technology may render our nano-structured material approach obsolete before or during commercialization.

Risks Related to Investment in Our Securities

Future issuances or the conversion or exercise, as applicable, of our outstanding convertible securities and warrants could result in substantial dilution to the interests of our shareholders and downward pressure on the price of our common stock.

The issuance of any shares of our common stock, either pursuant to the conversion or exercise of our outstanding convertible securities and warrants or pursuant to any other agreement entered into by us, including but not limited to the existing unsecured promissory notes, or which may be entered into by us in the future, may result in substantial dilution to the interests of holders of our common stock. The sale of our shares of common stock in the market could cause the market price of our common stock to decline as a result of the increased supply of shares, which could in turn cause you to lose a portion of your investment. Such depression in the value of our common stock could also reduce or eliminate amounts that would otherwise have been available to pay dividends on our common stock or to make distributions upon our liquidation.

Furthermore, shares owned by our current shareholders, to the extent they may be transferred without registration pursuant to applicable exemptions under the Securities Act of 1933, as amended (the Securities Act) may be sold. Because of the perception by the investing public that a sale by such insiders may be reflective of their own lack of confidence in our prospects, the market price of our common stock could decline as a result of a sell-off following sales of substantial amounts of common stock, including but not limited to any such sales by our officers, directors and 5% or more beneficial owners, into the public market, or the mere perception that these sales could occur.

Our stock price is likely to be volatile.

Our common stock has been quoted on the Pink OTC Markets, Inc. s Pink Sheets since November 15, 2005 and the Over the Counter Bulletin Board since November 24, 2008. The market price of our common stock has been and will likely continue to be subject to fluctuations. In addition, the stock market in general and the market for technology companies in particular, have from time to time experienced significant price and volume fluctuations that have been often unrelated or disproportionate to the operating performance of such companies. These broad market and industry factors may cause our common stock to materially decline, regardless of our operating performance. In the past, following periods of volatility in the stock market and the market price of a particular company s securities, securities class action litigation has often been instituted against that company. Litigation of this type could result in substantial legal fees and other costs, potential liabilities and a diversion of management s attention and resources.

23

Table of Contents

We have not and do not intend to pay dividends on our common stock.

The payment of dividends upon our capital stock is solely within the discretion of our board of directors and dependent upon our financial condition, results of operations, capital requirements, restrictions contained in our future financing instruments and any other factors our board of directors may deem relevant. We have never declared or paid a dividend on our common stock and, because we have very limited resources, we do not anticipate declaring or paying any dividends on our common stock in the foreseeable future. Rather, we intend to retain any future earnings for the continued operation and expansion of our business. It is unlikely, therefore, that the holders of our common stock will have an opportunity to profit from anything other than potential appreciation in the value of our common shares held by them.

Our executive officers and directors have significant shareholdings, which may lead to conflicts with other shareholders over corporate governance matters.

As of May 10, 2010, our directors and officers, as a group, beneficially own approximately 31.2% of our outstanding common stock, including shares of common stock issuable upon exercise of warrants and options. Acting together, these shareholders would be able to significantly influence all matters that our shareholders vote upon, including the election of directors, mergers or other business combinations.

As a company quoted on the OTC Bulletin Board, we are not subject to any minimum listing criteria or other eligibility requirements.

Companies that are listed on a national securities exchange, such as the NASDAQ Stock Market, American Stock Exchange or New York Stock Exchange, must meet certain qualitative and quantitative listing criteria, such as they must meet requirements with respect to operating results, net asset thresholds, corporate governance, trading price and minimums for their public float. Companies that are quoted on the OTC Bulletin Board, while not subject to listing requirements per se, must be registered with the SEC under Section 13 or 15(d) of the Exchange Act, and must remain current in their reporting requirements in order to remain eligible for quotation. As we are quoted on the OTC Bulletin Board, we do not need to meet minimum listing criteria and the information available regarding us, our financial condition, business or operations, may be more limited than those companies listed on a national securities exchange. Therefore you may find it more difficult to obtain accurate quotations as to the price of our securities or dispose of securities which you own.

Our securities are characterized as microcap stock, and are subject to a number of unique risks.

The term microcap stock applies to companies with low or micro capitalizations, meaning the total value of the company s stock. Our securities are characterized as microcap stock, and are subject to a number of unique risks. Many microcap companies tend to be new and have no proven track record. Some of these companies have limited or no assets or operations. Others have products and services that are still in development or have yet to be tested in the market. Another risk that pertains to microcap stocks involves the low volumes of trades. Because microcap stocks trade in low volumes, any size of trade can have a large percentage impact on the price of the stock. While all investments involve risk, microcap stocks can be among the most risky.

24

Table of Contents

Unless an active trading market develops for our securities, shareholders may have difficulty or be unable to sell their shares of common stock.

Our common stock is currently quoted on the OTC:BB under the symbol DLYT. However, currently there is not an active trading market for our common stock, meaning that the number of persons interested in purchasing shares of our common stock at or near ask prices at any given time may be relatively small or non-existent, and there can be no assurance that an active trading market may ever develop or, if developed, that it will be maintained. There are a number of factors that contribute to this situation, including, without limitation, the fact that we are a small development-stage company that is relatively unknown to stock analysts, stock brokers, institutional investors and others in the investment community that generate or influence sales volume, and even if we came to the attention of such persons, they tend to be risk-averse and would be reluctant to follow an unproven, development-stage company such as ours or purchase or recommend the purchase of shares of our common stock until such time we become more seasoned and viable.

As a consequence, our stock may be characterized by a lack of liquidity, sporadic trading, larger spreads between bid and ask quotations, and other conditions that may affect shareholders—ability to re-sell our securities. Moreover, there may be periods of several days or more when trading activity in our shares is minimal or non-existent, as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. Unless an active trading market for our common stock is developed and maintained, shareholders may be unable to sell their common stock and any attempted sale of such shares may have the effect of lowering the market price of our common stock and a shareholder—s investment could be a partial or complete loss.

Since our common stock is thinly traded, it is more susceptible to extreme rises or declines in price and shareholders may not be able to sell their shares at or above the price paid.

Since our common stock is thinly traded, its trading price is likely to be highly volatile and could be subject to extreme fluctuations in response to various factors, many of which are beyond our control, including:

the trading volume of our shares;
the number of securities analysts, market-makers and brokers following our common stock;
new products or services introduced or announced by us or our competitors;
actual or anticipated variations in quarterly operating results;
conditions or trends in our business industries;
announcements by us of significant contracts, acquisitions, strategic partnerships, joint ventures or capital commitments;
additions or departures of key personnel;
sales of our common stock;
general stock market price and volume fluctuations of publicly-quoted, and particularly microcap, companies; and

material legal action.

Shareholders, including but not limited to those who hold shares as a result of the exercise or conversion of our outstanding convertible securities and warrants, may have difficulty reselling shares of our common stock, either at or above the price paid, or even at fair market value. The stock markets often experience significant price and volume changes that are not related to the operating performance of individual companies, and because our common stock is thinly traded it is particularly susceptible to such changes. These broad market changes may cause the market price of our common stock to decline regardless of how well we perform as a company. In addition, and as noted below, our shares are subject to the penny stock regulations. Price fluctuations in such shares are particularly volatile and subject to manipulation by market-makers, short-sellers and option traders.

Table of Contents

Our common stock is subject to the penny stock regulations, which are likely to make it more difficult to sell.

Our common stock is considered a penny stock, which generally is a stock trading under \$5.00 and not registered on a national securities exchange. The SEC has adopted rules that regulate broker-dealer practices in connection with transactions in penny stocks. These rules generally have the result of reducing trading in such stocks, restricting the pool of potential investors for such stocks, and making it more difficult for investors to sell their shares once acquired. Prior to a transaction in a penny stock, a broker-dealer is required to:

deliver to a prospective investor a standardized risk disclosure document that provides information about penny stocks and the nature and level of risks in the penny stock market;

provide the prospective investor with current bid and ask quotations for the penny stock;

explain to the prospective investor the compensation of the broker-dealer and its salesperson in the transaction;

provide investors monthly account statements showing the market value of each penny stock held in their account; and

make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser s written agreement to the transaction.

These requirements may have the effect of reducing the level of trading activity in the secondary market for a stock that is subject to the penny stock rules. Since our common stock is subject to the penny stock rules, investors in our common stock may find it more difficult to sell their shares.

Our listing has moved to the OTC Bulletin Board as of November 24, 2008, subjecting us to additional regulatory requirements which may negatively affect our common stock strading price.

On November 24, 2008, the Company moved its listing to the OTC Bulletin Board where the trading price of our common stock has been and is expected to remain below \$5.00 per share. As a result of this exchange relocation, trading in our common stock is subject to the requirements of certain rules promulgated under the Exchange Act. These rules require additional disclosure by broker-dealers in connection with any trades generally involving any security not listed on a national exchange that has a market price of less than \$5.00 per share, subject to certain exceptions. Such rules require the delivery, before any penny stock transaction, of a disclosure schedule explaining the penny stock market and the risks associated therewith, and impose various sales practice requirements on broker-dealers who sell penny stocks to persons other than established customers and accredited investors (generally institutions). For these types of transactions, the broker-dealer must determine the suitability of the penny stock for the purchaser and receive the purchaser s written consent to the transaction before sale. The additional burdens imposed upon broker-dealers by such requirements may discourage broker-dealers from effecting transactions in our common stock. As a consequence, the market liquidity of our common stock could be severely affected or limited by these regulatory requirements.

USE OF PROCEEDS

This prospectus relates to the sale of 12,233,494 shares of common stock that may be offered from time to time by Selling Shareholders. Of the 12,233,494 shares, 1,541,286 shares are currently outstanding, 307,391 are issuable upon the conversion by Selling Shareholders of certain secured convertible notes and 10,384,817 shares are issuable upon exercise by Selling Shareholders of certain warrants. We will receive no proceeds from the sale of shares of common stock in this offering. We will receive no proceeds from the conversion of secured convertible notes. Of the warrants, warrants representing 9,793,641 shares contain both cash and cashless exercise provisions. Of these cashless warrants 9,601,333 have an exercise price of \$0.25 and 192,308 of these cashless warrants have an exercise price of \$0.26. The remaining warrants representing 591,176 shares of common stock are exercisable for \$0.55 per share. If all of the warrants representing an aggregate of 10,384,817 shares are exercised for cash (and assuming there are no adjustments to the purchase price prior to exercise) we will receive approximately \$2,775,480 in gross proceeds. The proceeds received from the exercise of warrants will be used for working capital and general corporate purposes. None of the Selling Shareholders are obligated to exercise any warrants.

DESCRIPTION OF BUSINESS

Dais Analytic Corporation is a nano-structure polymer technology materials company which has developed and is commercializing applications using its materials. The first commercial product is called ConsERV , a fixed plate energy recovery ventilator which we believe is useful in meeting building indoor fresh air requirements while saving energy in the Heating, Ventilation and Air Conditioning (HVAC) industry. We are developing other nano-structure polymer technology products including (i) NanoAir , a water based packaged heating and cooling system and (ii) NanoClear , a water clean-up process useful in the creation of potable water from sea, brackish or waste water. We further believe that our nano-structure polymer technology may be useful in developing an ultra-capacitor, a device which may be capable of greater energy density and power per pound than traditional capacitors or batteries.

History

We were incorporated as a New York corporation on April 8, 1993 as Dais Corporation. We subsequently changed our name to Dais Analytic Corporation on December 13, 1999. We were formed to develop new, cost-effective polymer materials for various applications, including providing a lower cost membrane material for Polymer Electrolyte Membrane (PEM) fuel cells. We believe our research on materials science has yielded technological advances in the field of selective ion transport polymer materials.

In December 1999, we purchased the assets of Analytic Power Corporation, which was founded in 1984 to provide fuel cell and fuel processor design and consulting services, systems integration and analysis services to develop integrated fuel cell power systems, and we were re-named Dais Analytic Corporation. Analytic Power Corporation developed a portfolio of fuel cell and related fuel cell component technologies, including fuel cell stack designs, a membrane electrode assembly process, and natural gas, propane, diesel and ammonia fuel processors for use in creating integrated fuel cell systems.

In March 2002, we sold substantially all of our fuel cell assets to a large U.S. oil company for a combination of cash and the assumption by such company of certain of our obligations. After we sold a substantial portion of our fuel cell assets, we focused on expanding our nano-structured polymer platform, having already identified the Energy Recovery Ventilator (ERV) application as our first commercial product.

Technology

We use proprietary nano-technology to reformulate thermoplastic materials called polymers. Nano-technology involves studying and working with matter on an ultra-small scale. One nanometer is one-millionth of a millimeter and a single human hair is around 80,000 nanometers in width. Polymers are chemical, plastic-like compounds used in diverse products such as Dacron, Teflon, and polyurethane. A thermoplastic is a material that is plastic or deformable, melts to a liquid when heated and to a brittle, glassy state when cooled sufficiently.

Table of Contents

These reformulated polymers have properties that allow them to be used in unique ways. We transform polymers from a hard, water impermeable substance into a material which water and similar liquids can, under certain conditions, diffuse (although there are no openings in the material) as molecules as opposed to liquid water. Water and similar liquids penetrate the thermoplastic material at the molecular level without oxygen and other atmospheric gases penetrating the material. It is believed this selectivity is dependent on the size and type of a particular molecule.

Products

ConsERV

We currently sell one product, our ConsERV product, a HVAC energy conservation product which should, according to various tests, save an average of up to 30% on HVAC operating costs and allow HVAC equipment to be up to 30% smaller, reducing peak energy usage by up to 20% while simultaneously improving indoor air quality. This product makes HVAC systems operate more efficiently and results, in many cases, in energy and cost savings. ConsERV attaches onto existing HVAC systems, typically in commercial buildings, to provide ventilation within the structure. It pre-conditions the incoming air by passing through our nano-technology polymer which has been formed into a filter of sorts. The nano-technology filter uses the stale building air that must be simultaneously exhausted to transfer heat and moisture into or out of the incoming air. For summer air conditioning, the core removes some of the heat and humidity from the incoming air, transferring it to the exhaust air stream thereby, under certain conditions, saving energy. For winter heating, the core transfers a portion of the heat and humidity into the incoming air from the exhaust air stream thereby often saving energy.

Our ConsERV product is the primary focus of our resources and commercialization efforts. When compared to similar competitive products, we believe based on test results conducted by the Air-Conditioning, Heating and Refrigeration Institute (AHRI), a leading industry association, ConsERV is twice as effective in managing latent and sensible heat. We expect ConsERV to continue to be our focused commercial product through 2010 with a growing emphasis moving the development of the NanoClear and NanoAir technologies towards commercialization.

