

DAIS ANALYTIC CORP  
Form 10-K  
March 30, 2012

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

FORM 10-K

(Mark One)

ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934

For the Fiscal Year Ended December 31, 2011

TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 000-53554

DAIS ANALYTIC CORPORATION  
(Exact name of registrant as specified in its charter)

New York  
(State or Other Jurisdiction of  
Incorporation or Organization)

14-1760865  
(I.R.S. Employer  
Identification No.)

11552 Prosperous Drive  
Odessa, Florida  
(Address of Principal Executive  
Offices)

33556  
(Zip Code)

Registrant's telephone number, including area code: (727) 375-8484

Securities registered pursuant to Section 12(b) of the Act:  
None

Securities registered pursuant to Section 12 (g) of the Act:  
Common Stock, par value \$0.01 per share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  
Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

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Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (Section 232.405) during the preceding 12 months. Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller 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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>

(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act): Yes  No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately \$10,088,693 as of the last business day of the registrant's most recently completed second fiscal quarter, based upon the closing sale price on the OTC:BB reported for such date. Shares of common stock held by each officer and director and by each person who owns 10% or more of the outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 30, 2012, the Registrant had 37,517,064 outstanding shares of its common stock, \$0.01 par value.

Documents incorporated by reference: none

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## DAIS ANALYTIC CORPORATION

## FORM 10-K

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PART I

INTRODUCTORY NOTE

FORWARD-LOOKING STATEMENTS

Information contained or incorporated by reference in this Annual Report may include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. This information may involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements to be materially different from the future results, performance or achievements expressed or implied by any forward-looking statements. Forward-looking statements, which involve assumptions and describe our future plans, strategies and expectations, are generally identifiable by use of the words “may,” “should,” “expect,” “anticipate,” “estimate,” “believe,” “intend” or “project” or the negative of these words or other on these words or comparable terminology.

This Annual Report on Form 10-K contains forward-looking statements, including statements regarding, among other things:

- our ability to continue as a going concern;
- 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 do business overseas;
- our ability to compete with current and future competitors;
- our short operating history;
- our ability to obtain additional financing;
- general economic and business conditions;
- 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.

These statements may be found under “Management’s Discussion and Analysis” and “Description of Business,” as well as in other sections of this Annual Report generally. 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 Annual Report generally. In light of these risks and uncertainties, there can be no assurance that the forward-looking statements contained in this Annual Report 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.

#### Third Party Data

This Form 10K also contains estimates and other information concerning our industry, including market size and growth rates, which are based on industry publications, surveys and forecasts, including those generated by us. This information involves a number of assumptions and limitations, and you are cautioned not to give undue weight to these estimates. Although we believe the information in these industry publications, surveys and forecasts is reliable, we have not independently verified the accuracy or completeness of the information. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in “Risk Factors”.

## ITEM 1. BUSINESS

Dais Analytic Corporation is a nano-structure polymer technology materials company that 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 and lowering emissions for most forms of Heating, Ventilation and Air Conditioning (HVAC) equipment. We are developing other nano-structure polymer technology applications 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 that may be capable of greater energy density and power per pound than traditional capacitors or batteries.

### Formation 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.

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 have commercialized the ConsERV™ product. ConsERV™ is an HVAC energy conservation product which should, according to various tests, save an average of up to 30% on HVAC ventilation air operating costs, lower CO2 emissions 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 heat exchanger core. The nano-technology heat exchanger 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 2012 with a growing emphasis on moving components of 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.

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.<sup>1</sup> 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.

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

- Achieving continued engineering or technological improvements in key materials to lower our ‘per unit’ cost structure.
- Engineering of additional sizes and add-on components (such as coils, heaters, dampers, new fan options and controls) to ConsERV systems to meet market demands
- Development of new core designs to meet broad spectrum of performance needs
- Continuing to implement ‘Lean Manufacturing’ techniques for in-house assembly processes as well as monitoring existing outsourced manufacturing and assembly relationships that lower our ‘per unit’ cost structure.
- Securing additional depth in the sales channels including adding more independent sales representatives, supplying 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.
- Access to sufficient working capital in a timely manner for the necessary steps outlined above to continue without interruption.

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, only small revenues have been generated from these non-ConsERV™ related applications.

- 1 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.

These product applications and activities include:

#### NanoAir™

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 stage of prototype development. The Company received a grant of \$681,322 from the US Department of Energy’s Advanced Research Projects Agency – Energy (ARPA-E) in September of 2010, and grant of \$254,500 from Pasco County, Florida in December of 2010. Both grants are designed to assist us to get the NanoAir family of products into commercialization sooner.

#### NanoClear™

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 most other current methods. We have developed a series of functional demonstration units which highlight the basics of how this system works using the Company’s nano-structured materials to produce potable water from a number of types of contaminated water streams. The information accumulated from the demonstration units is being used as the basis for the product’s next planned inflexion point: the buildup of a 10m<sup>3</sup> (approximately 26,500 gallons of clean water per day) pilot plant projected to be set up at a local County waste water treatment facility. The NanoClear product is currently in beta stage where it is to undergo further testing and scaling.

## NanoCap™

Ultra-capacitor: Based on initial material tests conducted by two third parties, 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.

Detailed information including development stage and estimated funding and time to market follows:

Application	Current Stage	Estimated Funding Required Commercialize	Estimated Time to Market (post funding)
Energy Recovery Ventilation(ConsERV) – An energy efficient process that exchanges heat and humidity between incoming and outgoing airstreams to increase fresh air within commercial and residential facilities	Varied - Additional components to meet market demand are necessary	\$1.5 Million	Commercial
Water Clean – up (NanoClear) – A process using a low temperature, low pressure approach to process brackish, salt, and waste water into potable water.	1st Stage Beta	\$3.8 Million	12 – 36 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.	1st Stage Beta	\$ 3.8 Million	12 – 36 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. Current activities are moving us closer to the optimization of materials.	\$ 500,000	—1

1. Estimated time to market (post funding) for the Ultracapacitor cannot be determined at this time because it is subject to completion of materials testing.

The Company has identified other potential products for our materials and processes as well as accumulating basic data to support the needed functionality and market differentiation of these products based on using our nano-technology based inventions. Such applications may 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 eight U.S. patents, four pending U.S. patent applications, and four Patent Cooperation Treaty (“PCT”) applications. National stage applications based on one of the PCT application have been filed in the U.S., China, Hong Kong 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, Hong Kong 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 selective for the ions or molecules they transfer. The 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 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 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 one vendor provides this to us. We have not sought additional vendors for this component. 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 on this 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 a vendor or us. 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 \$821,400 and \$338,000 on research and development during the years ended December 31, 2011 and 2010, respectively. During the year ended December 31, 2011 and 2010, the Company received approximately \$769,200 and \$99,000, respectively, to offset the cost of research and development expenses as it relates to a project that is funded by grants from Pasco County and the Department of Energy, American Economic Investment and Recovery Act.

## 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.



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 Greater China, including mainland 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 \$200 million. 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 Genertec 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. During 2011, Genertec expressed a desire to limit its participation in this endeavor as they find NanoAir™ and NanoClear™ to have engineering requirements they are not best suited to undertake. Subsequent to year end, we determined that collecting the outstanding receivable would be unlikely, therefore we have reversed the \$350,000 uncollected balance due to the Company from Genertec for the deposit in accounts receivable against deferred revenue in 2011. The parties are continuing to discuss modifications to or termination of this agreement and the CAST agreement (discussed below).

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. 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. For the year ended December 31, 2010, we have sold one unit under this agreement and recognized \$300,000 in revenue which has been billed and \$254,000 of which has been collected. Subsequent to year end, the Company has determined that the remainder of the receivable of \$56,356 is not likely to be collected and has been recorded as bad debt expense during the year ended December 31, 2011.

#### ConsERV™ – Sales and Marketing Strategies

We market our ConsERV™ product in North America principally through alliances with local independent manufacturer representatives. We currently have approximately 39 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 more than 70 to properly cover the North American commercial sales territory. We are also working to secure ongoing relationships with other 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. As interest has grown in ConsERV – and growth begins in NanoAir – we have decided to bring in an HVAC industry veteran to oversee the sales and marketing of ConsERV as well as to prepare to integrate the NanoAir applications as they come available for commercialization. In January 2010, the Company hired a new Vice President of Sales and Marketing who possesses 25 years of experience in the HVAC industry. Additionally this growth found our manufacturing efforts in need of bolstering. In June 2010 we hired a General Manager of Operations and Manufacturing (LEAN certified, 18 plus years of experience in growing running, and optimizing manufacturing organization to run the manufacturing effort, and to plan for the Company’s projected future manufacturing/assembly expansion.

#### 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 intend to bring industry seasoned executive talent into the Company at the appropriate time to influence the product’s feature set, and to then to establish and grow the market development and revenue generation of the NanoAir, and NanoClear product. We believe working with OEM’s who are industry leaders during development 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.

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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, Mitsubishi, LG
Ultracapacitor	Maxwell, Ioxus, B&D

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 eight U.S. patents, including patents covering the composition and structure of a family of ion conducting polymers and membranes and certain 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. 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 on or about 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 on or about 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 or about 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 or about 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 or about 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 or about 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 or about March 11, 2022.
8. Patent No. 7,990,679 – Nanoparticle Ultra Capacitor. This patent was issued on August 2, 2011 and expires on or about December 10, 2028.

We have provisional and patent applications in the following areas: Advanced Polymer Synthesis Processes, Anionic Exchange Electrolyte Polymers, Energy Storage Devices, Reversible Liquid to Air Enthalpy Core Applications and Construction, and Water Treatment and Desalination.



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

1. WO/2008/039779 – Enhanced HVAC System and Method
2. WO/2008/089484 – Multiphase selective Transport Through a Membrane
3. WO/2008/141179 – Molecule Sulphonation Process \*
4. WO/2009/002984 – Stable and Compatible Polymer Blends\*
5. WO2009/002984 – Novel Coblock Polymers and Methods for Making Same
6. WO2011/085186 - Anionic Exchange Electrolyte Polymer Membranes

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\* Patent applications jointly owned with Aegis Biosciences, LLC.