How ConsERV Works

Most building codes mandate commercial structures to provide certain levels of ventilation determined by use and occupancy. ERVs are systems used by HVAC manufacturers to increase energy efficiencies in HVAC units by transferring heat and humidity between air flows. They do this by capturing a portion of the energy already used to heat or cool air that is being released to the outside and use such released air to condition the incoming air stream. In an air conditioning application, heat and humidity that are part of the incoming air stream are transferred to the cool, dry exhaust air, thereby pre-conditioning the incoming air before it reaches the building s air conditioning system. By pre-conditioning the incoming air, ERVs should increase the operating efficiency of the HVAC unit, thereby lowering the overall costs associated with heating and cooling buildings and potentially reducing the size and initial capital cost of the overall HVAC unit.

28

Table of Contents

ConsERV has a core component made using our nano-structured material and may be described as a high-performance ERV. It is used in conjunction with a building s HVAC equipment. The ConsERV energy recovery ventilator employs nano-technology based materials to create an exchange of sensible (temperature) and latent (humidity) energy between the two air streams using HVAC equipment to provide building ventilation. The first air stream typically exits a building at the temperature and relative humidity level set by the buildings air conditioning and heating equipment. The second air stream comes from the outside environment at a different temperature and relative humidity level and is used to bring outdoor air to the occupants of the building. The ConsERV product uses the energy found in the first air stream (air already cooler or heated) to condition the second air stream (the outdoor air coming in) before the second air stream (outside air) enters the HVAC equipment. The ConsERV product may save energy, in that it often reduces the required energy and size of the HVAC equipment and thereby may lower the cost of providing ventilation. In addition, it may lower carbon dioxide emissions because the HVAC equipment may not need to be used as frequently and often times can be reduced in size to provide the same levels of comfort indoors. The process is shown in the picture below.

Given third-party test data, our ConsERV product, with its nano-structured materials, offers better total performance than other fixed plate ERV products of which we are aware, with no moving parts and little or no cross-air stream contamination. Our ConsERV core product has received UL 900 recognition and Air-Conditioning, Heating and Refrigeration Institute (AHRI) standard 1060 certification. Our ConsERV product is compatible with most commercial HVAC units and requires only a small amount of additional HVAC technical expertise to install. We believe the purchase and installation costs of our ConsERV product are comparable to the costs of many competing energy recovery products and our ConsERV product is more efficient in transferring moisture with lower life cycle maintenance costs.

Air-Conditioning, Heating, and Refrigeration Institute (AHRI) May 2008 test results. This study is publicly available and was not prepared for our benefit or funded by us.

29

Table of Contents

Achieving increased sales revenue growth from our ConsERV product is predicated on the success in five key areas:

Achieving continued technological improvements in key materials to lower our per unit cost structure.

Implementing Lean Manufacturing techniques for in-house assembly processes as well as monitoring existing outsourced manufacturing and assembly relationships which lower our per unit cost structure.

Securing HVAC equipment manufacturers, as well as ERV Original Equipment Manufacturers (OEM) (or Licensees), with presence in existing and evolving sales channels as our customers or partners to sell worldwide in-country or region.

Recruiting and retaining the necessary people and infrastructure to support sales growth of ConsERV and other products as they are introduced into their respective sales channels.

Obtaining capital in a timely manner for the necessary steps outlined above to continue without interruption.

Our Other Nano-Structured Products

We are devoting varying amounts of time to other uses of our nano-structured products in ways which are not disruptive to the key ConsERV effort. To date, insignificant revenues have been generated from these non-ConsERV related applications.

These product applications and activities include:

Water Clean-up or NanoClear: We expect that this application would function to remove quantities of salt and other impurities from water to produce potable water using an environmentally friendly design that would use less energy and be less expensive than current methods. We have developed a functional table-top demonstration unit which highlights the basics of how this system works using the Company s nano-structured materials to produce potable water. This demonstration unit is being used as the basis for the product s next planned inflexion point: a 10m3 (26,500 gallons per day) pilot plant projected to be set up at a local County waste water treatment facility. The NanoClear product is currently in the late stages of prototype development.

Water Based packaged HVAC system or NanoAir: We expect this application would function to dehumidify and cool air in warm weather, or humidify and heat in cold weather. This NanoAir application may be capable of replacing a traditional refrigerant loop based heating/cooling system. The Company has a small prototype showing fundamental heating, cooling, humidification, and dehumidification operation of this evolving product. The NanoAir product is in the middle to late stages of prototype development.

Ultra-capacitor: Based on initial tests conducted by a third party, we believe that by applying a combination of our nano-materials we may be able to construct a device which stores energy similar to a battery with projected increases in energy density and lifetimes. We believe the key application for such a device would be in transportation. We have not invested significant resources to date in the development of this product.

As previously mentioned, aside from our ConsERV product, the Company has three additional products under development. The Company intends to sell polymer membrane or polymer membrane incorporated into an application appropriate form, or to license the application. We do not intend to build and market the entire product. The three product applications include:

Application	Current Stage	Estimated Funding Required to Ready for Full Scale Commercialization ¹	Estimated Time to Initial Market Entry (post funding)
Water Clean up (NanoClean) A process using a low temperature, low pressure approach to process brackish and salt water into potable water.	3 rd Stage Alpha/Beta	\$8 Million	12 30 months
Advanced Heating, Ventilating, and Air Conditioning (NanoAir) A process using the nano technology materials to create an advanced heating, ventilating, and air conditioning system.	3rd Stage Alpha/Beta	\$6 Million	12 24 months
Ultracapacitor if fully developed, may have a greater energy density and power per pound than traditional capacitors or the batteries on the market today.	Base materials testing underway by third party to confirm the effectiveness of the Company s materials in the application.	\$12 Million	36 48 months
	Current activities are moving us closer to the optimization of materials. An alpha prototype would then be required.		

¹ This step is defined as completing pilot or beta site performance and benchmark testing, obtaining (if needed) industry certification(s), and securing initial fundamentals to scale for production.

The Company has identified other potential products for its materials and processes. Some have basic data to support the needed functionality and market differentiation of a product based on using our nano-technology based inventions. Such applications include immersion coatings and performance fabrics. These other products are based, in part, upon the known functionality of the Company s materials and processes.

Patents

We own the rights to seven U.S. patents, five pending U.S. patent applications, and one Patent Cooperation Treaty (PCT) application. National stage applications based on the PCT application have been filed in the U.S., China and Europe. In addition, we co-own two PCT applications with Aegis Biosciences LLC, a biomaterials drug delivery technology company. National stage applications based on one of the co-owned PCT applications have been filed in the U.S., China and Europe, and a National stage application based on the other co-owned PCT application has been filed in the U.S. and China. These patents relate to, or are applications of, our nano-structured polymer materials that perform functions such as ion exchange and modification of surface properties. The polymers are selectively permeable to polar materials, such as water, in molecular form. Selective permeability allows these materials to function as a nano-filter in various transfer applications. These materials are made from base polymer resins available from a number of commercial firms worldwide and possess what we believe to be some unique and controllable properties, such as:

Selectivity: Based on our research, we believe that when the polymer is made there are small channels created that are 5 to 30 nanometers in diameter. There are two types of these channels: hydrophilic (water permeable), and hydrophobic (water impermeable). The channels can be chemically tuned to be highly selective for the ions or molecules they transfer. The high selectivity of the polymer can be adjusted to efficiently transfer water molecules from one face to the other using these channels.

High transfer rate: Based on in-house testing protocols and related results, we have found that the channels created when casting the materials into a nano-structured membrane have a transfer rate of water, or flux, greater than 90% of an equivalent area of an open tube. This feature is fundamental to the material s ability to transfer moisture at the molecular level while substantially allowing or disallowing the transfer of certain other substances at a molecular level.

Unique surface characteristic: The materials offer a surface characteristic that we believe inhibits the growth of bacteria, fungus and algae and prevents adhesives from attaching.

The molecular selectivity, transfer rate and surface coating properties, coupled with our ability to produce the nano-structured materials at what we believe is an affordable price, distinguishes our technology and value-added products. By incorporating our nano-structured materials into existing products, we strive to address current real-world market needs by offering what we believe to be higher efficiencies and improved price performance. For example, there are other energy recovery mechanisms available for HVAC that use coated paper or desiccant technology instead of our highly efficient nano-structured polymer materials.

Manufacturing

We do not have long term contractual relationships with any of our manufacturers or vendors. The only product or service which we could not have purchased elsewhere and used in the on-going growth of the ConsERV business is the plastic based sheet good. In progress is a project aimed at lessening the Company s exposure in this sheet good area. All purchases to date of raw materials and related services have been on a purchase order basis using non-disclosure agreements. Our manufacturing process is described below.

Polymer Membrane

Commercially available styrene based polymer resin in flake form and industrial grade solvents are mixed together using a proprietary process involving heat, industrial mixers, and solvents. The resin and the solvents are commercially available from any number of chemical supply houses, or firms such as Dow and Kraton (formerly Shell Elastomers then part of Royal Dutch Shell). Our process changes the molecular properties of the starting styrene based polymer resins into a liquid material which we believe gives the attribute of being selective in what molecules it will allow through the plastic, which includes water molecules. This process, called sulfonation, is done at facilities around the world known as Toll Houses. These are firms which specialize in making small lot (by industry standards) runs of specialty chemicals.

Plastic Based Sheet Good

A thin coating of the liquid polymer material is applied on one side of the sheet good by a tape casting firm of which there are many in the United States. The coated sheet good is heated to rapidly dry the liquid material thus bonding the polymer solution and rolled sheet good together. The resulting modified sheet good is then re-coiled into rolls and shipped to us. Currently this is provided to us by one vendor. Additional vendors for this component have not been sought by the Company. However, we have identified other entities making similar types of products and believe such entities and products may provide alternatives should one be required. As noted above the Company is actively working one project to lower its exposure.

The Core

The modified sheet good is cut into defined dimensions and glued to a PVC formed spacer. This spacer/glued modified sheet good is a single layer. Multiple layers are stacked one on top the other until a certain height is achieved. Once the proper height is achieved, these layers are then fitted with a galvanized sheet metal plate on the top and bottom of the stack along with galvanized sheet metal Y shaped bracket on each of the four corners of the assembly. This assembly is called a core . The galvanized sheet metal is a world-wide commodity material formed to our specifications by local and out-of-town sheet metal forming companies. We have no long term contractual relationships with firms making the PVC spacers, supplying the glue, supplying rivets to hold the structure together, and the sheet metal firms making the top and bottom plate as well as the side rails.

Completion

For the complete ConsERV system, one or more cores are placed inside of aluminum or steel boxes built by us or a vendor. The box may or may not also be fitted with an electric motor, fan, electric relay, and electrical disconnect. Inclusion or exclusion of the electric motor and fan is dictated by the customers needs and current HVAC system. Once outfitted with cores, the product is complete. We have no long term contractual relationships with firms providing the aluminum or steel parts used to build the box, the motors, the fans, the relays, or the electrical disconnects.

Licensing

While we have earned licensing revenue under agreements licensing our technology in the past, we may not receive any material revenue from these agreements in the near or foreseeable future.

Research and Development

The Company has spent approximately \$18,200 on research and development during the last two fiscal years.

Key Relationships

We have strategic relationships with leaders in the energy industry who have entered into sales, marketing, distribution and product development arrangements with us and, in some cases, hold equity in our Company. They include:

Electric Power Research Institute (EPRI)

We have an on-going relationship with a number of utilities through EPRI. The EPRI participants include Public Service Company of New Mexico, Kansas City Power & Light, Reliant Energy Incorporated, Alliant Energy Company, Omaha Public Power District, Wisconsin Public Service Corporation, Southern California Gas Company, EDF Electricite de France, Consolidated Edison of New York, Tokyo Gas Co., Ltd., CINERGY Corporation, Northern States Power Company, American Electric Power Company, Inc., Sierra Pacific Power Company, Public Service Electric & Gas Company (PSE&G), and Tennessee Valley Authority. The EPRI users group has been helpful in creating opportunities for us to define specifications and applications for our nano-structured materials that address existing energy related challenges while possibly opening new sources of revenue.

Table of Contents

45

Genertec America, Inc (Genertec).

On August 21, 2009, we entered into an Exclusive Distribution Agreement with Genertec, under which we are to supply and Genertec is to distribute, on an exclusive basis, three of our nanotechnology-based membrane products and related products in Great China, including main land China, Hong Kong, Macau and Taiwan. The agreement provides that during the initial term of the agreement, Genertec will order and purchase these products in the aggregate amount of Two Hundred Million U.S. Dollars. A minimum quantity of said products is to be purchased by Genertec during each contract year of the initial term. In the event Genertec fails to purchase the minimum amount of products in any given year, we may convert the exclusivity provided to Genertec to a non-exclusive or terminate the agreement. Genertec has agreed to engage and appoint authorized person(s) or firm(s), to install, engineer, perform maintenance, sell and use the products within the defined distribution area and neither Genertec nor its designated buyer is permitted to alter, decompile or modify our products in any way. As consideration for entering into this agreement, Genertec agreed to pay us a deposit in monthly installments beginning in September 2009 and continuing through April, 2010. All such payments are to be applied to products purchased by Genertec. During the initial term of the agreement, the parties are to negotiate in good faith a royalty bearing license agreement whereby Genertec may be granted a license to manufacture certain portions of the our products in the designated territory. The initial term of the agreement shall be for a period of five (5) years, commencing on August 21, 2009, unless earlier terminated. Unless notice of termination is delivered to the respective parties 180 days prior to the expiration of the initial term, the Agreement will automatically renew for consecutive one year periods. We may terminate this agreement in the event: (1) Genertec fails to pay the deposit as indicated, (2) Genertec does not purchase the minimum amount of our designated products during any contract year, (3) breach by Generated of its obligations under the Agreement, or (4) at our discretion immediately upon the transfer of fifty percent (50%) or more of either the assets of the voting stock of Genertec to any third party. Genertec may not assign the Agreement to any party without our prior written consent. As of March 31, 2010, the Company has \$266,667 in accounts receivable and \$416,666 in deferred revenue to be applied against future orders.

In April of 2010, the Company entered into a technical and sales agreement with CAST Systems Control Technology Co., Ltd. (CAST) and Genertec with a value of up to approximately \$48 million over a twelve month period. Under the terms of the Agreement, the Company will supply to CAST, through Genertec, key system components of its nanotechnology clean water process. The Agreement is conditioned upon the Company obtaining a letter of credit from GTA in the amount as agreed to by the parties on or before April 13, 2010. As of the date of this filing, the Company has received the required letter of credit. This Agreement, the terms of which are disclosed in the Company s Current Report on Form 8-K, filed on April 9, 2010, is made pursuant to and in support of the \$200 million distribution agreement made between the Company and Genertec on August 21, 2009, granting Genertec the exclusive right to obtain, distribute and market the Company s nanotechnology-based membrane and related products in China, including mainland China, Hong Kong, Macau and Taiwan, the terms of which are summarized above and more fully disclosed in the Company s Current Report on Form 8-K, filed August 27, 2009.

34

ConsERV Sales and Marketing Strategies

We market our ConsERV product in North America principally through alliances with local independent manufacturer representatives. We currently have 30 independent commercial sales representatives in various locations throughout North America selling the ConsERV product. We intend to increase the number of commercial independent sales representatives to approximately 40 to properly cover the North American commercial sales territory. We are also working to secure ongoing relationships with leading industry HVAC manufacturers and other ERV manufacturers. Other potential and targeted sales channels for the ConsERV product are energy service companies and HVAC product distributorships. We continue to leverage our relationship with EPRI and a group of 16 utility companies (consisting of EPRI members and some of our minority shareholders) into expected sources of future product sales through the introduction of demand reduction incentives. In January 2010, the Company hired David Longacre, who possesses 25 years of experience in the HVAC industry, as our Vice President of Sales.

Future Products Sales and Marketing Strategies

Our intended sales and marketing strategy will require us to create alliances with companies having strong, existing channel presence in the target industries. We believe working with industry leaders at the development level allows us to better address the market s needs and possibly accelerate the time to market cycle.

Competition and Barriers to Entry

We believe the efficacy of our value-added products and technology has the ability to decrease sales of competing products, thus taking business away from more established firms using older technology. We believe that our ConsERV product may become a functional component of newer, more efficient OEM products. Our key challenge is to educate channel decision makers of the benefits of products made using our materials and processes to overcome the strength of the current product sales.

There are a number of companies located in the United States, Canada, Europe and Asia that have been developing and selling technologies and products in the energy recovery industry, including but not limited to: Semco, Greenheck, Venmar, Bry-Air, dPoint, Renewaire and AirXchange.

We will experience significant competition regarding our products because certain competing companies possess greater financial and personal resources than us. Future product competitors include, but are not limited to:

Products Current and Future Competitors

ConsERV Semco, Greenheck, Venmar, Bry-Air, dPoint, Renewaire and AirXchange.

NanoClear Dow, Siemens, , GE

NanoAir AAON, Trane, Carrier, York, Hier

Ultracapacitor EEstor Maxwell

We believe that the combination of our nano-material platform s characteristics (high selectivity, high flux rate, manufacturability, et al.), growing patent position, and possible first to market position, are competitive advantages, which may allow us time to execute our business plan. Competitors may experience barriers to entry in these markets primarily related to the lack of similarly performing proprietary materials and processes.

Intellectual Property

As stated above, we have seven granted U.S. patents, including patents covering the composition and structure of a family of ion conducting polymers and membranes and applications of the polymer. We believe some of these patents make reference to applications relating to the materials we are developing. Please see the Risk Factors Section of this Annual Report. A list of our existing patents follows:

- 1. Patent No. 6,841,601 Cross-linked polymer electrolyte membranes for heat and moisture exchange devices. This patent was issued on January 11, 2005 and expires March 12, 2022.
- 2. Patent No. 6,413,298 Water and ion-conducting membranes and uses thereof. This patent was issued on July 2, 2002 and expires July 27, 2020.
- 3. Patent No. 6,383,391 Water and ion-conducting membranes and uses thereof. This patent was issued on May 7, 2002 and expires on July 27, 2020.
- 4. Patent No. 6,110,616 Ion-conducting membrane for fuel cell. This patent was issued on August 29, 2000 and expires on January 29, 2018.
- 5. Patent No. 5,679,482 Fuel Cell incorporating novel ion-conducting membrane. This patent was issued on October 21, 1997 and expires on October 20, 2014.
- 6. Patent No. 5,468,574 Fuel Cell incorporating novel ion-conducting membrane. This patent was issued on October 21, 1995 and expires on May 22, 2014.
- 7. Patent No. 7,179,860 Cross-linked polymer electrolyte membranes for heat, ion and moisture exchange devices. This patent was issued on February 20, 2007 and expires on March 11, 2022.

We have provisional and patent applications in the following areas: Advanced Polymer Synthesis Processes, Reversible Liquid to Air Enthalpy Core Applications and Construction, Nanoparticle Ultra Capacitor and Water Treatment and Desalination.

The following is a partial list of the patent applications publicly visible:

- 1. WO20080316678 Nanoparticle Ultra Capacitor
- 2. WO/2008/039779 Enhanced HVAC System and Method
- 3. WO/2008/089484 Multiphase selective Transport Through a Membrane
- 4. WO/2008/141179 Molecule Sulphonation Process *

- 5. WO/2009/002984 Stable and Compatible Polymer Blends*
- 6. WO2009/002984 Novel Coblock Polymers and Methods for Making Same

36

^{*} Patent applications jointly owned with Aegis Biosciences, LLC.

Patents may or may not be granted on these applications. As noted above, two of these applications are jointly owned with Aegis Biosciences, LLC. We also seek to protect our proprietary intellectual property, including intellectual property that may not be patented or patentable, in part by confidentiality agreements with our current and prospective strategic partners and employees.

Government Regulation

We do not believe the sale, installation or use of our nano-structured products will be subject to any government regulation, other than perhaps adherence to building codes, military specifications, and water safety regulations governing products used in HVAC, military clothing, immersion coatings, and water treatment and desalination. We do not believe that the cost of complying with such codes and regulations, to the extent applicable to our products, will be material.

We do not know the extent to which any existing or new regulations may affect our ability to distribute, install and service any of our products. Once our products reach the commercialization stage and we begin distributing them to our target markets, federal, state or local governmental entities may seek to impose regulations.

We are also subject to various international, federal, state and local laws and regulations relating to, among other things, land use, safe working conditions, and environmental regulations regarding handling and disposal of hazardous and potentially hazardous substances and emissions of pollutants into the atmosphere. Our business may expose us to the risk of harmful substances escaping into the environment, resulting in potential personal injury or loss of life, damage to or destruction of property, and natural resource damage. Depending on the nature of the claim, our current insurance policies may not adequately reimburse us for costs incurred in settling environmental damage claims, and in some instances, we may not be reimbursed at all. To date, we are not aware of any claims or liabilities under these existing laws and regulations that would materially affect our results of operations or financial condition.

Employees

As of May 2010, we employed 17 full-time employees and one part time employee in our Odessa, Florida facility. Of the 18 employees we have 4 technicians, 2 product managers, 1 polymer chemist, 3 engineers, 1 development vice president, 2 administrative assistants, 2 administrators, 1 Vice President of Sales, 1 accountant and 1 President and Chief Executive Officer. None of the employees are subject to a collective bargaining agreement. We consider our relations with our employees to be good.

Principal Offices

Our principal office is located at 11552 Prosperous Drive, Odessa, FL 33556.

37

PROPERTIES

We currently lease a 7,200 square feet of combined office and production space located at 11552 Prosperous Drive, Odessa, FL 33556. We lease the site from Ethos Business Ventures, LLC, a limited liability company in which our Chief Executive Officer, Timothy N. Tangredi, has a controlling financial interest.

The lease for our corporate headquarters began on March 18, 2005. The lease term will terminate upon 30 days written notice from either party. The current monthly rent is \$3,800 per month. We also pay all taxes and utilities as well as most repairs relating to our office. Most of the Company functions are performed at this site including corporate, marketing, administration, on-going product and nano-structured polymer development, and product assembly and shipping. Key polymer synthesis and casting is out-sourced and not done at this facility.

We do not anticipate investing in real estate or interests in real estate, real estate mortgages, or securities of or interests in persons primarily engaged in real estate activities. We currently have no formal investment policy and do not intend to undertake investments in real estate as a part of our normal operations.

LEGAL PROCEEDINGS

We are not currently a party to any pending legal proceedings. In the ordinary course of business, we may become a party to various legal proceedings generally involving contractual matters, infringement actions, product liability claims and other matters.

From time to time, claims are made against us in the ordinary course of our business, which could result in litigation. Claims and associated litigation are subject to inherent uncertainties and unfavorable outcomes could occur, such as monetary damages, fines, penalties or injunctions prohibiting us from selling one or more products or engaging in other activities. The occurrence of an unfavorable outcome in any specific period could have a material adverse effect on our results of operations for that period or future periods.

DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS

The following table sets forth the names and ages of all of our directors and executive officers as of the date of this Prospectus. Also provided herein is a brief description of the business experience of each director and executive officer during the past five years and an indication of directorships held by each director in other companies subject to the reporting requirements under the Federal securities laws. All of the directors will serve until the next annual meeting of shareholders and until their successors are elected and qualified, or until their earlier death, retirement, resignation or removal. There are no arrangements or understandings between any director or executive officer and any other person pursuant to which the director or executive officer was selected.

Name	Age	Position
Timothy N. Tangredi	54	President, Chief Executive Officer and Chairman of the Board of Directors
Robert W. Brown	60	Vice President Operations
Scott G. Ehrenberg	56	Chief Technology Officer and Secretary
Judith C. Norstrud	41	Chief Financial Officer and Treasurer
David Longacre	51	Vice President Sales and Marketing
Robert W. Schwartz	65	Director
Raymond Kazyaka Sr.	79	Director

Directors and Executive Officers

The following are the Company s directors and executive officers:

Timothy N. Tangredi has been our Chief Executive Officer since 1996. Mr. Tangredi joined the Company in 1996, and was appointed a member of our board of directors in 1997. In 1999 and 2000, respectively, Mr. Tangredi initiated and executed the strategic purchases of Analytic Power and American Fuel Cell Corporation. From 1979 to 1990, Mr. Tangredi worked for AT&T, as a member of the Leadership Continuity Program working in technical marketing, network operations, and project management. Mr. Tangredi earned his BS from Siena College and MBA from Rensselaer Polytechnic Institute. He is a founder and member of the board of directors of Aegis BioSciences, LLC (Aegis). Aegis, created in 1995, is a licensee of the Company s nano-structured intellectual property and materials in the biomedical and healthcare fields. Mr. Tangredi spends approximately one to two days per month on Aegis business and is compensated by Aegis for his time and contribution(s).

Scott G. Ehrenberg, is a founder of the Company and has been our Chief Technology Officer since 1993 and Secretary since November 7, 2008. He has thirty years of experience developing along with others new materials and applications. These applications range from laser cutting systems, optical inspection technology, and new organic electronic packages for IBM to new polymer electrolytes for electrochemical and mass transport devices for the Company. His background includes 12 years at IBM plus two previous successful startups in the fields of electronic packaging and ultrasonic devices: Tessera of San Jose, CA and Sono-Tek of Milton, NY. He has 14 issued patents with 6 more pending along with numerous technical papers and presentations. Mr. Ehrenberg received his bachelor of science from Pennsylvania State University in 1976.

David E. Longacre has been Vice President of Sales and Marketing since January 2010. His background includes over 25 years of experience in the Heating, Ventilation and Air Conditioning (HVAC) industry. His career started with York International as a Sales Engineer, progressing to a Zone Manager over 17 years. He worked as an independent manufactures representative for two years before joining Trane, where he was a Strategic Account Manager and Team Leader for five years. He then worked with Siemens Building Technologies as their Service Sales Manager for a district, then became Branch Manager for Johnson Controls handling the profit and loss for both sales and operations. Mr. Longacre received his BS in Commerce and Engineering from Drexel University in 1980. He is also a LEED AP.

Robert W. Brown has been an officer of the Company since March 2003 and is currently Vice President of Operations. His background includes 28 years of experience in technical marketing and product management, technology commercialization, and many aspects of technology business start-up and growth. He has experience both onshore and internationally with utility and engineering organizations. From March 1994 to February 2003, as CEO of a subsidiary of Baymont Technologies Inc. Mr. Brown s responsibilities included turn around management and financial restructuring. Mr. Brown received a Technical Diploma from Southern Alberta Institute of Technology in 1970.

Judith C. Norstrud, CPA was appointed Chief Financial Officer and Treasurer on October 14, 2009. In March 2002, Judith founded Norco Accounting & Consulting, Inc., a firm that provides various accounting and consulting services to small companies on an as needed basis. From July 1999 to June 2002, Judith served as a manager with Pender, Newkirk and Company, CPAs. While at Pender, Judith served a variety of companies from start up enterprises to mid-sized publicly traded companies. Previously, from August 1996 to July 1999, Judith was an Audit Senior with PricewaterhouseCoopers, LLP. Judith graduated from the University of South Florida s College of Business Administration with a Master of Accountancy degree in 2002.

Non-Employee Directors

Raymond Kazyaka Sr. was appointed to our board of directors in 1995. Mr. Kazyaka is the former President (1976-2006) and a co-founder of Wright Malta Corporation, which was founded in 1972. Wright Malta, liquidated in 2005, owned and operated the Malta Test Station, which had performed military product development for various governmental and commercial organizations. Mr. Kazyaka has also served as a consultant to the Canadian National Defense on facility noise abatement. Prior to founding Wright Malta, Mr. Kazyaka worked for General Electric as a rocket engine design engineer and a manager. Mr. Kazyaka holds several patents on rocket engine components and noise abatement systems, and is a senior member of the American Institute of Aeronautics and Astronautics. Mr. Kazyaka graduated from Union College with a degree in Mechanical Engineering in 1953.

39

Table of Contents

Robert W. Schwartz was appointed to our board of directors in 2001. Mr. Schwartz founded the Schwartz-Heslin Group (SHG) in 1985 and serves as one of its Managing Directors. Mr. Schwartz specializes in corporate planning, finance and development. Prior to starting SHG, he was a founder, President and Chief Executive Officer of a venture-funded high tech telecommunications company (Windsource, Inc.). In addition, he was the President and Chief Operating Officer of an American Stock Exchange listed company (Coradian Corporation). He was also the Chief Financial Officer of a major manufacturer of outdoor power equipment (Troy Built Products, Troy, NY). His earlier experience was with KPMG as a management consultant and with IBM. Mr. Schwartz received a Bachelor of Science from Cornell University in 1967 and attended graduate courses at the University of New York Albany.

Involvement in Certain Legal Proceedings

None of our directors or executive officers has been, during the past ten years:

- (i) involved in any bankruptcy petition filed by or against such person or any business of which such person was a general partner or executive officer, either at the time of the bankruptcy or within two years prior to that time;
- (ii) convicted of any criminal proceeding or subject to a pending criminal proceeding (excluding traffic violations and other minor offences);
- (iii) subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction, permanently or temporarily enjoined, barred, suspended or otherwise limited from involvement in any type of business, securities, futures, commodities or banking activities;
- (iv) found by a court of competent jurisdiction (in a civil action), the Securities and Exchange Commission or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law, and the judgment has not been reversed, suspended, or vacated
- (v) found by a court of competent jurisdiction in a civil action or by the Commission to have violated any Federal or State securities law, and the judgment in such civil action or finding by the Commission has not been subsequently reverse, suspended, or vacated;
- (vii) subject of, or a party to, any Federal or State judicial or administrative order, judgment, decree, or finding, not subsequently reversed, suspended or vacated, related to an alleged violation of securities or commodities law or regulation; any law or regulation respecting financial institutions or insurance companies; or any law or regulation prohibiting mail or wire fraud or fraud in connection with any business entity; or
- (viii) the subject of, or a party to, any sanction or order, not subsequently reversed, suspending or vacated, of any self-regulatory any registered entity of the Commodity Exchange Act or any equivalent exchange, association, entity or organization that has disciplinary authority over its members or persons associated with a member.