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Patents may or may not be granted on these applications. As noted above, some 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 entering into confidentiality agreements with our current and prospective strategic partners and employees.

#### Government Regulation

We do not believe the sale, installation or use of our current nano-structured products will be subject to any government regulation, other than perhaps adherence to building codes, and water safety regulations. We do not believe that the cost of complying with such codes and regulations, to the extent applicable to our products, will be prohibitive.

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 December 31, 2011, we employed 26 full-time employees and one part time employee in our Odessa, Florida facility. Of the 27 employees, we have 10 technicians, 2 product managers, a polymer chemist, a polymer engineer, 5 engineers, a Chief Technology Officer Development, a General Manager of Operations, 1 administrative assistant, 2 administrators, a Vice President of Sales, a Chief Financial Officer and a 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.

#### Recent Events

We filed a registration statement on Form S-1 with the SEC which was declared effective on March 13, 2012 (Registration No. 333-176894).

Principal Offices

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

## ITEM 1A. RISK FACTORS

You should carefully consider the risks described below. Our business, financial condition, results of operations or cash flows could be materially adversely affected by any of the events or circumstances described in these risks. The valuation for the Company could also decline due to any of these events or circumstances, 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 Annual Report. In assessing these risks, you should also refer to the other information contained in this Annual Report, including our financial statements and related notes.

### Risks Related to Our Business

Our independent registered public accounting firm has issued an unqualified opinion with an explanatory paragraph to the effect that there is substantial doubt about our ability to continue as a going concern.

Our independent registered public accounting firm has issued an unqualified opinion with an explanatory paragraph to the effect that there is substantial doubt about our ability to continue as a going concern. This unqualified opinion with an explanatory paragraph could have a material adverse effect on our business, financial condition, results of operations and cash flows. See “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources” and Footnotes to our financial statements for the fiscal year ended December 31, 2011, included elsewhere in this filing.

We have no committed sources of capital and do not know whether additional financing will be available when needed on terms that are acceptable, if at all. This going concern statement from our independent registered public accounting firm may discourage some investors from purchasing our stock or providing alternative capital financing. The failure to satisfy our capital requirements will adversely affect our business, financial condition, results of operations and prospects.

Unless we raise additional funds, either through the sale of our securities or one or more collaborative arrangements, we will not have sufficient funds to continue operations. Even if we take these actions, they may be insufficient, particularly if our costs are higher than projected or unforeseen expenses arise.

We intend to use proceeds from an offering of equity securities to repay our outstanding secured and convertible promissory note in the aggregate principal amount of \$1,500,000. However, if we do not complete any offering or the proceeds of any offering are insufficient to repay the note in full, we may be unable to convert, repay or secure an extension of this note when due. If we do not complete an offering of equity securities or the proceeds of an offering are insufficient to repay the note in full, and if we are unable to reach an agreement with our note holders regarding conversion, repayment and/or extension of the maturity date of this note, the note holders could foreclose on our assets, which ultimately could require us to curtail or cease our operations and could ultimately result in the loss of our patent and patent applications.

We intend to use proceeds from an offering of equity securities to repay secured and convertible promissory note in the aggregate principal amount of \$1,500,000. However, if we do not complete an offering or the proceeds of any offering are insufficient to repay the note in full, we may be unable to convert, repay or secure an extension of this note. Apart from proceeds from an offering of equity securities, we do not currently have, and do not expect to attain, adequate funds for repayment of the above-mentioned note from our current operations. Although we intend to continue to finance our operations, including the repayment of this note, primarily through private sales of debt and equity securities, we may not be able to secure additional financing to repay the note on acceptable terms, if at all.



Further, our outstanding secured \$1.5 million convertible promissory note contains limitations on the amount of debt we can incur prior to repayment of this note. Hence, absent completion of a contemplated offering, unless the note holder waives the debt limit we may not be able to avail ourselves of sufficient financing should it be available. Absent completion of a contemplated offering, if we are unable to secure additional financing to repay this note we will seek to renegotiate the note. However, there is no guarantee that the note holders will accept any offer we may make and may request additional concessions from us for any accommodation we do secure. Any terms we may be able to secure may not be favorable to us. Unfavorable terms would adversely impact our business, financial condition and/or results of operations. In the event we are unable to secure such additional financing sufficient to pay the note prior to its maturity date and we are not able to renegotiate the terms of the note, the note holders will have the option to either convert the principal and interest into shares of our common stock or foreclose on the note. If the noteholder forecloses on the note, we could suffer the loss of our patents and patent applications, which secure our payment obligations under this note. Our success depends, to a significant extent, on the technology that is incorporated in our product and the underlying patents and patent applications securing this note. which would have material adverse consequences on our business operations, financial condition, results of operations and cash flows and possibly result in the loss of all of our patent rights and the failure of our business.

If we do not repay or convert the principal and interest on the above mentioned \$1.5 million secured convertible note or \$1.0 million unsecured convertible note when due, existing shareholders could be substantially diluted.

If we do not repay the \$1,500,000 secured convertible note and \$1,000,000 unsecured convertible note currently outstanding when due the noteholder may opt to convert the notes into shares of our own common stock. Both notes provide for conversion of the principal and interest into shares of our common stock upon certain conditions. Conversion of either or both of the notes into equity would substantially dilute existing shareholders. We intend to continue to finance our operations, including the repayment of this note, primarily through sales of debt and equity securities. If a contemplated offering is not completed or the proceeds of an offering are not sufficient to repay this note in full, we will have to seek alternative financing and may not be able to secure such additional financing to repay the note on acceptable terms, if at all. If we are not able to repay this note there is no guarantee that the note holder will accept any offer we may make with regard to extending or converting this note. Further, the note holder may request additional concessions from us in return for extending or converting the note. Any re-negotiated terms we may be able to secure may not be favorable to us.

We have a history of operating losses, and we expect our operating losses to continue for the foreseeable future. If we fail to obtain additional financing we will be unable to execute our business plan and/or we may not be able to 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 developed a family of nano-structured polymers and processes and are now marketing our first product application, ConsERV™. We anticipate the other listed applications in this document may take at least 12 to 36 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 the identified applications to the market including research and development, design and testing, obtaining third party validations, identifying and securing collaborative partnerships, executing to enter into strategic relationships, or selling materials or value-added components. Furthermore, even if we achieve our projection of selling a greater number of ConsERV™ units in 2012, 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 \$37,973,166 as of December 31, 2011. 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.

We financed our operations since inception primarily through private sales of our common stock and preferred stock, issuance of convertible promissory notes; issuance of unsecured promissory notes, cash received in connection with exercise of warrants, license fees and the sale of certain fuel cell assets in 2002. As of December 31, 2011, we had \$1,581,040 in current assets.

Even if we are successful in raising additional equity capital to fund our operations, we will still be required to raise an additional substantial amount of capital in the future to fund our development initiatives and to achieve profitability. Our ability to fund our 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 cost required to gain third party approvals;
- cost of manufacturing, marketing and distributing our products;
- cost of filing, prosecuting and enforcing patents, patent applications, patent claims and trademarks;
- status of competing products; and
- market acceptance and third-party reimbursement of our products, if successfully developed.

There are no assurances that future funding will be available on favorable terms or at all. If additional funding is not obtained, we will need to reduce, defer or cancel development programs and planned initiatives, to the extent necessary. The failure to fund our capital requirements would have a material adverse effect on our business, financial condition and results of operations.

Failure to achieve and maintain effective internal controls in accordance with Section 404 of the Sarbanes-Oxley Act of 2002 could have a material adverse effect on our business and operating results. In addition, current and potential stockholders could lose confidence in our financial reporting, which could have a material adverse effect on our stock price.

Effective internal controls are necessary for us to provide reliable financial reports and effectively prevent fraud. If we cannot provide reliable financial reports or prevent fraud, our operating results could be harmed. We are required to document and test our internal control procedures in order to satisfy the requirements of Section 404 of the Sarbanes-Oxley Act, which requires annual management assessments of the effectiveness of our internal controls over financial reporting. During the course of our testing, we may identify deficiencies which we may not be able to remediate in time for compliance with the requirements of Section 404. In addition, if we fail to maintain the adequacy of our internal controls, as such standards are modified, supplemented or amended from time to time; we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal controls over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act. Failure to achieve and maintain an effective internal control environment could also cause investors to lose confidence in our reported financial information, which could have a material adverse effect on our stock price.

We cannot provide assurance as to the result of these efforts. We cannot be certain that any measures we take will ensure that we implement and maintain adequate internal controls in the future. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to meet our reporting obligations.

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.

Ethos Business Ventures, LLC is our landlord. Our CEO, Mr. Tangredi, is a principal owner of this entity. We note that under the terms of our lease agreement for our corporate office and production space, the lease may be terminated upon 30 days prior written notice by landlord and 90 days prior written notice by us. If this lease is terminated, or if for any reason Mr. Tangredi should become unable to continue to lease this space to us, 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 under a significant portion of our outstanding debt, 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 us having no access to our 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 us. 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 marked down turn in project starts over the past year and such trend may continue in 2012. 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. Various economic stimulus measures by the federal and state governments appear to have targeted energy products. ConsERV™ may qualify under said programs and we may potentially benefit. However, when and if we will experience any increase in sales or investment due to these programs is uncertain. As noted above, we intend to continue to finance operations, including the repayment of all outstanding debt, such as the secured convertible note and unsecured promissory note, primarily through private sales of debt and equity securities. In light of the recent economic downturn we 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.

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.

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 AMEX, if and when accepted, in response to the Sarbanes-Oxley Act. 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.

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.

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 growing volumes. Our ability to expand 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 with overflow being produced by outsourced firms, which limits our capital outlay. 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 36 months to develop and ready our other products for scaled production. 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 of our products by key market participants and end-users.