40

Director Independence

Our board of directors has determined that it currently has two members who qualify as independent as the term is used in Item 407 of Regulation S-K as promulgated by the SEC and as that term is defined under NASDAQ Rule 4200(a)(15). The independent directors are Raymond Kazyaka Sr. and Robert W. Schwartz.

Board Meetings and Committees; Annual Meeting Attendance

Our board of directors has not adopted any committees to the board of directors. Our board of directors held five formal meeting during the most recently completed fiscal year. Other proceedings of the board of directors were conducted by resolutions consented to in writing by all the directors and filed with the minutes of the proceedings of the directors. Such resolutions consented to in writing by the directors entitled to vote on that resolution at a meeting of the directors are, according to the corporate laws of the State of New York and our bylaws, as valid and effective as if they had been passed at a meeting of the directors duly called and held.

At each annual meeting of shareholders, directors will be elected by the holders of common stock to succeed those directors whose terms are expiring. Directors will be elected annually and will serve until successors are duly elected and qualified or until a director s earlier death, resignation or removal. Our bylaws provide that the authorized number of directors may be changed by action of the majority of the board of directors or by a vote of the shareholders of our Company. Vacancies in our board of directors may be filled by a majority vote of the board of directors with such newly appointed director to serve until the next annual meeting of shareholders, unless sooner removed or replaced. We currently do not have a policy regarding the attendance of board members at the annual meeting of shareholders.

Code of Ethics

We have adopted a code of ethics that applies to our officers, directors and employees in accordance with applicable federal securities laws. We have filed a copy of our code of ethics as an exhibit to the Annual Report on Form 10-K for the fiscal year ended December 31, 2009. These documents may be reviewed by accessing our public filings at the SEC s web site at www.sec.gov. In addition, a copy of the code of ethics will be provided without charge upon request to us. We intend to disclose any amendments to or waivers of certain provisions of our code of ethics in a Current Report on Form 8-K

41

EXECUTIVE OFFICER COMPENSATION

The following executive compensation disclosure reflects all compensation awarded to, earned by or paid to the executive officers below for the fiscal years ended December 31, 2009 and 2008. The following table summarizes all compensation for fiscal years 2009 and 2008 received by our Chief Executive Officer, and most highly compensated executive officers in fiscal year 2009.

SUMMARY COMPENSATION TABLE

Summary Compensation Table

., ., ., ., ., ., ., ., ., ., ., ., ., .							Non-qualified Deferred Compen-			
							•	All other		
		Salary	Bonus	Stock Awards	Option Awards	Non-Equity	sation Earnings	compensation		Total
Name and principal position (a)	Year (b)	(\$) (c)	(\$) (d)	(\$)(2) (e)	(\$)(2) (f)	Incentive Plan (g)	(\$) (h)	(\$) (i)		(\$) (j)
Timothy N. Tangredi	2009	\$ 170,000	()	(-)	\$ 1,134,425		,	()	\$ 1	,304,425
Chief Executive Officer, President, and Chairman of the Board of Directors(1)	2008	\$ 170,000			752,450	0(3)			\$	922,450
Robert W. Brown	2009	\$ 57,187							\$	57,187
Secretary and Vice President of Marketing	2008	\$ 75,000			\$ 23,412	2			\$	98,412
Scott G. Ehrenberg, Chief Technology Officer	2009 2008	\$ 67,100 \$ 88,000			\$ 84,33	7(3)			\$ \$	67,100 172,337
Judith C. Norstrud,	2009	\$ 13,447			\$ 82,930	0(3)			\$	96,377

Chief Financial Officer and

Treasurer

- (1) Mr. Tangredi receives a salary of \$170,000 per year, and a bonus in an amount not to exceed 100% of his salary, which bonus shall be measured by meeting certain performance goals as determined in the sole discretion of our board of directors. In 2009 and 2008, Mr. Tangredi was paid \$55,350 and \$117,500, respectively and has accrued unpaid salary of \$114,650 for 2009 and \$52,500 for 2008. Additional accruals have been made for the years prior to 2008.
- (2) The amounts included in these columns are the aggregate dollar amounts of compensation expense recognized by us for financial statement reporting purposes in accordance with Accounting Standards Codification 718, Compensation-Stock Compensation, for the fiscal years ended December 31, 2009 and December 31, 2008, and thus include amounts from option awards granted in and prior to the indicated year. For information on the valuation assumptions used in calculating these dollar amounts, see Note 1 to our audited financial statements included in this Report for the fiscal years ended December 31, 2009 and December 31, 2008, each as filed with the SEC. These amounts reflect our accounting expense for these awards and do not correspond to the actual value that may be recognized by the individuals upon option exercise. During the fiscal year ended December 31, 2009, there were 472,733 option award forfeitures related to

service-based vesting conditions.

(3) In 2008 we issued Mr. Tangredi a warrant to purchase 3,000,000 shares of the Company s common stock at an exercise price of \$0.36 per share. The warrant had a five year term, vested upon issuance, provided for a cashless exercise and contained standard anti-dilution provisions. In the same year we issued Mr. Ehrenberg a warrant to purchase 250,000 shares of Company s common stock at the exercise price of \$0.30 per share with all other terms and conditions being the same as those of the Tangredi warrant. During 2009, we issued Ms. Norstrud an option to purchase 200,000 shares of the Company s common stock at an exercise price of \$0.45 per share. The option vests at a rate of 50,000 per quarter and has a term of five years.

42

Narrative Disclosure to Summary Compensation Table

Employment Agreements

Officer Employment Agreement

Timothy N. Tangredi. We are party to an employment agreement with Mr. Tangredi, our President, Chief Executive Officer, and director. The employment agreement, as amended and restated on July 29, 2008, sets forth Mr. Tangredi s compensation level and eligibility for salary increases, bonuses, benefits, royalty sharing for newer applications, and option grants. Mr. Tangredi s employment agreement provided for an initial term of three years with the term extending on the second anniversary thereof for an additional one year period and on each subsequent anniversary of the agreement for an additional year period. The agreement sets forth Mr. Tangredi s compensation level, conditions for certain option grants, benefits and the obligations of the Company in the event of termination. Mr. Tangredi s base salary is \$170,000, plus certain allowances as well as performance related payments and option issuances.

For each product for which the Company commences commercial sale or licensing during the term and receives more than \$1 million of revenue during any 12 month period, Mr. Tangredi, in addition to any other compensation which he may receive under the agreement, shall be granted options to purchase 10,000 shares of the Company's common stock at an exercise price equal to either (i) the lower of: (a) \$2.50 per share or (b) the fair market value per share of the stock on the date of grant as determined in good faith by the Compensation Committee of the Board of Directors, if the Company has not conducted an initial public offering prior to the date of grant (as hereinafter defined), or (ii) at an exercise price equal to 75% of the market price of the common stock, if the Company has completed an initial public offering of its common stock prior to the date of grant (with the market price to be the average of the closing sale prices during the five trading days immediately preceding the date of grant of the option). Such options, as well as any other options granted to Mr. Tangredi during the term of his employment, shall be granted under the Company's then existing stock option plan, shall be immediately exercisable, have a term of ten years, shall be exercisable for up to three years after termination of employment (unless termination is for cause, in which event they shall expire on the date of termination), shall have a cashless exercise feature, and shall be subject to such additional terms and conditions as are then applicable to options granted under such plan provided they do not conflict with the terms set forth in the agreement.

In the event that the fair market value of the Company s common stock (the average of the closing prices of the common stock for any five consecutive trading days, as reported by the principal exchange or other stock market on which the commons stock is then traded) equals or exceeds 200% of the price at which the Company sells common stock in a public offering (the Target Value) at any time during the term of the agreement, Mr. Tangredi shall be granted options to purchase 50,000 shares of common stock at an exercise price equal to 75% of the Target Value, on terms identical to the options provided for above.

In the event Mr. Tangredi s employment is terminated by the Company without cause or by Mr. Tangredi for good reason, death or disability, Mr. Tangredi shall be entitled to the following:

- (i) An amount equal to the sum of (A) the greater of 200% of the base salary then in effect for Mr. Tangredi or \$270,000 plus (B) the cash bonus, if any, awarded to Mr. Tangredi for the most recent year shall be payable by the Company in full within 10 days following termination;
- (ii) The Company shall continue to provide Mr. Tangredi the health and life insurance, car allowance and other benefits set forth in the agreement until two years following termination of employment, and shall continue to offer any of such benefits to Mr. Tangredi beyond such two year period to the extent required by COBRA or similar statute which may then be in effect;
- (iii) All stock options, to the extent they were not exercisable at the time of termination of employment, shall become exercisable in full; and

43

Table of Contents

(iv) Any indebtedness of Mr. Tangredi to the Company shall thereupon be cancelled and of no further force and effect, and the Company shall pay to Mr. Tangredi, within ten days following receipt of a written demand therefore, any income or other taxes resulting from such cancellation.

In the event that Mr. Tangredi elects to terminate employment within one year following a change in control of the Company, he shall receive, within the later of ten days following the date on which the change in control occurs or the date on which he gives notice of his election to terminate employment, a lump sum payment equal to three times the greater of (i) his then current base salary plus the cash bonus, if any, awarded to him for the most recent year or (ii) \$350,000 plus said cash bonus. In addition, he will be entitled to accelerated vesting of outstanding options and continuing benefits as described above.

Significant Employee

Patricia K. Tangredi. We are a party to an employment agreement with Ms. Tangredi. The agreement, provided for an initial term of 3 years beginning on January 1, 2001, with automatic extensions for subsequent one year terms, unless the Company or Ms. Tangredi provides the other party with written notice of intent not to renew. The agreement was subsequently amended and restated on July 29, 2008. The employment agreement set forth Ms. Tangredi s compensation level and eligibility for salary increases, options, royalty sharing for newer applications, benefits and the obligations of the Company in the event of termination. A portion of Ms. Tangredi s salary has been accrued and carried on the Company s books since 2002.

In the event Ms. Tangredi s employment is terminated by the Company without cause or by the Ms. Tangredi for good reason or by reason of death or disability, Ms. Tangredi shall be entitled to the following:

- (i) the greater of 100% of the base salary then in effect for Employee or \$115,000, which amount shall be payable by the Company in full within 10 days following termination;
- (ii) the Company shall provide, at its sole cost, Ms. Tangredi with the medical benefits for one year following the date of termination. The Company shall continue to offer such benefits to Ms. Tangredi beyond such one year period to the extent required by COBRA or any similar statute which may then be in effect; and
- (iii) all stock options granted to Ms. Tangredi at any time during the course of the term shall be exercisable in full.

In the event that Ms. Tangredi elects to terminate her employment within six months following a change in control of the Company, she shall receive, within the later of 10 days following the date on which the change in control occurs or the date on which she give notice of her election to terminate employment, a lump sum payment equal to the greater of three times her then current base salary or \$235,000. In addition, she will be entitled to accelerated vesting of outstanding options and continuing medical benefits as described above.

44

Outstanding Equity Awards

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

OPTION AWARDS			Equity					STOCK	AWARDS	
			Incentive							
			Plan							Equity
			Awards:						Equity	incentive plan
	Number of	Number of	Number of						incentive plan	awards: Market
		securities						Market value	awards: number	or payout
	securities	underlying	Securities				Number of	of shares	of unearned	value of unearned
	underlying	unexercised	underlying	Opti	on		shares or units	or units of	shares, units or	shares, units or
	unexercised		unexercised	-		Option	of stock that	stock that	other rights	other rights
	options (#)	options (#)	unearned	exerc		expiration	have not	have not	that have not	that have not
Name (a)	Exercisable (b)	Unexercis- able (c)	options (#) (d)	pric (\$) (e)	1	date (f)	vested (#) (g)	vested (\$) (h)	vested (#) (i)	vested (\$) (j)
Timothy N. Tangredi (1)	825,000	0	0	\$.2	26	9/23/2014	8/	()	(=)	3/
	150,000 120,000	0	0		10 10	5/10/2015 10/1/2015				
	40,000	0	0		30	5/2/2016				
	110,000	0	0		55	11/1/2016				
	140,000	0	0		55	2/20/2017				
	300,000	0	0		21	8/18/2017				
	350,000	0	0	\$.2	21	1/30/2018				
	3,000,000*	0	0	\$.3	36	4/18/2013				
	75,000	0	0		30	8/4/2018				
	100,000	0	0		42	11/12/2019				
	3,540,058	0	0	\$.4	42	11/12/2019				
* Warrant										
Robert W. Brown (2)	106,416	0	0		26	9/23/2014				
	120,000	0	0		10	5/10/2015				
	120,000	0	0		10	10/1/2015				
	72,500	0	0		55	11/1/2016				
	33,334 66,667	16,666 133,333	16,666 133,333		21 30	8/18/2017 8/4/2018				
Scott G. Ehrenberg (3)	140,000	0	0		26	9/23/2014				
Scott G. Ememberg (3)	110,000	0	0		20 10	5/10/2015				
	80,000	0	0		10	10/1/2015				
	40,000	0	0		55	11/1/2016				
	120,000	0	0		55	2/20/2017				
	33,334	16,666	16,666		21	8/18/2017				
	ຄລັກກາ	166 667	166 667		20	0/4/2010				

Table of Contents 60

83,333

166,667

166,667 \$.30

8/4/2018

Edgar Filing: DAIS ANALYTIC CORP - Form POS $\operatorname{\mathsf{AM}}$

*250,000 0 0 \$.30 8/4/2013

* Warran	t
----------	---

Judith C. Norstrud (4)	0	200,000	200,000	\$.45	10/15/2019	
Patricia K Tangredi (5)	395,000 278,058 140,000	0 0 0	0 0 0	\$ \$ \$		9/23/2014 5/10/2015 10/1/2015	
	125,000 350,000	0	0	\$ \$.55 .21	11/1/2016 8/18/2017	
	300,000 250,000 100,000	0 0 0	0 0 0	\$ \$ \$.21 .30 .42	1/30/2018 8/4/2018 11/12/2019	

45

- (1) Mr. Tangredi receives a salary of \$170,000 per year, and a bonus in an amount not to exceed 100% of his salary, which bonus shall be measured by meeting certain performance goals as determined in the sole discretion of our board of directors. The April 2008 warrant grant to Mr. Tangredi was made by the Board of Directors in recognition for Mr. Tangredi s achievement of the following goals: negotiating conversion of the convertible notes issued in the Additional Financing, securing a release with respect to the consulting agreement with Gray Capital Partners, Inc., securing and closing upon the Financing. In 2009 and 2008, Mr. Tangredi has accrued unpaid salary of \$114,650 for 2009 and \$52,500 for 2008. Additional accruals have been made for the years prior to 2008. All stock options issued to Mr. Tangredi were issued under the 2000 Plan.
- (2) All stock options issued to Mr. Brown were issued under the 2000 Plan.
- (3) All stock options issued to Mr. Ehrenberg were issued under the 2000 Plan.
- (4) All stock options issued to Ms. Norstrud were issued under the 2000 Plan.
- (5) All stock options issued to Ms. Tangredi were issued under the 2000 Plan

Director Compensation

The following table sets forth the compensation awarded to, earned by or paid to the directors during the fiscal year ended December 31, 2009.

DIRECTOR COMPENSATION

					Change in		
				Non-	Pension		
				Equity	Value and		
	Fees			Incentive	Non-qualified		
	Earned			Plan	Deferred		
	or Paid in	Stock	Option	Compen-	Compensation	All Other	
	Cash	Awards	Awards	sation	Earnings	Compensation	
Name (a)	(\$) (b)	(\$) (c)	(\$) (d)	(\$) (e)	(\$) (f)	(\$) (g)	Total (\$) (h)
Raymond Kazyaka Sr., Director(1)			\$ 31,165				\$ 31,165
Robert W. Schwartz, Director(2)			\$ 31,165				\$ 31,165

At fiscal year end December 31, 2009, Mr. Kazyaka had 504,600 option awards outstanding and no stock awards outstanding.
 At fiscal year end December 31, 2009, Mr. Schwartz had 474,600 option awards outstanding and no stock awards outstanding.

(2) At fiscal year end December 31, 2009, Mr. Schwartz had 4/4,600 option awards outstanding and no stock awards outstanding. We do not have a plan pursuant to which our directors are compensated and directors do not receive cash compensation for their services on the Board of Directors although they do receive stock options as determined by the full board of directors. Timothy N. Tangredi, Raymond Kazyaka Sr. and Robert W. Schwartz were each granted an option on November 12, 2009 to purchase 100,000 shares of common stock at an exercise price of \$0.42 per share, vesting immediately upon issuance and exercisable for a period of ten years. This option grant to Mr. Tangredi as a director is also contained in the table summarizing grants made to our officers.

Our non-employee directors are currently compensated with the issuance of stock options, which generally become exercisable upon the date of grant, and which generally expire on the earlier of ten years from the date of grant or up to three years after the date that the optionee ceases to serve as a director. Non-employee directors are also reimbursed for out-of-pocket expenses associated with attending to the Company s business

46

SECURITY OWNERSHIP OF

CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Securities Authorized for Issuance under Equity Compensation Plans

In June 2000 and November 2009, our Board of Directors adopted, and our shareholders approved, the 2000 Incentive Compensation Plan and 2009 Long-Term Incentive Plan, respectively (together the Plans). The Plans provide for the granting of options to qualified employees of the Company, independent contractors, consultants, directors and other individuals. As of March 31, 2009, the Company s Board of Directors approved and made available 15,000,000 shares of common stock to be issued pursuant to the 2009 Plan. The Plans permit grants of options to purchase common shares authorized and approved by the Company s Board of Directors.

The following summarizes the information relating to outstanding stock options activity with employees during 2009 and 2008:

	Common Shares	0	ed Average cise Price	Weighted Average Remaining Contractual Term (in years)	I	ggregate ntrinsic Value
Outstanding at December 31, 2007	6,376,889	\$	0.27	7.94	\$	
Granted	2,916,668	\$	0.26			
Forfeited or expired	(687,000)	\$	0.31			
Outstanding at December 31, 2008 Granted Exercised Forfeited or expired	8,606,556 4,190,058 (25,000) (472,732)	\$ \$ \$ \$	0.26 0.21 0.17 0.58	7.58	\$	38,294 3,250
Outstanding at December 31, 2009	12,298,882	\$	0.26	7.64	\$ 1	,052,839
Exercisable at December 31, 2009	11,951,021	\$	0.24	7.61	\$ 1	,034,594
Exercisable at December 31, 2008	7,329,993	\$	0.26	7.39	\$	35,727

Security Ownership of Certain Beneficial Owners

The following table sets forth information as of the date of this prospectus as to each person or group who is known to us to be the beneficial owner of more than 5% of our outstanding voting securities and as to the security and percentage ownership of each of our executive officers and directors and of all of our officers and directors as a group.

Beneficial ownership is determined under the rules of the SEC and generally includes voting or investment power over securities. The number of shares shown as beneficially owned in the tables below are calculated pursuant to Rule 13d-3(d)(1) of the Exchange Act. Under Rule 13d-3(d)(1), shares not outstanding that are subject to options, warrants, rights or conversion privileges exercisable within 60 days are deemed outstanding for the purpose of calculating the number and percentage owned by such person, but not deemed outstanding for the purpose of calculating the percentage owned by each other person listed. Except in cases where community property laws apply or as indicated in the footnotes to this table, we believe that each shareholder identified in the table possesses sole voting and investment power over all of the shares of common stock shown as beneficially owned by the shareholder.

The address for each of the persons named below is 11552 Prosperous Drive, Odessa, FL 33556, unless otherwise indicated.

Applicable percentage ownership in the following table is based on approximately 29,636,717 of common stock outstanding as of May 10, 2010, plus, for each individual, any securities that individual has the right to acquire within 60 days of May 10, 2010.

C----- C4--l-

	Common Stock Beneficially	
	Owned	
	Number of	
	Shares of	Percentage of
Name of Beneficial Owner	Common Stock	Class
Timothy N. Tangredi (Officer and Chairman) (1)	10,835,916	26.9%
Robert W. Brown (Officer) (2)	518,916	1.7%
Scott G. Ehrenberg(3) (Officer)	939,466	3.1%
Judith Norstrud (Officer) (4)	50,000	.2%
David Longacre (Officer)	0	0%
Raymond Kazyaka Sr. (Director) (5)	504,600	1.7%
Robert W. Schwartz (Director) (6)	474,600	1.6%
Executive officers and directors as a group (7 persons)	13,323,498	31.2%
Brian A. Kelly 181C Hague Blvd. Glenmont, N.Y. 12077	2,254,085	7.6%
Michael Gostomski (7) 1666 Valley View Dr. Winnona, MN 55987	2,086,842	6.9%
Louis M. Jaffe (8) 1500 S. Ocean Blvd #5201 Boca Raton, FL 33432	3,631,646	11.8%
Marisa Stadmauer (9) 26 Columbia Turnpike Florham Park, NJ 07932	1,835,373	6.0%
Mark Nordlich (10) 152 West 575th St. 4th Floor New York, NY 10019	3,324,740	11.2%
Erick Richardson (11) 10900 Wilshire Blvd. Suite 500 Los Angeles, CA		
90024	1,503,263	5.1%
Leonard Samuels (12) 1011 Centennial Road Penn Valley, PA 19072	8,795,212	26.2%
Leah Kaplan Samuels (13) 1011 Centennial Road Penn Valley,		
PA 19072	2,576,746	8.4%

⁽¹⁾ Includes 8,750,058 shares of common issuable upon exercise of stock options and warrants and 2,065,858 shares beneficially owned by Mr. Tangredi s wife, Patricia Tangredi. 1,938,058 of Ms. Tangredi s shares are issuable upon the exercise of stock options.

Table of Contents

- (2) Includes 518,916 shares of common stock issuable upon exercise of stock options.
- (3) Includes 856,666 shares of common stock issuable upon the exercise of stock options and warrants and 41,400 shares beneficially owned by Mr. Ehrenberg s wife, Linda Ehrenberg.
- (4) Includes 50,000 shares of common stock issuable upon exercise of stock options.
- (5) Includes 504,600 shares of common stock issuable upon exercise of stock options.
- (6) Includes 474,600 shares of common stock issuable upon exercise of stock options.
- (7) Includes 18,750 common shares issuable upon exercise of certain warrant issued in connection with the conversion of notes issued in the Additional Financing. Also includes 499,875shares of common stock issuable upon exercise of warrants issued in connection with the Financing and 288,462 shares of common stock issuable upon exercise of a certain warrant issued in connection with a March 2009 purchase of Company s common stock.
- (9) Includes 999,750 shares of common stock issuable upon exercise of warrants issued in connection with the Financing in the name of MSSRPS, LLC. The natural person with voting power and investment power on behalf of MSSRPS, LLC is Marisa Stadmauer.
- 10) Includes 3,238,204 shares of common stock issued upon conversion of convertible notes. The natural person with voting power and investment power on behalf of Platinum Montaur Life Sciences, LLC is Mark Nordlich. Not included above are 3,999,000 shares of common stock issuable upon exercise of warrants issued in connection with the Financing. The warrants, as amended, may not be exercised to the extent the shares resulting from such exercise, when aggregated with its other holdings, would result in Platinum Montaur Life Sciences, LLC holding in excess of 9.9% of all our common stock on a beneficially converted basis.
- (11) Includes 610,955 shares of common stock issuable upon conversion of certain outstanding convertible notes and 500,000 shares of common stock issuable upon exercise of certain outstanding warrants issued in connection with the Financing in the name of RP Capital LLC. Erick Richardson and Nimish Patel of Richardson & Patel LLP own RP Capital LLC. Also includes 392,308 shares of common stock issuable upon exercise of certain outstanding warrants held in the name of Richardson & Patel LLP. Erick Richardson is a partner at Richardson & Patel LLP. The natural person with voting and investment control over the shares held by these entities is Erick Richardson.
- (12) Includes 825,000 shares of common stock issuable upon exercise of certain outstanding warrants issued in connection with the Financing and 80,000 shares of common stock issuable upon exercise of certain outstanding warrants issued in connection with a purchase of Company s common stock in 2009. All of the foregoing warrants are held in the name of Leah Kaplan-Samuels and Leonard Samuels JTWROS. The natural persons with voting power and investment power on behalf of Leah Kaplan-Samuels and Leonard Samuels JTWROS are Leah Kaplan-Samuels and Leonard Samuels. Also includes 3,193,466 shares of common stock issued upon conversion of convertible notes and 3,025,000 shares of common stock issuable upon exercise of certain outstanding warrants in the Financing issued to shareholder RBC Dain Custodian for Leonard Samuels IRA.
- (13) Includes 825,000 shares of common stock issuable upon exercise of warrants issued in connection with the Financing and 80,000 shares of common stock issuable upon exercise of certain outstanding warrants issued in connection with a purchase of Company s common stock in 2009. All of the foregoing warrants are held in the name of Leah Kaplan-Samuels and Leonard Samuels JTWROS. The natural persons with voting power and investment power on behalf of Leah Kaplan-Samuels and Leonard Samuels JTWROS are Leah Kaplan-Samuels and Leonard Samuels.

49

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Timothy N. Tangredi, the Company s Chief Executive Officer and Chairman, is a founder and a member of the board of directors of Aegis BioSciences, LLC (Aegis). Aegis, created in 1995, is a licensee of the Company s nano-structured intellectual property and materials in the biomedical and healthcare fields. Mr. Tangredi spends approximately one to two days per month on Aegis business and is compensated by Aegis for his time and contribution(s). We granted Aegis two exclusive, world-wide licenses, the first in 1995 and the second in 2005. Pursuant to these licenses, Aegis has the right to use and sell products containing our polymer technologies in biomedical and health care applications. The first license was entered into in 1995 and has been amended twice. In 2005, we agreed to accept \$150,000 as payment in full of all royalties and no further license revenue will be forthcoming. The second license allows Aegis the use of our intellectual property in the field of health care. A one-time payment of \$50,000 was made under this license in 2005. In addition, under the second license Aegis is to make royalty payments of 1.5% of the net sales price it receives with respect to any personal hygiene product, surgical drape or clothing products (the latter when employed in medical and animal related fields) and license revenue it receives should Aegis grant a sublicense to a third party. To date Aegis has sold no such products nor has it received any licensing fees requiring a royalty payment be made to us. All obligations for such payments will end on the earlier of June 2, 2015 or upon the aggregate of all sums paid to us by Aegis under the agreement reaching \$1 million. The term of each respective license runs for the duration of the patented technology.

On May 21, 2009, to evidence a loan, Company issued its Chief Executive Officer a promissory note in the principal amount of \$51,900. The note is unsecured and bears a simple interest rate of 9% per annum. The principal amount plus all accrued interest is to be paid in full to the holder no later than July 31, 2009. This note was paid in full prior to July 31, 2009.

On June 10, 2009, to evidence a loan, the Company issued a promissory note in the principal amount of \$10,000 to Ethos Business Ventures, an entity in which its Chief Executive Officer holds a position. The note is unsecured and bears a simple interest rate of 9% per annum. The principal amount plus all interest accrued is to be paid in full to the holder no later than July 31, 2009. This note was paid in full prior to July 31, 2009

On September 11, 2009, to evidence a loan, Company issued its Chief Executive Officer a promissory note in the principal amount of \$124,000. The note is unsecured and bears a simple interest rate of 9% per annum. The principal amount plus all accrued interest is to be paid in full to the holder no later than October 15, 2009. This note was paid in full prior to October 15, 2009.

On September 11, 2009, to evidence a loan, the Company issued a promissory note in the principal amount of \$37,000 to Ethos Business Ventures, an entity in which its Chief Executive Officer holds a position. The note is unsecured and bears a simple interest rate of 9% per annum. The principal amount plus all interest accrued is to be paid in full to the holder no later than October 15, 2009. This note was paid in full prior to October 15, 2009

The Company rents a building on a month to month basis from a related party which is wholly owned by two shareholders of the Company, one of which is Timothy N. Tangredi, our Chief Executive Officer. The base monthly rent expense is \$3,800 per month. The Company also pays the taxes, insurance and some repairs on the building. For the year ending December 31, 2009 and 2008, the Company recorded \$49,604 and \$48,792, in rent expense to this related party, respectively.

There are no material relationships between us and our directors or executive officers except as previously discussed herein.

Since the beginning of our last fiscal year, we have not been a participant in any transaction, or proposed transaction, not disclosed herein in which any related person had or will have a direct or indirect material interest and in which the amount involved exceeds the lesser of \$120,000 or one percent of our total assets at year end for the last two completed fiscal years.

50

MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATION

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and the notes thereto included elsewhere in this Prospectus and in our Form 10K filed with the Securities and Exchange Commission on March 30, 2010.