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;
- 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 materials unsuitable or impractical for commercialization. Testing and required development of the manufacturing process will require the expenditure of funds and 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 we have and expect to continue 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 ConsERV™ products and, while we have sold increasing quantities of our products on a yearly basis, even by adding staff experienced in the industry we continue to experience a learning curve 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 depend to a great extent on the efforts of others. We have and intend to continue to enter into additional strategic marketing and distribution agreements or other collaborative relationships to market and sell our nano-structured materials and value added products. However, we may not have identified or established appropriate relationships or be able to identify or establish appropriate relationships in the future. To the extent we have or will in the future enter into these types of relationships, we cannot assure you that the distributors or OEMs with which we have or will 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 have or 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 have or may establish in the future are exclusive, we may not be able to enter into other arrangements at a time when the distributor of OEM with which we have or will 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 in our target markets will adversely affect our commercialization schedule and, to the extent we have entered or enter into such relationships, the failure of our distributors and other third parties to assist us with the marketing and distribution of our products or to meet their monetary obligations to us may adversely affect our financial condition and results of operations.

We will face intense competition in the markets of our product applications for our nano-structured materials and value-added products. 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:

- increased costs associated with maintaining international marketing efforts;
- compliance with potential United States Department of Commerce export controls;
- increases in duty rates or other adverse changes in tax laws;
- trade protection measures and import or export licensing requirements;
- fluctuations in currency exchange rates;
- political and economic instability in foreign countries; and
- difficulties in securing and enforcing intellectual property rights, foreign (where filed and obtained) or domestic, and time and complexities of vetting and establishing relations with foreign resellers or licensees including but not limited to designing, validating and marketing a product geared specifically to a particular market segment.

We depend on our intellectual property and failure to protect it could enable competitors to market products with similar features that may reduce demand for our products.

We currently have eight United States patents, eleven patent applications and co-own six 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.

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.

Members of any scientific advisory board we had in the past or may have in the future have been or may be 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. In some instances such agreements provide that a third party will own any resulting intellectual property rights and for the grant of a license to us relating to those rights. We cannot assure you that the terms of any such 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;
- 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 and we may be liable for the related losses that may incur.

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 product applications. If the cost of warranty claims exceeds 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's perception 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 our personnel have non-compete agreements with us however such agreements 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 business. Any dissent among executive officers could impair our ability to make strategic decisions.

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

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 business 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.

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 36 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 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 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 become 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.

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.

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 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 an Investment in Our Securities

Our common stock has traded only sporadically and is expected to experience significant price and volume volatility in the future which substantially increases the risk of loss to persons owning our common stock.

We cannot predict the extent to which an active public market for our common stock will develop or be sustained. Our common stock has been quoted on OTC Market Group Inc.'s OTC Pink Market 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. Because of the limited trading market for our common stock, meaning that the number of persons interested in purchasing our common shares at or near bid prices at any given time may be relatively small or non-existent, and the possible price volatility given our status as a relatively small company with a small and thinly traded "float", you may not be able to sell your shares of common stock when you desire to do so. The inability to sell your shares in a rapidly declining market may substantially increase your risk of loss because of such illiquidity and because the price for our common stock may suffer greater declines because of its price volatility.

Volatility in our common share price may subject us to securities litigation.

The market for our common stock is characterized by significant price volatility, and we expect that our share price will continue to be volatile for the indefinite future. In the past, following periods of volatility in the stock market and the market price of a particular company's securities, securities 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.

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 March 27, 2012, our directors and officers, as a group, beneficially own approximately 31.9% of our outstanding common stock, including shares of common stock issuable upon exercise of warrants and options they hold. 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.

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

We cannot predict the extent to which an active public market for our common stock will develop or be sustained.

Our common stock is currently quoted on the OTC Bulletin Board 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 whether large or small;
- 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 that tend to have products or services in development or have yet to be tested in the market;
- material legal action.

Shareholders, including but not limited to those who hold shares as a result of the exercise or conversion of our 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. Price fluctuations in such shares are particularly volatile and subject to manipulation by market-makers, short-sellers and option traders.

Our common stock is currently and may in the future be subject to the “penny stock” regulations, which are likely to make it more difficult to sell.

The trading price of our common stock is currently below \$5 per share and therefore is currently subject to the “penny stock” rules. 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.

Shares eligible for future sale may adversely affect the market.

From time to time, certain of our stockholders may be eligible to sell all or some of their shares of common stock by means of ordinary brokerage transactions in the open market pursuant to Rule 144, promulgated under the Securities Act, subject to certain limitations. In general, pursuant to Rule 144, non-affiliate stockholders may sell freely after six months subject only to the current public information requirement (which disappears after one year). Affiliates may sell after six months subject to the Rule 144 volume, manner of sale (for equity securities), current public information and notice requirements. Of the 37,517,604 shares of our common stock outstanding as of March 27, 2012, approximately 28,689,278 shares are held by non-affiliates and are, or will be, freely tradable without restriction, and the remaining shares are held by our affiliates, as of such date. Any substantial sale of our common stock pursuant to Rule 144 or pursuant to any resale prospectus (including sales by investors of securities acquired in connection with the above mentioned effective registration statement) may have a material adverse effect on the market price of our common stock.

As of March 27, 2012, the Company has issued options, warrants and convertible securities which could result in the issuance of up to 54,870,985 shares of common stock from time to time, consisting of:

17,402,757 shares under options;  
26,390,778 shares under warrants; and  
11,077,450 shares under convertible securities.

Of these securities, a substantial number of the shares are obtainable at exercise and conversion prices at less than the price of the shares registered with the SEC on Form S-1 (Registration No. 333-176894), including by means of cashless exercise provisions. Accordingly, a substantial number of the shares issuable on exercise or conversion of the securities could be sold by the holders of these securities immediately or promptly after any sale of securities by the Company. If these shares are issued and available for sale or actually sold in the public market, the market could be adversely impacted and the market price depressed.

A large number of shares may be sold in the market following an equity offering, which may depress the market price of our common stock.

A large number of shares may be sold in the market following an equity offering which may depress the market price of our common stock. Sales of a substantial number of shares of our common stock in the public market following an equity offering could cause the market price of our common stock to decline. If there are more shares of common stock offered for sale than buyers are willing to purchase, then the market price of our common stock may decline to a market price at which buyers are willing to purchase the offered shares. We filed a registration statement on Form S-1 with the SEC which was declared effective on March 13, 2012 (Registration No. 333-176894). Assuming the sale of all shares registered pursuant to the effective registration statement and described in the prospectus, and the issuance of an estimated 2,568,785 shares of common stock to our CEO as partial payment of his accrued salary (as described in the prospectus), we will have approximately 80,086,389 shares of our common stock outstanding.

If we cannot raise sufficient funds from an offering of equity securities, we may not be able to achieve our business objectives.

We cannot assure you that we will be able to complete any offering of equity securities. If we are unable to complete the sale of equity securities, our ability to achieve our objectives could be adversely affected.

#### ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

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## ITEM 2. 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 (See Certain Relationships and Related Transactions, and Director Independence).

The lease for our corporate headquarters began on March 18, 2005. The lease term will terminate upon 30 days' written notice from landlord or 90 days written termination from us. The current monthly rent is \$3,800. 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.

## ITEM 3. 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.

## ITEM 4. REMOVED AND RESERVED



## PART II

## ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

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, 2011:		
First Quarter	\$ 0.50	\$ 0.27
Second Quarter	\$ 0.44	\$ 0.35
Third Quarter	\$ 0.60	\$ 0.22
Fourth Quarter	\$ 0.48	\$ 0.25
For the year ending December 31, 2010:		
First Quarter	\$ 0.44	\$ 0.20
Second Quarter	\$ 0.66	\$ 0.23
Third Quarter	\$ 0.40	\$ 0.27
Fourth Quarter	\$ 0.37	\$ 0.24

## Transfer Agent

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

## Holders

As of December 31, 2011 there were approximately 200 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 December 31, 2011:

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans Excluding Securities Reflected in Column (a)
Equity compensation plans approved by security holders:	17,402,757 \$	0.32	9,348,000

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.

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.

Transferability. 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.

#### RECENT SALES OF UNREGISTERED SECURITIES

We issued securities and reported these issuances, which were not registered under the Securities Act of 1933, as amended (the "Securities Act") in our Forms 10-Q for the quarters ended March 31, 2011, June 30, 2011, and September 30, 2011. For the quarter ended December 31, 2011, the Company did not issue any securities.

#### Recent Repurchases of Common Stock

There were no repurchases of our common stock during 2011.

#### ITEM 6. SELECTED FINANCIAL DATA

We are a smaller reporting company as defined by Rule 12b-2 of the Securities Exchange Act 1934, as amended, and are not required to provide the information under this item.

#### ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and related notes appearing elsewhere in this Report. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. The actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors, including, but not limited to, those which are not within our control.

#### 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. Our primary focus is to expand our marketing and sales of our ConsERV products. We also have new product applications in various stages of development. We believe that three of these product applications, including an advanced air conditioning system which is projected to be more energy efficient and have lower emissions compared to current HVAC equipment, a sea-water desalination product and an electrical energy storage device, may 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 2012 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 largely commercial HVAC markets with a small amount of revenue coming from residential sales to consumers and HVAC distributors. 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 near term 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 from HVAC equipment manufacturers and from distribution firms servicing the equipment needs of the HVAC installer community. We are also working to create license/supply relationships with HVAC or ERV OEMs preferably having a dominant presence in existing direct related sales channels.