THIS FILING, INCLUDING BUT NOT LIMITED TO MANAGEMENT S DISCUSSION AND ANALYSIS, CONTAINS FORWARD-LOOKING STATEMENTS. THE WORDS ANTICIPATED, BELIEVE, EXPECT, PLAN, INTEND, **ESTIMATE** SEEK. COULD, MAY, AND SIMILAR EXPRESSIONS ARE INTENDED TO IDENTIFY FORWARD-LOOKING PROJECT, WILL, STATEMENTS. THESE STATEMENTS INCLUDE, AMONG OTHERS, INFORMATION REGARDING FUTURE OPERATIONS, FUTURE CAPITAL EXPENDITURES, AND FUTURE NET CASH FLOW. SUCH STATEMENTS REFLECT THE COMPANY S CURRENT VIEWS WITH RESPECT TO FUTURE EVENTS AND FINANCIAL PERFORMANCE AND INVOLVE RISKS AND UNCERTAINTIES, INCLUDING, WITHOUT LIMITATION, GENERAL ECONOMIC AND BUSINESS CONDITIONS, CHANGES IN FOREIGN, POLITICAL, SOCIAL, AND ECONOMIC CONDITIONS, REGULATORY INITIATIVES AND COMPLIANCE WITH GOVERNMENTAL REGULATIONS, THE ABILITY TO ACHIEVE FURTHER MARKET PENETRATION AND ADDITIONAL CUSTOMERS, AND VARIOUS OTHER MATTERS, MANY OF WHICH ARE BEYOND THE COMPANY S CONTROL. OUR ACTUAL RESULTS COULD DIFFER MATERIALLY FROM THOSE ANTICIPATED IN THESE FORWARD-LOOKING STATEMENTS AS A RESULT OF SEVERAL FACTORS, INCLUDING THE RISKS FACED BY US AS DESCRIBED BELOW AND ELSEWHERE HEREIN AS WELL AS IN OUR FORM 10-K FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON MARCH 30, 2010. IN LIGHT OF THESE RISKS AND UNCERTAINTIES THERE CAN BE NO ASSURANCE THAT THE FORWARD-LOOKING STATEMENTS CONTAINED IN THIS PROSPECTUS WILL OCCUR. WE HAVE NO OBLIGATION TO PUBLICLY UPDATE OR REVISE THESE FORWARD-LOOKING STATEMENTS TO REFLECT NEW INFORMATION, FUTURE EVENTS, OR OTHERWISE ,EXCEPT AS REQUIRED BY FEDERAL SECURITIES LAWS AND WE CAUTION YOU NOT TO PLACE UNDUE RELIANCE ON THESE FORWARD-LOOKING STATEMENTS, WE MAY NOT UPDATE THESE FORWARD-LOOKING STATEMENTS, EVEN THOUGH OUR SITUATION MAY CHANGE IN THE FUTURE.

OVERVIEW

We have developed and patented a nano-structure polymer technology, which is being commercialized in products based on the functionality of these materials. We believe the applications of our technology have promise in a number of diverse market segments and products.

The initial product focus of the Company is ConsERV, an energy recovery ventilator. We also have new product applications in various developmental stages. We believe that three of these additional product applications, including an advanced air conditioning system which is projected to use less energy and emit fewer emissions than most current HVAC equipment, a sea-water desalination product and an electrical energy storage device, can be brought to market in the foreseeable future if we receive adequate capital funding.

We expect ConsERV to continue to be our focused commercial product through 2010 with a growing emphasis on moving the development of the NanoClear and NanoAir technologies towards commercialization.

REVENUES

We generate our revenues primarily from the sale of our ConsERV products in residential and commercial HVAC markets. Sales channels for our ConsERV products include OEMs, distributors, retailers, and consumers. We also occasionally license our technology to strategic partners and sell various prototypes of other product applications that use our polymer technology.

Our revenue growth is dependent on continued sales from (i) more seasoned independent sales representatives, (ii) a greater number of independent sales representatives (iii) fulfilling the ventilation needs of the growing energy consultant marketplace which work to lower their client s energy costs and emissions, and (iv) from the Company s own customer direct sales activities, all of which focus on the sale of product primarily into the commercial user marketplace with a growing emphasis on low rise structures (small commercial buildings, multi-purpose structures, and residences). In addition, the Company and its independent sales representative sales force will work to secure orders for ConsERV core only sales (i) from HVAC equipment manufacturers, (ii) from distribution firms servicing the equipment needs of the HVAC installer community, and (iii) creating license/supply relationships with HVAC or ERV OEMs preferably having a dominant presence in existing direct related sales channels.

51

Table of Contents

COST OF SALES

Our cost of sales consists primarily of materials (including freight), direct labor, and outsourced manufacturing expenses incurred to produce our ConsERV products.

We are dependent on third parties to manufacture the key components needed for our nano-structured based materials and value added products made with these materials. Accordingly, a supplier s failure to supply components in a timely manner, or to supply components that meet our quality, quantity and cost requirements or our technical specifications, or the inability to obtain alternative sources of these components on a timely basis or on terms acceptable to us, would create delays in production of our products or increase our unit costs of production. Certain of the components contain proprietary products of our suppliers, or the processes used by our suppliers to manufacture these components are proprietary. If we are required to replace any of our suppliers, while we should be able to obtain comparable components from alternative suppliers at comparable costs, it would create a delay in production.

Our cost of sales may fluctuate due to a number of factors, including, but not limited to:

A change in key suppliers or the prices that they charge for the fundamental components of our ConsERV products;

An increase in the labor resources needed to expand the production of our ConsERV products;

Commercialization of new product applications of our polymer technology;

Continued technological improvements in key materials or configuration(s) to reduce our per unit cost structure; and

Additional outsourcing of our manufacturing and assembly processes with strategic partners to reduce our per unit cost structure. **SELLING, GENERAL AND ADMINISTRATIVE EXPENSES**

Our selling, general and administrative expenses consist primarily of payroll and related benefits, share-based compensation, professional fees, marketing and channel support costs, and other infrastructure costs such as insurance, information technology and occupancy expenses.

Our selling, general and administrative expenses may fluctuate due to a variety of factors, including, but not limited to:

Additional expenses as a result of becoming a reporting company including, but not limited to, director and officer insurance, director fees, SEC reporting and compliance expenses, transfer agent fees, additional staffing, professional fees and similar expenses;

Additional infrastructure needed to support the expanded commercialization of our ConsERV products and/or new product applications of our polymer technology for, among other things, administrative personnel, physical space, marketing and channel support and information technology; and

The fair value of new share-based awards, which is based on various assumptions including, among other things, the volatility of our stock price

RESULTS OF OPERATIONS

THREE MONTHS ENDED MARCH 31, 2010 COMPARED TO THREE MONTHS ENDED MARCH 31, 2009

The following table sets forth, for the periods indicated, certain data derived from our Statements of Operations and certain of such data expressed as a percentage of revenues:

	Three Months	Three Months Ended			
	March 3	31,			
	2010	2009			
Sales, excludes license fees	\$ 386,782	\$ 136,317			
Cost of goods sold	\$ 321,326	\$ 120,013			
Percentage of revenues	83.1%	88.0%			
Selling, general and administrative expenses	\$ 559,520	\$ 529,965			
Percentage of revenues	144.7%	388.8%			
Interest expense	\$ 46,510	\$ 156,197			
Percentage of revenues	12.0%	114.6%			
Net loss	\$ (520,038)	\$ (648,786)			
Percentage of revenues	(134.5)%	(475.9)%			

REVENUES: Total revenues for the three months ended March 31, 2010 and 2009 were \$386,782 and \$136,317, respectively, an increase of \$250,465 or 184%. The increase in revenues in the 2010 period is primarily attributable to the Company increasing the sales price of the ConsERV products, introducing a new product to the ConsERV line generating additional sales in a new price category and an increase in the number and size of its sales transactions in 2010. During the three months ended March 31, 2010 and 2009, four and three customers accounted for approximately 58% and 69% of revenues, respectively.

COST OF GOODS SOLD: Cost of goods sold increased \$201,313 to \$321,326 and represented 83% of revenues, for the three months ended March 31, 2010 compared to \$120,013 or 88% of revenues for the three months ended March 31, 2009. The increase in cost of goods sold during 2010 is primarily due to the increase in sales. The decrease in cost of goods sold as a percentage of revenue in 2010 is primarily attributable to a decrease in the cost of materials due to the implementation of improvements to the production process of certain product components and a decrease in the cost of both labor and materials through outsourcing some of the production in order to maximize the gross margin.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES: Selling, general and administrative expenses of \$559,520 for the three months ended March 31, 2010 increased \$29,555 from \$529,965 in the same period of 2009 or 6%. Although the Company was able to decrease stock based compensation by approximately \$27,000, this was offset by a significant increase in consulting services for 2010 as compared to 2009 to assist the Company with the establishment of new customers and advise the Company in securing federal and state funding.

INTEREST EXPENSE: Interest expense was \$46,510 for the three months ended March 31, 2010 compared to \$156,197 for the same period of 2009, a decrease of \$109,687. During the three months ended March 31, 2010, \$3,375 of interest expense was related to convertible notes and approximately \$43,100 of interest was related to other note holders. During the three months ended March 31, 2009, interest expense was comprised of amounts related to convertible notes of approximately \$62,000, \$30,000 for the amortization of the note discount and embedded beneficial conversion feature on the convertible notes, and approximately \$63,000 in expense relating to warrants issued to induce conversion of principal and interest accrued on two convertible notes.

NET LOSS: Net loss for the three months ended March 31, 2010 decreased by \$128,748 to \$520,038 from \$648,786 for the three months ended March 31, 2009. The decrease in net loss is primarily due to the increase in gross margin, coupled with the decrease in interest expense as discussed above.

YEAR ENDED DECEMBER 31, 2009 COMPARED TO YEAR ENDED DECEMBER 31, 2008

The following table sets forth, for the periods indicated, certain data derived from our Statements of Operations:

	Year Ended December 31,		
	2009	2008	
Revenues	\$ 1,531,215	\$ 1,015,433	
Percentage of revenues	100.0%	100.0%	
Cost of goods sold	\$ 1,071,098	\$ 796,217	
Percentage of revenues	70.0%	78.4%	
Selling, general and administrative expenses	\$ 3,224,592	\$ 2,935,552	
Percentage of revenues	210.6%	289.1%	
Interest Expense	\$ 621,574	\$ 3,282,768	
Percentage of revenues	40.6%	323.3%	
Net loss	\$ (3,385,382)	\$ (5,979,446)	
Percentage of revenues	(221.1) %	(588.9) %	

REVENUES: Total revenues for the year ended December 31, 2009 and 2008 were \$1,531,215 and \$1,015,433 respectively, an increase of \$515,782, or 50.8%. The increase in revenues for 2009 is primarily attributable to the Company increasing the sales price of the ConsERV products, introducing a new product to the ConsERV line generating additional sales in a new price category and an increase in the number and size of its sales transactions in 2009. The Company also attributes the sales increase to a realignment of its independent sales representatives. During the years ended December 31, 2009 and 2008, five and four customers accounted for approximately 66% and 64% of revenues, respectively.

COST OF GOODS SOLD: Cost of goods sold was \$1,071,098 and \$796,217, or 70.0% and 78.4% of revenues for the years ended December 31, 2009 and 2008, respectively. The increase in 2009 of \$274,881 is primarily due to an increase in sales. The decrease in cost of goods sold as a percentage of revenue in 2009 is primarily attributable to a decrease in the cost of materials due to the implementation of improvements to the production process of certain product components and a decrease in the cost of both labor and materials through outsourcing a portion of the production.

54

Table of Contents

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES: Selling, general and administrative expenses were \$3,224,592 for the year ended December 31, 2009, compared to \$2,935,552 for the year ended December 31, 2008, an increase of \$289,040 or 9.8%. This increase is primarily due to an increase in stock based compensation of approximately \$396,000 and a \$75,000 increase in professional fees, which was partially offset by a decrease in payroll expenses of approximately \$177,700.

INTEREST EXPENSE: Interest expense was \$621,574 for the year ended December 31, 2009 compared to \$3,282,768 for the same period of 2008, a decrease of \$2,661,194 or 81.1%. During the year ended December 31, 2009, interest expense was primarily related to convertible notes issued from December 2007 to January 2008, and comprised of approximately \$172,000 of stated interest expense on the notes, approximately \$413,000 in expense relating to warrants issued to induce conversion of principal and \$30,100 in expense related to the amortization of the discount and embedded beneficial conversion feature. The decrease in interest expense is due to the fact that the beneficial conversion feature and discount on the notes payable became fully amortized in January 2009 and the convertible debt has been reduced by \$2,625,000 in 2009.

For the year ended December 31, 2008, interest expense was comprised of amounts related to convertible notes issued from December 2007 to January 2008, including approximately \$197,000 of stated interest expense on the notes, loan cost amortization of approximately \$102,000, and approximately \$2,914,000 for the amortization of the discount and embedded beneficial conversion feature. During the year ended December 31, 2008, the Company also recognized approximately \$65,000 of interest expense from the induced conversion of notes payable to the Robb Charitable Trust.

NET LOSS: Net loss for the year ended December 31, 2009 decreased by \$2,594,064 to \$3,385,382 from \$5,979,446 for the year ended December 31, 2008. The decrease in net loss is primarily due to the increases in sale, and decreases in cost of sales and interest expense, which was partially offset by increases in selling, general and administrative expenses.

LIQUIDITY AND CAPITAL RESOURCES

The Company finances its operations primarily through sales of its ConsERV products, sales of its common stock, the issuance of convertible promissory notes, unsecured promissory notes and license agreements.

Our historical revenues have not been sufficient to sustain our operations. We have not achieved profitability in any year since inception and we expect to continue to incur net losses and negative cash flow from operations until we can produce sufficient revenues to cover our costs, which are not expected for several years. Furthermore, even if we achieve our goal of selling a greater number of ConsERV units, we anticipate that we will continue to incur losses until we can cost-effectively produce and sell our products to a wider market. Our profitability will require the successful commercialization of our ConsERV products and any future products we develop. No assurances can be given when this will occur.

During the year ended December 31, 2009 eighteen holders converted their Convertible Notes, having an aggregate outstanding principal balance of \$2,350,000 plus accrued interest of \$361,600, into 13,553,822 shares of common stock. Some of the holders converted during periods in which we were offering an additional warrant as an inducement to convert. In accordance with the offers we issued additional warrants to purchase 1,665,000 shares of common stock, exercisable immediately at \$0.25 per share and valued at \$126,367, and 575,000 warrants, exercisable immediately at \$0.75 per share valued at \$286,641 which was recorded as interest expense during the twelve months ended December 31, 2009.

55

Table of Contents

During 2009, four investors holding Convertible Notes with an aggregate outstanding principal balance of approximately \$450,000 at December 31, 2008 notified the Company that they were asserting their rights to receive payment of the principal and interest pursuant to the terms of the Convertible Notes. In June of 2009, three of these investors, holding an aggregate principal note balance of \$250,000, entered into a confession of judgment with the Company. Under that agreement, the three investors had the right, should the Company fail to pay all principal and interest due pursuant to their Convertible Notes on or before September 11, 2009, to file the confession of judgment with the court and seek to secure a judgment against the Company in the amount of all principal and interest due under their Convertible Notes together with the reasonable cost and expense of collection. All accrued interest and principal related to the three Convertible Notes, \$289,803 in the aggregate, was paid in full by the Company on or before September 11, 2009. In July 2009, the fourth investor, holding a Convertible Note in the principal amount of \$200,000, agreed to extend said note to September 2009. In November 2009, this investor and the Company modified the Convertible note to extend the maturity date of said note to July 2010, pay the principal amount due in eight monthly installments commencing December of 2009, end the accrual of interest as of November 20, 2009 and convert the \$34,861 in interest due under the Convertible Note as of November 20, 2009 into 170,137 shares of the Company as common stock. As of March 31, 2010 the outstanding principal balance of said loan was \$100,000. Subsequent to March 31, 2010, the Company paid \$25,000 of the principal amount outstanding on this amended note and the investor converted his remaining balance of \$75,000 into 375,000 shares of common stock based on a per share conversion rate of \$0.20.

As of March 31, 2010, \$250,000 of principal on the Convertible Notes was outstanding, of which \$100,000 has been extended to July of 2010 with the remaining notes currently in default and due and payable in full. Subsequent to March 31, 2010, the Company paid \$25,000 of the principal amount outstanding on the extended note and the investor converted the remaining balance of \$75,000 into 375,000 shares of common stock at a per share conversion price of \$0.20.

We cannot currently pay our outstanding promissory notes, including the Convertible Notes and the \$1,870,000 in unsecured promissory notes due between June and August of 2010, without severely impacting our ability to continue operations and the Company may not be able to secure additional financing to repay the notes on acceptable terms, if at all. As an alternative, management may attempt to renegotiate the repayment terms of the notes and seek extension of the maturity dates. If we are able to renegotiate the terms there is no guarantee that the terms would be favorable to the Company. Unfavorable terms, in either a financing transaction or debt renegotiation, would adversely impact our business, financial condition and/or results of operations. In the event (i) we are unable to secure additional financing sufficient to pay these notes, (ii) the Convertible Notes are not converted into shares of our common stock pursuant to their terms, (iii) we are unable to renegotiate the terms of the notes, or (iv) we are unable to generate sufficient funds from operations to repay these loans, the Convertible Note holders will have the option to foreclose on our patents and patent applications securing the Convertible Notes which may result in the failure of our business and, subject to the terms of the notes, the unsecured note holders shall have the option to seek a judgment against our unsecured assets which may have a detrimental impact on our business.

In July 2009, we secured a loan of \$300,000 from an investor. Pursuant to the terms of the note, we are to pay the note holder simple interest at the rate of seven percent per annum commencing on July 17, 2009 with all interest and principal due there under payable in cash on or before January 16, 2011.

In December 2009, we secured a loan in the principal amount of \$1,000,000 from an investor. Pursuant to the terms of the note, we are to pay the holder simple interest at the rate of ten percent per annum commencing on the date of issuance with all interest and principal due and payable in cash on or before June 17, 2010.

56

Table of Contents

The Company secured loans from two investors in the principal amounts of \$250,000 and \$620,000. The loan amounts were received by the Company on December 31, 2009 and February 18, 2010, respectively. Pursuant to the terms of the notes, the Company is to pay the holders simple interest at the rate of ten percent per annum commencing on the date of issuance with all interest and principal due and payable in cash on or before June 30, 2010 and August 10, 2010.

Any future financing may result in substantial dilution to existing shareholders, and future debt financing, if available, may include restrictive covenants or may require us to grant a lender a security interest in any of our assets not already subject to an existing security interest. To the extent that we attempt to raise additional funds through third party collaborations and/or licensing arrangements, we may be required to relinquish some rights to our technologies or products currently in various stages of development, or grant licenses or other rights on terms that are not favorable to us. Any failure by us to timely procure additional financing or investment adequate to fund our ongoing operations, including planned product development initiatives, clinical studies and commercialization efforts, will have material adverse consequences on our financial condition, results of operations and cash flows.

We will be dependent upon our existing cash of \$1,044,971 at March 31, 2010, product sales and additional debt and equity issuances to finance our operations through the next 12 months. We need to raise additional capital of approximately \$13 million to \$18 million, net of costs, during the next eighteen months, the proceeds of which will be used to pay down existing debt, secure new patents for innovative applications of our core technology, purchase equipment, and fund our working capital requirements through December 2011. We currently have no commitments for any such funds. If we are unable to raise the funds we may delay development plans and reduce expenditures wherever possible.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. For the three months ended March 31, 2010, the Company incurred a net loss of \$520,038 and has incurred significant losses since inception. As of March 31, 2010, the Company has an accumulated deficit of \$32,682,189, negative working capital of \$2,972,405 and a stockholders deficit of \$3,058,161. The Company used \$576,116 and \$196,110 of cash from operations during the three months ended March 31, 2010 and 2009, respectively, which was funded by proceeds from debt and equity financings. There is no assurance that such financing will be available in the future. In view of these matters, there is substantial doubt that the Company will continue as a going concern. The Company is currently pursuing the following sources of short and long-term working capital:

- 1. We are currently holding preliminary discussions with parties who are interested in licensing, purchasing the rights to, or establishing a joint venture to commercialize, certain applications of our technology.
- 2. We are seeking growth capital from certain strategic and/or government (grant) related sources. In addition to said capital, these sources may, pursuant to any agreements that may be developed in conjunction with such funding, assist in the product definition and design, roll-out, and channel penetration of our products. As part of this step we will attempt to take advantage of key programs associated with the recently enacted American Recovery and Reinvestment Act of 2009.

The Company s ability to continue as a going concern is highly dependent on our ability to obtain additional sources of cash flow sufficient to fund our working capital requirements. However, there can be no assurance that the Company will be successful in its efforts to secure such cash flow. Any failure by us to timely procure additional financing or investment adequate to fund our ongoing operations, including planned product development initiatives and commercialization efforts, will have material adverse consequences on our financial condition, results of operations and cash flows.

The financial statements of the Company do not include any adjustments relating to the recoverability and classification of recorded assets, or the amounts and classifications of liabilities that might be necessary should the Company be unable to continue as a going concern.

57

Statement of Cash Flows

As of and for the Quarter Ended March 31, 2010

The following table sets forth, for the periods indicated, selected cash flow information:

	Three Months Ended March 31,		
	2010	2009	
Cash flows used in operating activities	\$ (576,116)	\$ (196,110)	
Cash flows used in investing activities	(9,541)		
Cash flows provided by financing activities	545,000	181,000	
Net increase in cash and cash equivalents	\$ (40.657)	\$ (15,110)	

During the three months ended March 31, 2010, cash used in operating activities consisted of our net loss of \$576,116 less non-cash adjustments such as issuance of stock compensation and stock and warrants issued for services totaling \$132,469 and also adjusted for cash used by other changes in operating assets and liabilities which net to a decrease in cash of approximately \$191,000. Financing activities provided \$545,000 from the issuance of notes payable, net of repayments.

During the three months ended March 31, 2009, financing activities provided \$181,000 of cash which was comprised of net proceeds from the issuance common stock of \$176,000 and \$5,000 proceeds from the issuance of notes payable.

As of and for the Fiscal Year Ended December 31, 2009

Cash and cash equivalents as of December 31, 2009 was \$1,085,628 compared to \$26,867 as of December 31, 2008. Cash is primarily used to fund our working capital requirements.

As of December 31, 2009, the Company had an increase in working capital of \$1,536,639, resulting in a working capital deficit of \$2,265,370 compared to \$3,802,009 of working capital deficit as of December 31, 2008. During the year ended 2009, we used approximately \$818,000 of cash to fund our operations, approximately \$513,000 to repay debt, and approximately \$41,000 to purchase patent licenses and equipment. These uses of cash are partially offset by approximately \$643,000 of proceeds received during 2009 in connection with the sale of common stock and \$1,787,900 of proceeds from the issuance of debt.

Net cash used in operating activities was approximately \$818,000 in the year ended 2009 compared to approximately \$1,825,000 for the same period in 2008. During the year ended December 31, 2009, we used additional cash to fund operating losses of approximately \$3,385,000 and working capital requirements of approximately \$1,116,000 compared to the same period in 2008.

Net cash used in investing activities was approximately \$41,000 for the year ended December 31, 2009 compared to approximately \$19,000 for the same period in 2008. During the year ended December 31, 2009, we used additional cash to purchase patent licenses and equipment.

Net cash provided by financing activities was approximately \$1,918,000 for the year ended December 31, 2009 compared to approximately \$1,366,000 for the same period in 2008. During the year ended December 31, 2009, we received net proceeds of \$1,787,900 from the issuance of debt and \$643,000 of proceeds from the sale of common stock.

ECONOMY AND INFLATION

Except as disclosed herein, we have not experienced any significant cancellation of orders due to the downturn in the economy and only a small number of customers requested delays in delivery or production of orders in process. Our management believes that inflation has not had a material effect on our results of operations

Our management believes that inflation has not had a material effect on our results of operations

CONTRACTUAL OBLIGATIONS

As of May 10, 2010, we have contractual obligations of \$2,235,113as indicated below:

		Less than				
Contractual Obligations	Total	1 Year	ear 1-3 Years		3-5 Years	
Long term debt	\$ 2,170,000	\$ 2,170,000	\$	0	\$	0
Purchase Obligations	65,113	65,113	\$	0	\$	0
Total	\$ 2,235,113	\$ 2,235,113	\$	0	\$	0

OFF-BALANCE SHEET ARRANGEMENTS

We do not have any off balance sheet arrangements that are reasonably likely to have a current or future effect on our financial condition, revenues, results of operations, liquidity or capital expenditures.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The preparation of the accompanying financial statements and related disclosures in conformity with U.S. GAAP requires us to make judgments, assumptions and estimates that affect the amounts reported in the accompanying financial statements and the accompanying notes. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. When making these estimates and assumptions, we consider our historical experience, our knowledge of economic and market factors and various other factors that we believe to be reasonable under the circumstances. Actual results could differ from these estimates. The following critical accounting policies are significantly affected by judgments, assumptions and estimates used in the preparation of the financial statements:

The significant accounting policies followed are:

Revenue Recognition

Generally, the Company recognizes revenue for its products upon shipment to customers, provided no significant obligations remain and collection is probable. Our ConsERV product typically carries a warranty of two years for all parts contained therein with the exception of the energy recovery ventilator core which typically carries a 10 year warranty. The warranty includes replacement of defective parts. Warranty costs have been immaterial to our overall operations in the past and therefore, the Company has not recorded an accrual for any estimated warranty expenses. Revenue derived from the sale of licenses is deferred and recognized as revenue on a straight-line basis over the life of the license, or until the license arrangement is terminated.

Table of Contents

Impairment of Long-Lived and Intangible Assets

Long-lived and intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the book value of the asset may not be recoverable. The Company periodically evaluates whether events and circumstances have occurred that indicate possible impairment. When impairment indicators exist, the Company uses market quotes, if available or an estimate of the future undiscounted net cash flows of the related asset or asset group over the remaining life in measuring whether or not the asset values are recoverable.

Stock-Based Compensation

The Company recognizes all share-based payments to employees, including grants of employee stock options, as compensation expense in the financial statements based on their fair values. That expense is recognized over the period during which an employee is required to provide services in exchange for the award, known as the requisite service period (usually the vesting period).

The value of each grant is estimated at the grant date using the Black-Scholes option model.

The basis for the Black-Scholes assumptions are as follows: the dividend rate is based upon the Company s history of dividends; the risk-free interest rate for periods within the expected term of the option is based on the U.S. Treasury yield curve in effect at the time of grant; the expected term was calculated based on the Company s historical pattern of options granted and the period of time they are expected to be outstanding; and expected volatility was calculated by review of a peer company s historical stock prices.

Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates.

Taxes

Income taxes are provided for the tax effects of transactions reported in the financial statements and consist of taxes currently due plus deferred taxes resulting from temporary differences. Such temporary differences result from differences in the carrying value of assets and liabilities for tax and financial reporting purposes. The deferred tax assets and liabilities represent the future tax consequences of those differences, which will either be taxable or deductible when the assets and liabilities are recovered or settled. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

60

RECENT ACCOUNTING PRONOUNCEMENTS

For a description of recent accounting standards, including the expected dates of adoption and estimated effects, if any, on our financial statements, see Note 3: Significant Accounting Polices: Recent Accounting Standards included in the March 31, 2010 financial statements in this prospectus.

MATERIAL TRANSACTIONS

On April 8, 2010, the Company entered into a technical and sales agreement with CAST Systems Control Technology Co., Ltd. (CAST) and Genertec America, Inc. (Genertec) with a value of up to approximately \$48 million over a twelve month period. Under the terms of the Agreement, the Company will supply to CAST, through Genertec, key system components of its nanotechnology clean water process. The Agreement is conditioned upon the Company obtaining a letter of credit from GTA in the amount as agreed to by the parties on or before April 13, 2010. As of the date of this filing, the Company has received the required letter of credit from Genertec. This Agreement, the terms of which are disclosed in the Company s Current Report on Form 8-K, filed on April 9, 2010, is made pursuant to and in support of the \$200 million distribution agreement made between the Company and Genertec on August 21, 2009, granting Genertec the exclusive right to obtain, distribute and market the Company s nanotechnology-based membrane and related products in China, including mainland China, Hong Kong, Macau and Taiwan, the terms of which are disclosed in the Company s Current Report on Form 8-K, filed August 27, 2009.

MARKET FOR COMMON EQUITY

Our common stock was traded from November 15, 2005 to November 23, 2008 on the Pink Sheets and from November 24, 2008 to present on the Over the Counter Bulletin Board under the trading symbol DLYT. The following table sets forth the range of reported high and low sales prices of our common stock during the periods indicated. Such quotations reflect prices between dealers in securities and do not include any retail mark-up, mark-down or commission, and may not necessarily represent actual transactions. Trading in our common stock should not be deemed to constitute an established trading market.

	High	Low
For the year ending December 31, 2010:		
First Quarter	\$ 0.44	\$ 0.18
Second Quarter (to May 15, 2010)	\$ 0.74	\$ 0.18
For the year ending December 31, 2009:		
First Quarter	\$ 0.20	\$ 0.08
Second Quarter	\$ 0.19	\$ 0.13
Third Quarter	\$ 2.60	\$ 0.10
Fourth Quarter	\$ 0.95	\$ 0.22
For the year ending December 31, 2008:		
First Quarter	\$ 0.51	\$ 0.15
Second Quarter	\$ 0.51	\$ 0.24
Third Quarter	\$ 0.45	\$ 0.16
Fourth Quarter	\$ 0.20	\$ 0.07

Transfer Agent

Our transfer agent is Clear Trust Transfer located at 17961 Hunting Bow Circle, Suite 102, Lutz, Florida 33558, telephone (813) 235-4490.

61

Holders

As of May 10, 2010 there were approximately 186 shareholders of record of our common stock.

Dividend Policy

We have not declared or paid any dividends and do not intend to pay any dividends in the foreseeable future to the holders of our common stock. We intend to retain future earnings, if any, for use in the operation and expansion of our business. Any future decision to pay dividends on common stock will be at the discretion of our board of directors and will depend on our financial condition, results of operations, capital requirements and other factors our board of directors may deem relevant.

Equity Compensation Plan Information

The following table sets forth information regarding our 2000 Incentive Compensation Plan (the 2000 Plan) and the 2009 Long-Term Incentive Plan (the 2009 Plan) under which our securities are authorized for issuance as of March 31, 2010

			(c)
			Number of
			Securities
			Remaining
		(b)	Available for
	(a)	Weighted	Future Issuance
	Number of Securities	Average Exercise	Under Equity
	to	Price of	Compensation
	be Issued Upon	Outstanding	Plans
	Exercise	Options,	Excluding
	of Outstanding	Warrants	Securities
	Options,	and	Reflected in
Plan Category	Warrants and Rights	Rights	Column (a)
Equity compensation plans approved by security holders:	12,498,882	\$ 0.24	14,800,000

In June 2000 and November 2009, our board of directors adopted, and our shareholders approved, the 2000 Plan and 2009 Plan; respectively (together the Plans). The Plans provide for the grant of stock options, incentive stock options, stock appreciation rights, restricted stock, restricted stock units and bonus stock and other awards to eligible persons, as defined in said plans, including, but not limited to, officers, directors and employees of the Company. Certain awards under the Plans may be subject to performance conditions.