## 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 being 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

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

	Year Ended December 31,	
	2011	2010
Revenues	\$ 3,504,054	\$ 3,342,468
Percentage of revenues	100.0%	100.0%
Cost of goods sold	\$ 2,563,250	\$ 2,290,041
Percentage of revenues	73.2%	68.5%
Research and development expenses, net grant revenue	\$ 52,275	\$ 238,182
Percentage of revenues	1.5%	7.1%
Selling, general and administrative expenses	\$ 2,992,156	\$ 2,693,092
Percentage of revenues	85.4%	80.6%
Amortization of discount on convertible note payable	\$ 1,141,445	\$ 0
Percentage of revenues	32.6%	0.0%
Interest expense	\$ 297,010	\$ 209,550
Percentage of revenues	8.5%	6.3%



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Change in fair value of warrant liability	\$ (1,204,483)	\$ (618,801)
Percentage of revenues	34.4%	18.5%
Net loss	\$ (2,335,204)	\$ (1,433,593)
Percentage of revenues	(66.6)%	(42.9)%

DECEMBER 31, 2011 COMPARED TO DECEMBER 31, 2010

REVENUES: Total revenues for the year ended December 31, 2011 and 2010 were \$3,504,054 and \$3,342,468 respectively, an increase of \$161,586, or 4.8%. The increase in revenues for 2011 is primarily attributable to an increase in the number of independent sales representatives and an overall increase in the number of sales of engineered ConsERV products in 2011. During the year ended December 31, 2011 and 2010, four and seven customers accounted for approximately 57% and 61% of revenues, respectively.

COST OF GOODS SOLD: Cost of goods sold was \$2,563,250 and \$2,290,041 or 73% and 69% of revenues for the years ended December 31, 2011 and 2010, respectively. The increase in 2011 of \$273,209 is due to the increase in sales and labor costs. Gross profit margin decreased to 27% in 2011 from 31% in 2010. The decrease in the gross profit margin was due to an increase in the cost of materials of approximately \$121,000 and an increase in the cost of labor by approximately \$106,000.

**SELLING, GENERAL AND ADMINISTRATIVE EXPENSES:** Selling, general and administrative expenses were \$2,992,156 for the year ended December 31, 2011, compared to \$2,693,092 for the year ended December 31, 2010, an increase of \$299,064 or 11%. This increase is primarily due to an increase in stock based compensation of approximately \$266,000 and a \$37,000 increase in travel expenses.

**AMORTIZATION OF DISCOUNT ON NOTE PAYABLE:** Amortization of discount on note payable was \$1,141,445 for the year ended December 31, 2011 compared to \$0 for the same period of 2010, an increase of \$1,141,445 or 100%. During the year ended December 31, 2011, the Company had recorded a discount and embedded beneficial conversion feature on a convertible note which was amortized over the life of the related note.

**INTEREST EXPENSE:** Interest expense was \$297,010 for the year ended December 31, 2011 compared to \$209,550 for the same period of 2010, an increase of \$87,460 or 41.7%. During the year ended December 31, 2011, the Company there was an additional \$1.5 of debt outstanding over the prior year resulting in additional interest expense.

**CHANGE IN FAIR VALUE OF WARRANT LIABILITY:** The change in the fair value of warrant liability increased by \$585,682 for the year ended December 31, 2011 to income of \$1,204,483 from \$618,801 in the prior year due to the change in the fair value of the underlying warrant liability based on the Black-Scholes option pricing model. See Note 11 in the Financial Statements for further explanation.

**NET LOSS:** Net loss for the year ended December 31, 2011 increased by \$901,611 to \$2,335,204 from \$1,433,593 for the year ended December 31, 2010. The increase in net loss is primarily due to the increases in general and administrative expenses and interest expense.

## 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.

We filed a registration statement on Form S-1 with the SEC which was declared effective on March 13, 2012 (Registration No. 333-176894). Pursuant to the registration statement, we registered 40 million shares of our common stock at a purchase price per share of \$0.26. The price of the shares registered will remain fixed while the registration statement is effective. Because there is no minimum offering amount required as a condition to closing in this offering, the proceeds to us, if any, are not presently determinable and may be substantially less than the total gross registered amount of \$10.4 million. As disclosed in our registration statement, we intend to use the proceeds for working capital, general corporate purposes and repayment of certain outstanding indebtedness.

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 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, 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.

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, \$289,600 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 Company's common stock. During the year ended December 31, 2010, \$75,000 of the outstanding balance was repaid and \$75,000 was converted into 325,000 shares of common stock.

As of December 31, 2010, \$50,000 of principal on the Convertible Notes was outstanding, in default and due and payable in full. On March 23, 2011 this note was paid in full by Company. As of the date of this filing all Convertible Notes issued under the Financing have been paid in full or converted.

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. On December 30, 2010, the investor elected to apply all of the proceeds due and payable under the Note, including all accrued interest, to purchase the Company's Common Stock. Pursuant to this transaction, the investor subscribed for and purchased 1,268,472 shares of Common Stock at a purchase price of \$0.26 per share resulting in an aggregate purchase price of \$329,803.

In December 2009, we secured a 10% 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. The note's maturity date was extended to April 30, 2011. On March 22, 2011, the Company entered into a Securities amendment and exchange agreement and an amended and restated convertible promissory note ("Convertible Note", collectively "Exchange Agreements") with this investor. Pursuant to the terms and subject to the conditions set forth in the Exchange Agreements, the Company and the Investor amended and restated the \$1,000,000 unsecured promissory note to, among other things, add a conversion option and extend the maturity date to March 22, 2012 (as amended and restated, the "2011 Convertible Note") which was subsequently extended to May 7, 2012. Subject to the terms and conditions of the 2011 Convertible Note, including limitations on conversion, the outstanding principal and interest under the 2011 Convertible Note will automatically convert into shares of the Company's common stock at the then-effective conversion price upon the closing of a qualified firm commitment underwritten public offering or may be voluntarily converted by the investor at anytime during the debt term. The initial conversion price is \$0.26 per

share. Any principal or interest which is not converted will be repaid by the Company at the earlier of a qualified offering, (as defined in the 2011 Convertible Note which is filed as an exhibit to the Form 8K filed with the Securities and Exchange Commission on March 28, 2011), or March 22, 2012, which was subsequently extended to May 7, 2012. Pursuant to and during the term of the 2011 Convertible Note, the Company will not issue or allow to exist any obligation for borrowed money, except for subordinate indebtedness in payment and priority, trade payables incurred in the ordinary course of business, purchase money secured indebtedness for equipment or inventory, unsecured and subordinate, or unsecured and subordinate working capital guarantees provided by, the Export Import Bank of the United States (the "EXIM Bank"), and indebtedness evidenced by the promissory note dated February 19, 2010 issued to RBC Capital Markets- Custodian of Leonard Samuels IRA (as amended) in the principal amount of \$620,000.

On March 22, 2011, in connection with the above Exchange Agreements, the Company entered into Amendment to 2007 Warrant and Amendment to 2009 Warrant to extend the terms of the Stock Purchase Warrant, dated on or about December 31, 2007, and Stock Purchase Warrant, dated on or about March 12, 2009, respectively, to March 22, 2016 and to provide for cashless exercise unless such warrant shares are registered for resale under a registration statement. In addition, on March 22, 2011, the Company issued a Stock Purchase Warrant to the Investor to purchase 1,000,000 shares of the Company's common stock at \$0.45 per share, exercisable commencing on the earliest of the consummation of the qualified offering (as defined in the Exchange Agreements), the date of conversion of the 2011 Convertible Note in full, or the date of conversion of the 2011 Convertible Note by the Investor in the greatest number of shares of the Company's common stock not to exceed 9.99% beneficial ownership of Company outstanding common stock and terminating on March 22, 2016.

Also, on March 22, 2011, the Company entered into a Note and Warrant Purchase Agreement, Secured Convertible Promissory Note and Patent Security Agreement ("Financing Agreements") with the Investor. Pursuant to the terms and subject to the conditions set forth in the Financing Agreements, the Investor has provided a bridge loan in the amount of \$1,500,000 ("Loan") to the Company, which will be secured in all patents, patent applications and similar protections of the Company and all rents, royalties, license fees and "accounts" with respect to such intellectual property assets. Pursuant to the Secured Convertible Promissory Note ("Secured Note"), interest in the amount of 10% per annum, calculated on a 365 day year, and the principal amount of \$1,500,000 will be paid on March 22, 2012, which was subsequently extended to May 7, 2012, but repayment is accelerated upon a qualified offering (as defined in the note). In the event of such qualified offering, and subject to the terms and conditions of the Secured Note, the outstanding principal and interest under the Secured Note will automatically convert, subject to the limitations on conversion described in the note, into shares of the Company's common stock at the then-effective conversion price upon the closing of such qualified offering. The initial conversion price is \$0.26 per share. Any principal or interest which is not converted will be repaid by the Company at the earlier of a qualified offering or March 22, 2012, which was subsequently extended to May 7, 2012. No cash fees were paid to any party to the transaction in exchange for lending the money. On March 22, 2011, in connection with the Financing Agreements, the Company issued a Stock Purchase Warrant to the Investor to purchase 3,000,000 shares of the Company's common stock at \$0.45 per share, exercisable until March 22, 2016.

Pursuant to and during the term of the Secured Note, the Company will not issue or permit to exist any obligation for borrowed money, except for trade payables incurred in the ordinary course of business, purchase money secured indebtedness for equipment or inventory, unsecured and subordinate indebtedness to, or unsecured and subordinate working capital guarantees provided by, the EXIM Bank, the promissory note dated February 19, 2010 issued to RBC Capital Markets- Custodian of Leonard Samuels IRA (as amended) in the principal amount of \$620,000, the Amended and Restated Convertible Promissory Note, dated March 22, 2011, issued to the Investor in the principal amount of \$1,000,000 and other unsecured indebtedness for borrowed money in an amount not to exceed \$750,000.

Pursuant to the Patent Security Agreement issued in connection with the Note and Warrant Purchase of March 22, 2011, the Company shall not, without the Investor's prior consent, sell, dispose or otherwise transfer all or any portion of the Collateral, except for license grants in the ordinary course of business. In addition, the Company will take all actions reasonably necessary to prosecute to allowance applications for patents and maintain all patents, and to seek to recover damages for infringement, misappropriation or dilution of the Collateral with limited exceptions.

In connection with such qualified offering, and subject to the terms and conditions of the Convertible Note, the Company will use reasonable efforts to include the Investor's securities in such offering. Pursuant to the terms and conditions of the Exchange Agreements, the Investor will not sell, offer to sell or otherwise transfer or dispose of (other than to affiliates) any securities of the Company held by it for a period of 180 days from the date of the final prospectus relating to such qualified offering, except for certain limited sales as more fully described in the Exchange Agreements.



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, respectively.

On December 27, 2010, one of the investors elected to apply all of the proceeds due and payable under the \$250,000 Note, including all accrued interest, to the purchase of our common stock. Pursuant to this transaction, the investors subscribed for and received 1,052,950 shares of common stock at a purchase price of \$0.26 per share resulting in an aggregate purchase price of \$273,767 (the principal amount and related accrued interest under the note).

The \$620,000 note's maturity date was extended to April 30, 2011 and during 2011 was converted into common stock.

At maturity, we may not be able to repay all or any of the outstanding notes when due without severely impacting our ability to continue operations and we may not be able to secure additional financing to repay the notes on acceptable terms, if at all. Should we be unable to repay or renegotiate the notes, as an alternative, management could attempt to renegotiate the repayment terms of the notes and seek extension of the maturity dates. There is no guarantee that, if we should need to renegotiate these notes, any negotiated terms we may be able to secure would be favorable to the Company. Unfavorable terms, in either a financing transaction or a debt renegotiation, could adversely impact our business, financial condition and/or results of operations. Should we be unable to repay the loan and unsuccessful in securing additional financing or renegotiating the, \$1.5 million dollar secured convertible note the holder would have the option to foreclose on all of our patents and patent applications which would likely result in the failure of our business.

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 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 \$262,740 at December 31, 2011, product sales and additional debt and equity issuances to finance our operations through the next 12 months. These operational expenses include debt service on a principal amount of \$2,500,624 in outstanding indebtedness, and other contractual obligations amounting to \$276,695 as of December 31, 2011. We must raise additional capital in the amount of approximately \$8.9 million, net of expenses, during the next eighteen months in order to pay down existing debt, secure new patents for innovative applications of our core technology, purchase equipment, and fund our working capital requirements in accordance with our existing plans through July 2013. This additional capital could be provided by a successful completion of an offering of equity securities. If we are unable to raise these funds, we may be required to delay our development plans, curtail our expenditures, and attempt to renegotiate the terms of our outstanding convertible notes.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. For the year ended December 31, 2011, the Company incurred a net loss of \$2,335,204 and has incurred significant losses since inception. As of December 31, 2011, the Company has an accumulated deficit of \$37,973,166, negative working capital of \$3,222,163 and a stockholders' deficit of \$4,900,910. The Company used \$1,329,734 and \$1,180,848 of cash from operations during 2011 and 2010, 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.
3. We filed a registration statement on Form S-1 with the SEC which was declared effective on March 13, 2012. Pursuant to the registration statement, we registered 40 million shares of our common stock at a price per share of \$0.26.

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.

#### Statements of Cash Flows

Cash and cash equivalents as of December 31, 2011 was \$262,740 compared to \$304,656 as of December 31, 2010. Cash is primarily used to fund our working capital requirements.

As of December 31, 2011, the Company had a decrease in working capital of \$360,675, resulting in a working capital deficit of \$3,222,163 compared to \$2,861,488 of working capital deficit as of December 31, 2010. During the year ended 2011, we used approximately \$1,329,700 of cash to fund our operations, \$50,000 to repay debt, and approximately \$108,000 to purchase property and equipment and patent costs. These uses of cash are partially offset by approximately \$1,500,000 of proceeds received during 2011 in connection with the issuance of debt.



Net cash used in operating activities was approximately \$1,329,700 for the year ended December 31, 2011 compared to approximately \$1,180,800 for the same period in 2010. During the year ended December 31, 2011, we used additional cash to fund operating losses of approximately \$2,335,200 and working capital requirements of approximately \$1,005,500 compared to the same period in 2010.

Net cash used in investing activities was approximately \$108,000 for the year ended December 31, 2011 compared to approximately \$120,000 for the same period in 2010. During the year ended December 31, 2010, we used additional cash to purchase equipment.

Net cash provided by financing activities was approximately \$1,396,200 for the year ended December 31, 2011 compared to approximately \$520,000 for the same period in 2010. During the year ended December 31, 2011, we received net proceeds of \$1,500,000 from the issuance of debt net of \$50,000 of payments on notes payable and \$53,800 of deferred offering costs.

#### ECONOMY AND INFLATION

We have not experienced any significant cancellation of orders due to the downturn in the economy and only a small number of customer 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

#### CONTRACTUAL OBLIGATIONS

As of December 31, 2011, we have contractual obligations of \$2,777,369 as indicated below:

Contractual Obligations	Total	Less than		
		1 Year	1-3 Years	3-5 Years
Long-term debt	\$ 2,500,624	\$ 2,500,624	\$ —	\$ —
Purchase obligations	276,695	276,695	—	—
Total	\$ 2,777,319	\$ 2,777,319	\$ —	\$ —

#### 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. Management has discussed the selection of critical accounting policies and estimates with our Board of Directors, and the Board of Directors has reviewed our disclosure relating to critical accounting policies and estimates in this annual report on Form 10-K. 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. This policy applies to all of our customers, including Genertec America (a distribution agreement) and CAST Systems Control Technology Co. (an agreement for the purchase of specific goods).

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. The Company has recorded an accrual of approximately \$47,400 and \$11,500 for future warranty expenses at December 31, 2011 and 2010, respectively.

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. The Company recognized revenue of \$82,000 from license agreements for both years ended December 31, 2011 and 2010.

### Accounts receivable

Accounts receivable consist primarily of receivables from the sale of our ERV products. The Company regularly reviews accounts receivable for any bad debts based on an analysis of the Company's collection experience, customer credit worthiness, and current economic trends.

### 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. There have been no significant impairments of long-lived and intangible assets during the two-year period ended December 31, 2011.



## 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 with the following assumptions for options granted during the years ended December 31, 2011 and 2010:

	Years Ended December			
	2011		31, 2010	
Dividend rate	0	%	0	%
Risk free interest rate	1.45%	–	1.96%	–
Expected term	2.93	%	3.68	%
	6.5 – 10			
	years			
Expected volatility	180%	–	97%	– 112%
	189	%		

The basis for the above 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. Based on historical experience of forfeitures, the Company estimated forfeitures at 0% for the each of the years ended December 31, 2011 and 2010.

## Derivative Financial Instruments

The Company does not use derivative instruments to hedge exposure to cash flow, market or foreign currency risk. Terms of convertible promissory note instruments are reviewed to determine whether or not they contain embedded derivative instruments that are required under ASC 815 "Derivative and Hedging" (ASC 815) to be accounted for separately from the host contract, and recorded on the balance sheet at fair value. The fair value of derivative liabilities, if any, is required to be revalued at each reporting date, with corresponding changes in fair value recorded in current period operating results.

Freestanding warrants issued by the Company in connection with the issuance or sale of debt and equity instruments are considered to be derivative instruments and are evaluated and accounted for in accordance with the provisions of ASC 815. Pursuant to ASC 815, an evaluation of specifically identified conditions is made to determine whether fair value of warrants issued is required to be classified as equity or as a derivative liability.

## 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.

As of December 31, 2011, the Company had no unrecognized tax benefits or related interest and penalties. We will include future interest and penalties associated with any unrecognized benefits within provision for income taxes on the Statements of Operations, if applicable. We do not anticipate any unrecognized benefits in the next 12 months that would result in a material change to our financial position.

#### 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 Policies: Recent Accounting Standards” in Part II, Item 8 of this Form 10-K.

#### ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

Our financial statements and the related notes begin on Page 65, which are included in this Annual Report on Form 10-K.

#### ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

None.

#### ITEM 9A(T). CONTROLS AND PROCEDURES.

##### Disclosure Controls and Procedures

##### Evaluation of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and our Chief Financial Officer, we carried out an evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act. Management conducted its evaluation based on the framework in Internal Control Over Financial Reporting Guidance for Smaller Public Companies issued by the Committee on Sponsoring Organizations of the Treadway Commission (COSO). Based on that evaluation, our Chief Executive Officer and our Chief Financial Officer have concluded that, at December 31, 2011, such disclosure controls and procedures were effective.

Disclosure controls and procedures are controls and other procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, or persons performing similar functions, as appropriate, to allow timely decisions regarding required disclosure.

#### Limitations on the Effectiveness of Controls

Our disclosure controls and procedures are designed to provide reasonable, not absolute, assurance that the objectives of our disclosure control system are met. Because of inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Based on their evaluation as of the end of the period covered by this report, management concluded that our disclosure controls and procedures were sufficiently effective to provide reasonable assurance that the objectives of our disclosure control system were met.

#### Management's Annual Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Internal control over financial reporting is a process, including policies and procedures, designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles. Our management assessed our internal controls over financial reporting based on the Internal Control Over Financial Reporting Guidance for Smaller Public Companies issued by the COSO. Based on the results of this assessment, our management concluded that our internal controls over financial reporting were effective as of December 31, 2011.

#### Auditor's Report on Internal Control over Financial Reporting

This Annual Report does not include an attestation report of the Company's independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this Annual Report.

#### Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with our evaluation that occurred during the quarter ended December 31, 2011 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

#### ITEM 9B. OTHER INFORMATION

NONE

## PART III

## ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The following table sets forth the names and ages of all of our directors and executive officers as of the date of this Annual Report. 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	56	President, Chief Executive Officer and Chairman of the Board of Directors
Scott G. Ehrenberg	58	Chief Technology Officer and Secretary
Judith C. Norstrud	43	Chief Financial Officer and Treasurer
David Longacre	53	Vice President – Sales and Marketing
Robert W. Schwartz	67	Director
Raymond Kazyaka Sr.	76	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 the assets 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.