Number of Shares of Common Stock Available Under the Plans. As of December 31, 2007, our board of directors approved and made available 6,093,882 shares of common stock to be issued pursuant to the 2000 Plan. Subsequently, our board of directors approved and made available an additional 5,000,000 shares of our common stock for issuance under the 2000 Plan. The 2000 Plan permits grants of options to purchase common shares authorized and approved by the Company s Board of Directors and shareholders for issuance prior to the enactment of the 2000 Plan. On November 5, 2009, our board of directors approved and made available a total of 15,000,000 shares of common stock to be issued pursuant to the 2009 Plan.

62

Table of Contents

Administration of the Plans. The Plans are administered by a committee of two or more directors designated by the board of directors to administer the Plans (the Committee) or, in the absence of such Committee, by the board of directors. Currently, the Plans are administered by our board of directors. The board of directors has the authority to select the participants to whom awards under Plans will be granted, grant awards, determine the type, number and other terms and conditions of, and all other matters relating to, awards granted under the Plans and to prescribe the rules and regulations for the administration of the Plans. No option or stock appreciation rights granted under the Plans shall be exercisable, however, more than ten years after the date of the grant.

Exercise Price. The Plans require the Committee to grant qualified options with an exercise price per share not less than the fair market price of a share of common stock on the date of grant of the option.

<u>Transferability.</u> Awards granted under the Plans are generally not transferable by the optionee otherwise than by will or the laws of descent and distribution and generally exercisable during the lifetime of the optionee only by the optionee.

Change in Control. All awards granted under the 2000 Plan which were not previously exercisable and vested shall become fully exercisable and vested upon a change of control of the Company, which includes the consummation of a merger or consolidation of the Company with or into any other entity, sale of all or substantially all of our assets, replacement of a majority of our board of directors, acquisition by any person of securities representing 20% or more of the voting power of our then outstanding securities (other than securities issued by us) or any other event which the board of directors determines would materially alter our structure or ownership.

Options Granted to Non-Employee Directors. Non-employee directors of the Company are usually granted options each year, which generally become exercisable upon the date of grant, and generally expire on the earlier of ten years from the date of grant or up to three years after the date that the optionee ceases to serve as a director.

Stand-Alone Grants

Our board of directors may grant common share purchase options or warrants to selected directors, officers, employees, consultants and advisors in payment of goods or services provided by such persons on a stand-alone basis outside of any of our Plans. The terms of these grants may be individually negotiated.

63

DESCRIPTION OF SECURITIES BEING REGISTERED

Authorized Capital

We are authorized to issue shares of stock to be designated respectively common stock and preferred stock and collectively referred to herein as capital stock. The total number of shares of capital stock which we have the authority to issue are 210,000,000, consisting of 200,000,000 shares of common stock, par value \$0.01 per share, and 10,000,000 shares of preferred stock, par value \$0.01 per share.

Securities Being Registered Hereunder

Common Stock

We have approximately 29,636,717 shares of common stock issued and outstanding as of May 15, 2010. We also have 257,213 shares held in the Company's treasury. Each shareholder of our common stock is entitled to a pro rata share of cash distributions made to shareholders, including dividend payments. The holders of our common stock are entitled to one vote for each share of record on all matters to be voted on by shareholders. There is no cumulative voting with respect to the election of our directors or any other matter. The holders of our common stock are entitled to receive dividends when, as and if declared by our board of directors from funds legally available therefore. Cash dividends are at the sole discretion of our board of directors. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share ratably in all assets remaining available for distribution to them after payment of our liabilities and after provision has been made for each class of stock, if any, having any preference in relation to our common stock. Holders of shares of our common stock have no conversion, preemptive or other subscription rights, and there are no redemption provisions applicable to our common stock.

9% Secured Convertible Note

Of the 12,233,494 shares of common stock being registered, 307,391 are issuable upon the conversion by Selling Shareholders of 9% secured convertible notes issued in the Financing transaction. The notes have a twelve month term and earn 9% interest during the term. The notes are secured by certain of the Company s patents with first priority. There are no other liens against these assets. The notes may be converted at the option of the holder any time prior to the maturity date at a conversion price of \$0.20 per share. The notes include standard default provisions and price protection with regards to issuance by the Company of common stock and common stock equivalents. The Company is also not permitted to consolidate or merge with or into another entity so long as the notes are outstanding. The notes do not contain any forced conversion or redemption features.

Warrants

Of the 12,233,494 shares of common stock being registered, 10,848,677 shares are issuable upon exercise by Selling Shareholders of certain warrants.

The warrants issued in the Financing have a five-year term, cashless exercise provisions and anti-dilution protection. Each warrant holder has been granted the right to secure a set number of shares equal to the number of shares into which that holder s note issued in the Financing would have been convertible on the date of issuance. During the term each holder has, at full conversion or payoff prior to maturity, the right to exercise the warrant for all warrant shares. However, until pay-off prior to maturity or full conversion of the note each holder is limited to the extent to which such holder may exercise the warrant to the same percentage to which the holder has converted the note. The anti-dilution protection in the warrants includes protection for stock dividends or splits, reclassification or capital reorganization as well as protection with regards to additional issuances of common stock or common stock equivalents. The exercise price under the warrants is \$0.25 per share of common stock. The warrants do not contain any forced exercise or redemption features.

Warrants issued to Legend Merchant Group, Inc. (Legend) and Richardson & Patel LLP (Richardson) are substantially similar to the cashless warrants issued in the Financing, with the exception that the amount that may be exercised is tied to the percentage converted notes bears to the total of all notes issued. Upon payment or conversion in full of all notes the warrant may be exercised as to the total number of set shares underlying the warrant. All of the warrants issued to Legend have an exercise price of \$0.25. Of the warrants issued to Richardson 200,000 have an exercise price of \$0.25 and the remaining 192,308 have an exercise price of \$0.26.

The warrants issued in the Additional Financing have a five-year term and anti-dilution protection for stock dividends or splits, mergers, consolidation, reclassification, capital reorganization or a sale of substantially all of the Company s assets. The exercise price is \$0.55 per share of common stock and they do not provide for cashless exercise. These warrants are exercisable as follows: (a) one third of the total number of warrant shares on or after the six month anniversary of the issuance date, (b) an additional one third of the total number of warrant shares on or

after the one year anniversary of the issuance date, and (c) in full commencing on or after the 18 month anniversary of the issuance date. If the per share market value of the Company s common stock is \$1.50 per share or greater for ten consecutive trading days (subject to adjustment to reflect stock splits, stock dividends, recapitalizations and the like), the Company may require the holder to exercise the warrant and purchase all warrant shares ten business days of Company issuing notice to the holder or the warrant will automatically terminate. The warrants do not contain any redemption features.

Warrants issued to the Robb Charitable Trust are identical to warrants issued in the Additional Financing. Warrants issued in the Daily Financing are substantially similar to those issued in the Additional Financing but permit immediate exercise and contain no provision permitting the Company to compel exercise based on Company s stock price.

64

SELLING SHAREHOLDERS

The Selling Shareholders listed in the table below may use this prospectus for the resale of shares of common stock being registered hereunder, although no Selling Shareholder is obligated to sell any such shares. Of the 12,233,494 shares of common stock offered by this prospectus, 1,541,286 shares of common stock are outstanding as of May 10, 2010.

The first column of the table below lists the name of each Selling Shareholder. The second column lists the number of common shares beneficially owned by each Selling Shareholder as of May 10, 2010. The third column lists the number of common shares that may be resold under this prospectus. The fourth and fifth columns list the number of common shares owned and the percentage of common shares owned after the resale of the common shares registered under this prospectus. Except as noted in the table below, none of the Selling Shareholders have had any material relationship with us within the past three years. The total number of common shares outstanding as of May 10, 2010 was approximately 29,636,717.

Beneficial ownership is determined in accordance with the rules of the Securities and Exchange Commission, and includes voting and investment power with respect to our common stock. Common stock subject to convertible debentures, warrants or options that are currently convertible or exercisable or convertible or exercisable within 60 days after May 10, 2010, are deemed to be beneficially owned by the person holding those securities for the purpose of computing the percentage ownership of that person but are not treated as outstanding for the purpose of computing the percentage ownership of any other shareholder.

The inclusion of any securities in the following table does not constitute an admission of beneficial ownership by the persons named below. Except as indicated in the footnotes to the table, no Selling Shareholder has had any material relationship with us or our predecessors or affiliates during the last three years. We may amend or supplement this prospectus from time to time to update the disclosure set forth herein. Of the Selling Shareholders, Legend Merchant Group Inc. and Aegis Capital Corp. are broker-dealers and are underwriters of the shares they are offering. Pali Performance, LLC, Robert J. Eide, Steve Maurer, Hilary Bergman, and Matthew Waxelbaum are affiliates of a broker dealer and (1) purchased the shares in the ordinary course of business and, (2) at the time of the purchase of the securities to be resold, had no agreements or understandings, directly or indirectly, with any person to distribute the securities.

65

Selling Shareholder Table

	Number of Shares Beneficially		Number of Shares Beneficially	Percentage
	Owned	Number of Shares	Owned	Owned
Name	Before Offering	Being Offered	After Offering (1)	After Offering (2)
David Ehrenberg (3)	321,979	15,000	306,979	*
Harris K. Weston (4)	299,511	9,100	290,411	*
Howard Rubinstein (5)	41,735	2,500	39,235	*
Mark Smith (6)	145,823	8,750	137,073	*
Randolph Blum (7)	28,743	28,743		*
Sussman Sales Co, Inc. Profit Sharing Plan (8)	304,251	18,650	285,601	*
Michael M. Gostomski (9)	2,086,842	808,788	1,278,054	4.20%
Alan & Janet Leisen (10)	53,253	2,500	50,753	*
Charles B. Buchanan Trustee U/A DTD 5.12.1999 (11)	226,868	62,500	164,368	*
CounterPoint Ventures, L.L.C. (12)	1,324,126	249,750	1,074,376	3.60%
Teresina De Caravahlo (13)	47,135	2,994	44,141	*
Peter Farrand (14)	154,218	9,440	144,778	*
Robb Charitable Trust (15)	489,293	50,000	439,293	1.50%
William B. Newman (16)	565,130	250,000	315,130	1.10%
Andrew J. Maffey (17)	250,000	250,000		*
Andrew Mitchell (18)	847,140	375,000	472,140	1.60%
Bruce S. Mora (19)	557,391	557,391	,	*
E. Todd Tracey (20)	565,068	250,000	315,068	1.10%
Gemini Master Fund Ltd. (21)	501,975	250,000	251,975	*
Lawrence T. Jaffe (22)	564,329	250,000	314,329	1.10%
Louis M. Jaffe 2004 Intangible Asset Mgmt. TR U/A			,	
DTD 5/24/04 (23)	3,631,646	1,054,247	2,577,399	8.35%
Market Byte L.L.C. Defined Benefit & Trust (24)	500,000	500,000	2,577,577	*
Michael Frederick Stone (25)	1,375,000	1,000,000	375,000	1.20%
Michael J. McGrath (26)	1,130,260	500,000	630,260	2.10%
MSSRPS, LLC (27)	1,835,373	750,000	1,085,373	3.50%
Next Generation Investment LLC (28)	927,581	802,706	124,875	*
Platinum Montaur Life Sciences LLC (29)	3,324,740	1,000,000	3,153,518	9.90%
RBC Dain Custodian for Leonard Samuels IRA (30)	6,218,466	760,000	5,458,466	16.70%
Robert Melnick (31)	673,329	250,000	423,329	1.4%*
RP Capital LLC (32)	1,110,955	500,000	610,955	2.00%
Sharon Youcha (33)	564,945	250,000	314,945	1.10%
Howard Eisenberg (34)	281,795	269,295	12,500	*
Leah Kaplan Samuels and Leonard Samuels JTWROS	201,793	209,293	12,300	·
(35)	2,576,746	240,000	2,336,746	7.65%
Aegis Capital Corp. (36) **			2,330,740	7.03% *
Legend Merchant Group, Inc. (37) **	25,500	25,500		*
	288,083	288,083		*
Hilary Bergman (38) **	15,000	15,000		*
Matthew Waxelbaum (39) **	2,250	2,250		*
Pali Performance LLC (40) **	15,000	15,000		*
Steve Maurer (41) **	30,000	30,000		*
Robert J. Eide (42) **	25,500	25,500		
Richardson & Patel LLP (43)	392,308	392,308		*
Arthur M. and Elva R. Daily Trust GST Trust Dtd				
09/13/1982 FBO Carrie N. Daily, Sun Trust Bank,				
Trustee (44)	68,939	8,333	60,606	*
Arthur M. and Elva R. Daily Trust GST Trust Dtd				
09/13/1982 FBO Travis D. Bjork, Sun Trust Bank,				
Trustee (45)	68,939	8,333	60,606	*

Arthur M. and Elva R. Daily Trust GST Trust Dtd 09/13/1982 FBO Troy S. Daily, Sun Trust Bank, Trustee 68,939 60,606 8,333 Arthur M. Daily Family Trust Dated May 8, 1995, FBO Cleora Daily, Sun Trust Bank, Trustee (47) 12,500 12,500 90,909 Carrie Daily (48) 103,409 12,500 Cleora Daily (49) 58,555 12,500 46,055 James Daily (50) 206,818 25,000 181,818 James T. Daily Revocable Trust Dated 10/1/1975 (51) 90,909 103,409 12,500 Troy Daily (52) 103,409 12,500 90,909 TOTAL 35,114,222 12,223,494 23,709,506(29)

- * Indicates less than one percent.
- ** Denotes broker-dealer or affiliate of a broker-dealer.
- (1) Assumes that all shares offered hereby will be resold by the selling security holders after this offering.
- (2) Percentage based on 29,636,717 shares of common stock outstanding as of May 10, 2010.
- (3) Includes 15,000 common shares issuable upon exercise of certain warrants issued in connection with the conversion of the notes issued in the Additional Financing. David Ehrenberg is the brother of the Company s Chief Technology Officer, Scott Ehrenberg.
- (4) Includes 9,100 common shares issuable upon exercise of certain warrants issued in connection with the conversion of the notes issued in the Additional Financing and 50,000 shares issuable upon exercise of a certain warrant issued in connection with the purchase of stock on March 9, 2009.
- (5) Includes 2,500 common shares issuable upon exercise of certain warrants issued in connection with the conversion of notes issued in the Additional Financing.
- (6) Includes 8,750 common shares issuable upon exercise of certain warrants issued in connection with the conversion of notes issued in the Additional Financing. Mr. Smith was an independent sales representative for the ConsERV TM line.
- (7) Includes 28,743 common shares issuable upon exercise of certain warrants issued in connection with the conversion of notes issued in the Additional Financing.

(8)