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 startups in the fields of electronic packaging and ultrasonic devices: one firm which ultimately became Tessera of San Jose, CA and the other which ultimately became Sono-Tek of Milton, NY. He has 15 issued patents with 8 more pending along with numerous technical papers and presentations. Mr. Ehrenberg received his bachelor of science from Pennsylvania State University in 1976.



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

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 from 2005 through 2007, then became Branch Manager for Johnson Controls handling the profit and loss for both sales and operations during 2007 through 2009. Mr. Longacre received his BS in Commerce and Engineering from Drexel University in 1980. He is also a LEED AP.

#### Non-Employee Directors

Raymond Kazyaka Sr. was appointed to our board of directors in 1995. He is the President of RJK Tech Ltd since 2005. Mr. Kazyaka is the former President (1976-2004) and a co-founder of Wright Malta Corporation, which was founded in 1972 after a buy-out of a GE business. Wright Malta, liquidated in 2005, owned and operated the Malta Test Station, which had performed military product development for various governmental and commercial organizations including Lockheed Martin and Northrup . 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 19 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. Mr. Kazyaka's experience in strategic planning and business acumen provides us with assistance in our overall goals and initiatives.

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 (Windsorce, Inc.). In addition, he was the President and Chief Operating Officer of an AMEX 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. He currently serves on the boards of five corporations, including ours. Mr. Schwartz's experience in financial planning and reporting provides assistance to us in these areas and he is considered to be a financial expert to the company.

The Board members serve for the latter of a period of one year or until the next annual meeting of Company's shareholders.

#### Director Candidates

The following director nominees have agreed to serve as members of our Board of Directors, effective as of, and subject to, the closing of an equity offering:

Peter Termyn, age 51, has recently agreed to join our Board. Mr. Termyn has been the President and CEO at Parkinson Technologies since January 2007. Parkinson Technologies Inc. is a world-wide industry leader in the development, design and manufacturing of web processing machinery for plastics, nonwovens, paper and specialty materials used in key markets including energy, healthcare, flexible/ridged packaging, automotive, and construction. Parkinson's customer base includes a broad range of companies, from venture-backed startups to Fortune 50 enterprises located world-wide, all of whom demand innovative solutions to their web processing challenges.

Staying highly focused on its core objectives, making world-class personnel additions, and leading investments that improved his company's operations and abilities to serve its diverse customer base Termyn created solid, sustainable growth in its existing business areas and newer areas such as the processing of novel materials using polylactic acid films, and specialty films like separator films for rechargeable batteries.

He previously directed the company's commercial organization and led efforts to unlock its growth potential in emerging clean-tech and bio-based material processing applications.

Prior to Parkinson, Mr. Termyn held multiple technical, commercial and business management roles in the semiconductor, fluid transfer, chemical, automotive and engineered products industries with Helix Technology, Tyco International, BOC Group, ITT Corporation, and Dresser Industries.

Mr. Termyn holds dual engineering degrees in Chemical Engineering and Materials/Metallurgical Engineering from the University of Michigan, in addition to a Masters of Business Administration from the University of Michigan

Bill McCollum, age 68, has recently agreed to join our board. In 2011, Mr. McCollum joined as a partner in SNR Denton's Public Policy and Regulation practice. He joined the firm following his term as the 36th attorney general of the state of Florida. Mr. McCollum served as attorney general from 2007 to 2011. Prior to becoming the Florida Attorney General in 2007, McCollum was a partner with Baker & Hostetler's Government Policy practice from 2001-2007. Between 1981-2001, McCollum was a Member of the US House of Representatives representing Florida's 8th District where he served on the Judiciary, Banking and Financial Services, and Intelligence Committees. He also held a number of leadership positions, including Chairman of the Judiciary Subcommittee on Crime, Vice Chairman for six years of the Banking and Financial Services Committee, ranking Member of the subcommittee overseeing the Federal Reserve, and Vice Chairman of the House of Republican Conference for three terms (one of eight House GOP leadership positions). Mr. McCollum expertise in governmental regulations and energy policy will be an asset to the board once his service begins.

#### 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.

## Director Independence

We have determined that our board of directors 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. On the basis of information solicited from each director, Raymond Kazyaka, Sr. and Robert W. Schwartz have no material relationship with us and are independent within the meaning of such rules. In making this determination, the board evaluated responses to a questionnaire completed by each director regarding relationships and possible conflicts of interest between each director, the company and management. In its review of director independence, the board considered all commercial, industrial, banking, consulting, legal, accounting, charitable, and familial relationships any director may have with the company or management.

## Board Meetings and Committees; Annual Meeting Attendance

Although we intend to establish an audit committee and compensation committee, our board of directors has not adopted any committees to the board of directors. Our board of directors held three 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 our Annual Report on Form 10-K as filed on March 31, 2009. This document may be reviewed by accessing our public filings at the SEC’s web site at [www.sec.gov](http://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.

## Compliance with Section 16(a) of the Exchange Act

Section 16(a) of the Exchange Act requires our executive officers and directors, and persons who own more than 10% of any publicly traded class of our equity securities, to file reports of ownership and changes in ownership of our equity securities with the SEC. Officers, directors, and greater than ten percent stockholders are required by SEC regulation to furnish the Company with copies of all Section 16(a) forms that they file.

Based solely on the reports received and on the representations of the reporting persons, we believe that these persons have complied with all applicable filing requirements of Section 16(a) of the Exchange Act during fiscal 2011.



## ITEM 11. EXECUTIVE COMPENSATION

The table below summarizes the total compensation earned by or paid to our principal executive officer, our principal financial officer and each of our two other executive officers other than our principal executive officer and principal financial officer for the fiscal years ended December 31, 2011 And 2010. The amounts represented in the “Options Award” column reflect the stock compensation expense recorded pursuant to the ASC Topic 718 and does not necessarily equate to the income that will ultimately be realized by the named executive for such awards.

## SUMMARY COMPENSATION TABLE

## Summary Compensation Table

Name and principal position (a)	Year (b)	Salary (\$) (c)	Bonus (\$) (d)	Stock Awards (\$)(2) (e)	Option Awards (\$)(2) (f)	Non-Equity Incentive Plan (g)	Non-qualified	All	Total (\$) (j)
							Deferred Compensation Earnings (h)	Other compensation (i)	
Timothy N. Tangredi Chief Executive Officer, President, and Chairman of the Board of Directors(1)	2011	\$ 170,000	—	—	\$ 91,754	—	—	—	—\$ 261,754
	2010	\$ 170,000	—	—	\$ 95,869	—	—	—	—\$ 265,869
David E. Longacre Vice President of Sales and Marketing	2011	\$ 125,000	\$ —	—	\$ 29,529	—	—	—	—\$ 154,529
	2010	\$ 125,000	10,000	—	\$ 80,186	—	—	—	—\$ 215,186
Scott G. Ehrenberg Chief Technology Officer and Secretary	2011	\$ 105,000	—	—	\$ 214,056	—	—	—	—\$ 319,056
	2010	\$ 74,808	—	—	\$ 89,877	—	—	—	—\$ 164,685
Judith C. Norstrud Chief Financial Officer and Treasurer	2011	\$ 68,333	—	—	\$ 95,606	—	—	—	—\$ 163,939
	2010	\$ 50,000	—	—	\$ 35,951	—	—	—	—\$ 85,951

(1) Mr. Tangredi received a salary of \$170,000 per year, and may receive 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 2011 and 2010, Mr. Tangredi was paid \$156,667 and \$110,833, respectively and has accrued unpaid salary of \$13,333 for 2011 and \$59,167 for 2010. Additional accruals have been made for the years prior to 2010. As of March 27, 2012, we owed Mr. Tangredi accrued compensation in the aggregate amount of \$1,047,884.

- (2) The amounts included in these columns are the aggregate dollar amounts of the grant date fair value of option awards granted in the indicated year as adjusted to disregard the effects of any estimate of forfeitures related to service-based vesting, in accordance with Accounting Standards Codification 718, Compensation-Stock Compensation, for the fiscal years ended December 31, 2011 and December 31, 2010. 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, 2011 and December 31, 2010. 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, 2011, there were forfeitures of options for the purchase of up to 320,000 shares related to service-based vesting conditions.



## Narrative Disclosure to Summary Compensation Table

Timothy N. Tangredi. We are party to an employment agreement with Mr. Tangredi, our President, Chief Executive Officer, and director, which was amended and restated on September 14, 2011. Mr. Tangredi's employment agreement provides for an initial term of three years commencing on September 14, 2011 with the term extending on the second anniversary thereof for an additional two-year period and on each subsequent anniversary of the commencement date for an additional year period. Mr. Tangredi's initial base salary is \$200,000. Mr. Tangredi's base salary shall be increased annually, if applicable, by a sum equal to his current base salary multiplied by one third of the percentage increase in our yearly revenue compared to our prior fiscal year revenue; provided however any annual increase in Mr. Tangredi's base salary shall not exceed a maximum of 50% for any given year. Any further increase in Mr. Tangredi's base salary shall be at the sole discretion of our board of directors or compensation committee (if applicable). In addition, Mr. Tangredi will be eligible for bonus compensation at the discretion of board of directors, as well as option-based compensation under our 2009 Plan. Among the option grants Mr. Tangredi is eligible to receive under this agreement is a grant to purchase up to 520,000 shares of common stock upon the successful completion of a secondary public offering. For a full description of the terms of our agreement with Mr. Tangredi, please refer to the section below entitled "Certain Relationships and Related Party Transactions — Employment Agreements."

Scott G. Ehrenberg. In 2010, Mr. Ehrenberg, our Chief Technology Officer and Secretary, received a salary of \$74,808 and he was granted an option to purchase up to 375,000 shares of common stock at an exercise price of \$0.30 per share. The value of this option is approximately \$89,877. In January and April of 2011, our Board granted Mr. Ehrenberg an option to purchase 625,000 shares at an exercise price of \$.30 per share and 75,000 shares of our common stock at an exercise price of \$0.40. The value of these options were \$184,557 and \$29,499, respectively. The above options were granted pursuant to the terms and conditions of the 2009 Long Term Incentive Plan. On May 24, 2011 we entered into an employment agreement with Mr. Ehrenberg. Mr. Ehrenberg's employment agreement provides for an initial term of two 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. Mr. Ehrenberg's initial base salary is \$110,000, with an increase to \$165,000 per annum after the date on which we obtain \$10 million or more in equity financing ("Offering"). Additionally, at the discretion of our board of directors and its compensation committee, Mr. Ehrenberg may be eligible for an annual bonus which amount, if any, will not be below 50% of his effective base salary and not exceeding 100% of his then effective base salary; provided that, under certain extraordinary circumstances, Mr. Ehrenberg may be eligible for an annual bonus greater than 150% of his then effective base salary. After the completion of an Offering, Mr. Ehrenberg is eligible to receive a one-time payment of \$20,000 for each U.S. patent of which he is the originator and the first name listed on the patent as inventor of the intellectual property described in such patent. In addition to any other compensation which Mr. Ehrenberg may receive under the agreement, he will be granted a stock option to purchase 40,000 shares of common stock at the end of each year or on the annual anniversary of the agreement, whichever is mutually acceptable to the Company and Mr. Ehrenberg. For a full description of the terms of our agreement with Mr. Ehrenberg, please refer to the section below entitled "Certain Relationships and Related Party Transactions — Employment Agreements."

David Longacre. Mr. Longacre receives a salary of \$125,000 per year and may receive a bonus which is measured by meeting certain performance goals. In 2010, received a bonus of 10,000 and was granted two options which permit him to purchase up to 200,000 shares of common stock at an exercise price of \$0.28 per share and 100,000 shares of common stock at an exercise price of \$0.30 per share. The value of each option is \$51,785 and \$28,401 respectively. In January of 2011, Mr. Longacre was granted an option to purchase up to 100,000 shares of common stock at an exercise price of \$0.27 per shares and a value of \$29,529. All options granted to Mr. Longacre were granted pursuant to the terms and conditions of the 2009 Long Term Incentive Plan.



Judith Norstrud. In 2011, Ms. Norstrud salary was increased to \$72,000. In addition, during that year, Ms. Norstrud received three option awards to purchase 100,000, 137,500 and 35,000 shares of our common stock at exercise prices of \$0.30, \$0.40 and \$0.35 per share, respectively. The value of these options are \$29,529, \$54,082 and \$12,064, respectively. The options were granted pursuant to the terms and conditions of the 2009 Long Term Incentive Plan

### Outstanding Equity Awards

The following table summarizes outstanding unexercised options, unvested stocks and equity incentive plan awards held by each of our name executive officers and significant employees, as of December 31, 2011.

#### OUTSTANDING EQUITY AWARDS AT FISCAL YEAR-END

Name	OPTION AWARDS					STOCK AWARDS				
	Number of securities underlying unexercised options (#)	Equity Incentive Plan Awards: Number of securities underlying unexercised options (#)	Equity Incentive Plan Awards: Number of securities underlying unexercised options (#)	Option exercise price (\$)	Option expiration date	Number of shares or units of stock that have not vested	Market value of shares or units of stock that have not vested (\$)	Equity incentive plan awards: Market plan or awards: number of unearned shares, units or other rights that have not vested (#)	Equity incentive plan awards: Market plan or awards: payout value of unearned shares, units or other rights that have not vested (\$)	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
Timothy N. Tangredi (1)	825,000	—	—	\$ 0.26	9/23/2014	—	—	—	—	
	150,000	—	—	\$ 0.10	5/10/2015	—	—	—	—	
	120,000	—	—	\$ 0.10	10/1/2015	—	—	—	—	
	40,000	—	—	\$ 0.30	5/2/2016	—	—	—	—	
	110,000	—	—	\$ 0.55	11/1/2016	—	—	—	—	
	140,000	—	—	\$ 0.55	2/20/2017	—	—	—	—	
	300,000	—	—	\$ 0.21	8/18/2017	—	—	—	—	
	350,000	—	—	\$ 0.21	1/30/2018	—	—	—	—	
	3,000,000*	—	—	\$ 0.36	4/2/2013	—	—	—	—	
	75,000	—	—	\$ 0.30	8/4/2018	—	—	—	—	
	100,000	—	—	\$ 0.42	11/12/2019	—	—	—	—	
	3,540,058	—	—	\$ 0.42	11/12/2019	—	—	—	—	
	400,000	—	—	\$ 0.30	6/25/2020	—	—	—	—	
	125,000	—	—	\$ 0.30	1/18/2021	—	—	—	—	
	100,000	—	—	\$ 0.40	4/5/2021	—	—	—	—	

45,000            —            —    \$   0.35            10/7/2021            —            —            —            —

            
\* Warrant

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Scott G.										
Ehrenberg (2)	140,000	—	—	—\$	0.26	9/23/2014	—	—	—	—
	110,000	—	—	—\$	0.10	5/10/2015	—	—	—	—
	80,000	—	—	—\$	0.10	10/1/2015	—	—	—	—
	40,000	—	—	—\$	0.55	11/1/2016	—	—	—	—
	120,000	—	—	—\$	0.55	2/20/2017	—	—	—	—
	50,000	—	—	—\$	0.21	8/18/2017	—	—	—	—
	250,000	—	—	—\$	0.30	8/4/2018	—	—	—	—
	*250,000	—	—	—\$	0.30	8/4/2013	—	—	—	—
	250,000	125,000	125,000	\$	0.30	6/25/2020	—	—	—	—
	625,000	—	—	—\$	0.30	1/18/2021	—	—	—	—
	75,000	—	—	—\$	0.40	4/5/2021	—	—	—	—

\* Warrant

Judith C.										
Norstrud (3)	200,000	—	—	—\$	0.45	10/15/2019	—	—	—	—
	50,000	100,000	100,000	\$	0.30	6/25/2020	—	—	—	—
	100,000	—	—	—\$	0.30	1/18/2021	—	—	—	—
	137,500	—	—	—\$	0.40	4/5/2021	—	—	—	—
	35,000	—	—	—\$	0.35	10/7/2021	—	—	—	—

David E.										
Longacre (4)	133,333	66,667	66,667	\$	0.28	1/20/2020	—	—	—	—
	33,333	66,667	66,667	\$	0.27	7/06/2020	—	—	—	—
	33,333	66,667	66,667	\$	0.30	1/18/2021	—	—	—	—

- (1) The April 2008 warrant grant to Mr. Tangredi for 3,000,000 shares 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. All stock options issued to Mr. Tangredi prior to December 31, 2009 were issued under the 2000 Plan. The remaining options were issued under the 2009 Plan.
- All stock options issued to Mr. Ehrenberg prior to December 31, 2009 were issued under the 2000 Plan. The remaining options issued under the 2009 Plan.
- (2) All stock options issued to Mr. Ehrenberg prior to December 31, 2009 were issued under the 2000 Plan. The remaining options were issued under the 2009 Plan.
- (3) All stock options issued to Ms. Norstrud prior to December 31, 2009 were issued under the 2000 Plan. The remaining options were issued under the 2009 Plan.
- (4) All stock options issued to Mr. Longacre were issued under the 2009 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, 2011.

Name (a)		Fees Earned or Paid in		Option Awards (\$) (d)	Non-Equity Incentive Plan Compensation (\$) (e)	Change in Pension Value and Non-qualified Deferred Compensation Earnings (\$) (f)	All Other Compensation (\$) (g)	Total (\$) (h)
		Cash (\$) (b)	Stock Awards (\$) (c)					
Raymond Kazyaka Sr., Director(1)	2011	—	—\$	91,754	—	—	—\$	91,754
Robert W. Schwartz, Director(2)	2011	—	—\$	91,754	—	—	—\$	91,754

(1) At December 31, 2011, Mr. Kazyaka had options to purchase 1,174,600 shares and no stock awards outstanding.

(2) At December 31, 2011, Mr. Schwartz had options to purchase 1,144,600 shares and no stock awards outstanding.

We do not have a plan pursuant to which our directors are compensated and directors currently 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 with each director abstaining from any such vote involving himself or a member of his immediate family. Timothy N. Tangredi, Raymond Kazyaka Sr. and Robert W. Schwartz were each granted an option on January 18, 2011, April 5, 2011 and October 7, 2011 to purchase 125,000 shares, 100,000 shares and 45,000 shares of common stock at an exercise price of \$0.30, \$0.40 per share and \$0.35, respectively. Each option vests immediately upon issuance and is exercisable for a period of ten years. This option grant to Mr. Tangredi as a director is 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 our business.

## ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

### Securities Authorized for Issuance under Equity Compensation Plans

The following table sets forth information regarding our 2000 Incentive Compensation Plan (the “2000 Plan”) and our Long-Term Incentive Plan of 2009 (the “2009 Plan”) under which our securities are authorized for issuance as of December 31, 2011.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans
Equity compensation plans approved by security holders	17,402,757	\$ 0.32	9,348,000
Equity compensation plans not approved by security holders	0	0	0

#### 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 37,517,604 shares of common stock outstanding as of March 27, 2012 plus, for each individual, any securities that individual has the right to acquire within 60 days of March 27, 2012. The following table does not reflect any conversion of notes or accrued compensation which may occur within the above-mentioned 60 day period.

Name of Beneficial Owner	Common Stock Beneficially Owned Number of Shares of Common Stock	Percentage of Class
Timothy N. Tangredi (Officer and Chairman) (1)*	12,310,477	25.0%
David Longacre (Officer) (2)*	199,999	.5%
Scott G. Ehrenberg (3) (Officer)*	2,077,800	5.3%
Judith Norstrud (Officer) (4)*	572,500	1.5%
Raymond Kazyaka Sr. (Director) (5)*	1,174,600	3.0%
Robert W. Schwartz (Director) (6)*	1,144,600	3.0%
Peter Termyn (Director Nominee)*	0	0.0%
Bill McCollum (Director Nominee)*	0	0.0%
Executive officers, directors and nominees, as a group (9 persons)	17,479,976	31.9%
Brian A. Kelly 181C Hague Blvd. Glenmont, N.Y. 12077	2,254,085	6.0%
Michael Gostomski (7) 1666 Valley View Dr. Winnona, MN 55987	3,355,535	8.8%
Louis M. Jaffe (8) 1500 S. Ocean Blvd #5201 Boca Raton, FL 33432	3,684,300	9.5%
Mark Nordlicht (9) 152 West 575th St. 4th Floor New York, NY 10019	3,793,240	9.99%
Leonard Samuels (10) 1011 Centennial Road Penn Valley, PA 19072	13,478,165	31.8%
Leah Kaplan Samuels (11) 1011 Centennial Road Penn Valley, PA 19072	3,629,696	9.4%



- \* Address is Company's principal office at 11552 Prosperous Driver, Odessa, Florida 33556
- (1) Includes 9,420,058 shares of common stock issuable upon exercise of stock options and warrants and 2,863,358 shares beneficially owned by Mr. Tangredi's wife, Patricia Tangredi. 2,735,558 of Ms. Tangredi's shares are issuable upon the exercise of stock options. Excludes an estimated 2,568,785 shares of common stock that would be issued in partial payment of Mr. Tangredi's accrued unpaid compensation (assuming completion of the public offering, receipt by us of gross proceeds of \$6 million or more from the public offering price of \$0.26 per share and cash payment of approximately \$380,000).
  - (2) Includes 147,222 shares of common stock issuable upon exercise of stock options.
  - (3) Includes 1,990,000 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 585,000 shares of common stock issuable upon exercise of stock options.

- (5) Includes 1,174,600 shares of common stock issuable upon exercise of stock options.
- (6) Includes 1,144,600 shares of common stock issuable upon exercise of stock options.
- (7) Includes 807,087 common shares issuable upon exercise of certain warrants.
- (8) Includes 666,500 shares of common stock issuable upon exercise of certain outstanding warrants issued in connection with the Financing to Louis M. Jaffe 2004 Intangible Asset Mgmt. TR U/A DTD 5/24/04 and 298,077 shares of common stock issuable upon exercise of certain outstanding warrants issued in connection with a purchase of Company's common stock in 2009. Also includes 1,819,715 shares held by the aforementioned trust, 250,004 shares held by the Louis Jaffe TTEE Irrevocable Trust – Jennifer Jaffe and 250,004 shares held by the Louis Jaffe TTEE Irrevocable Trust – Lara Jaffe Taylor. The natural person with voting power and investment power on behalf each of the aforementioned trusts is Louis M. Jaffe. Also includes 100,000 shares held by the Diana G. Jaffe Revocable Trust Dated 8/4/99 and 50,000 shares held by Ashlin Trevor Jaffe under the Florida Uniform Gift to Minors Act for which Diana G. Jaffe, Louis M. Jaffe's wife, is the natural person with voting power and investment power on behalf of the trusts and 250,000 shares of common stock issuable on exercise of a certain outstanding warrant issued to Louis M. Jaffe pursuant to a consulting agreement.
- (9) Includes 3,324,740 shares of common stock, and 468,500 shares issuable upon the exercise of certain outstanding warrants. The natural person with voting power and investment power on behalf of Platinum Montaur Life Sciences, LLC is Mark Nordlicht. Platinum Montaur Life Sciences, LLC holds warrants for the purchase of up to 7,999,000 shares of common stock. Among these warrants, excluded from the above table are 7,530,500 shares of common stock issuable upon exercise of those warrants, and two convertible notes which would (as of March 27, 2012) result in the issuance of 11,077,450 shares if fully converted. The warrants as amended and the convertible notes, have certain limitations on exercise and conversion 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 9.99% of all our common stock on a beneficially converted basis. These limitations on exercise of certain warrants and conversion of both notes may be waived by the holder. For purposes of this beneficial ownership table, we have assumed the exercise by Platinum Montaur Life Sciences, LLC of its warrants for the maximum number of shares it may acquire and hold at one time (9.99%), without conversion of the notes. As of March 27, 2012 we estimate that at the closing of the contemplated offering of equity securities, approximately \$2.88 million of net proceeds from the offering will be used to repay principal and interest under these notes.
- (10) Includes 905,000 shares of common stock issuable upon exercise of certain outstanding warrants. 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 5,860,969 shares of common stock and 3,987,500 shares of common stock issuable upon exercise of certain outstanding warrants issued to shareholder RBC Dain – Custodian for Leonard Samuels IRA.
- (11) Includes 905,000 shares of common stock issuable upon exercise of warrants. 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.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

We rent 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. We also pay the taxes, insurance and most repairs on the building. For the years ended December 31, 2011, 2010 and 2009, we recorded \$48,792, \$48,792 and \$49,604, in rent expense to this related party, respectively. At December 31, 2011 and December 31, 2010, \$58,459 and \$151,440, respectively, were included in accounts payable for amounts owed to these shareholders for rent.

Timothy N. Tangredi, our Chief Executive Officer and Chairman, is a founder and a member of the board of directors of Aegis BioSciences, LLC (“Aegis”). Mr. Tangredi currently owns 52% of Aegis’ outstanding equity and spends approximately one to two days per month on Aegis business for which he is compensated by Aegis. Aegis has two exclusive, world-wide licenses from us under which it has the right to use and sell products containing our polymer technologies in biomedical and health care applications. As a result of a \$150,000 payment made by Aegis, the first license is considered fully paid and as such no additional license revenue will be forthcoming. Pursuant to the second license Aegis made an initial one-time payment of \$50,000 and 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.

E. Todd Tracy and Michael Stone, two individuals holding warrants as a result of the Financing exercised and tendered their warrants on September 13, 2011 and received 145,832 and 537,037 shares of the Company’s common stock. The common stock was issued pursuant to an exemption from registration under Section 4(2) of the Securities Act

On September 6, 2011, RP Capital and Richardson and Patel, LLP, two entities holding warrants (one as a result of the Financing and the other as a part of a payment arrangement for services) tendered and exercised their warrants and received 244,897 and 188,225 shares of the Company’s common stock. The common stock was issued pursuant to an exemption from registration under Section 4(2) of the Securities Act.

On September 6, 2011, the Company issued 202,703 shares of common stock to legal counsel, Richardson and Patel, LLP, in settlement of accounts payable of \$75,000 for services rendered. The issuance of these securities was exempt from registration under Section 4(2) and Regulation D of the Securities Act.

In December, 2009, we obtained \$1,000,000 of financing from Platinum-Montaur Life Sciences, LLC (“Investor”). Mark Nordlicht, who is a significant beneficial holder of our securities, is a control person with respect to the 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. The note’s maturity date was extended to April 30, 2011. On March 22, 2011, the Company entered into a Securities Amendment and Exchange Agreement and an Amended and Restated Convertible Promissory Note (“2011 Convertible Note”, collectively “Exchange Agreements”) with this investor. Pursuant to the terms and subject to the conditions set forth in the Exchange Agreements, the Company and the Investor amended and restated the \$1,000,000 unsecured promissory note issued by the Company to Investor on or about December 17, 2009 (“Original Note”) to, among other things, extend the term to March 22, 2012, which was subsequently extended to May 7, 2012. Interest in the amount of 10% per annum, commencing on December 17, 2009 and calculated on a 365 day year, and the principal amount of \$1,000,000 will be paid on March 22, 2012, which was subsequently extended to May 7, 2012. Subject to the terms and conditions of the 2011 Convertible Note, including limitations on conversion, the outstanding principal and interest under the 2011 Convertible Note will automatically convert into shares of the Company’s common stock at the then-effective conversion price upon the closing of a qualified firm commitment underwritten public offering or may be voluntarily converted by the investor at anytime during the term. The initial conversion price is \$0.26 per share. Any principal or interest which is not converted will be repaid by the Company at the earlier of a qualified offering, (as defined in the 2011 Convertible Note which is filed as an exhibit to the Form 8K filed with the Securities and Exchange Commission on March 28, 2011), or March 22, 2012, which was subsequently extended to May 7, 2012. Pursuant to and during the term of the 2011 Convertible Note, the Company will not issue or allow to exist any obligation for borrowed money, except for subordinate indebtedness in payment and priority, trade payables incurred in the ordinary course of business, purchase money secured indebtedness for equipment or inventory, unsecured and subordinate, or unsecured and subordinate working capital guarantees provided by, the Export Import Bank of the

United States (the “EXIM Bank”), and indebtedness evidenced by the promissory note dated February 19, 2010 issued to RBC Capital Markets- Custodian of Leonard Samuels IRA (as amended) in the principal amount of \$620,000. In addition, on March 22, 2011, in connection with the above Exchange Agreements, the Company entered into an Amendment to 2007 Warrant and an Amendment to 2009 Warrant to extend the terms of the Stock Purchase Warrant, dated on or about December 31, 2007, and Stock Purchase Warrant, dated on or about March 12, 2009, respectively, to March 22, 2016 and to provide for cashless exercise unless such warrant shares are registered for resale under a registration statement. In addition, on March 22, 2011, the Company issued a Stock Purchase Warrant to the Investor to purchase 1,000,000 shares of the Company’s common stock at \$0.45 per share, exercisable commencing on the earliest of the consummation of the qualified offering (as defined in the Exchange Agreements), the date of conversion of the 2011 Convertible Note in full, or the date of conversion of the 2011 Convertible Note by the Investor in the greatest number of shares of the Company’s common stock not to exceed 9.99% beneficial ownership of Company outstanding common stock and terminating on March 22, 2016.

Also, on March 22, 2011, the Company entered into a 10% Note and Warrant Purchase Agreement, Secured Convertible Promissory Note and Patent Security Agreement (“Financing Agreements”) with the above Investor. Pursuant to the terms and subject to the conditions set forth in the Financing Agreements, the Investor has provided a bridge loan in the amount of \$1,500,000 (“Loan”) to the Company, which is secured by all patents, patent applications and similar protections of the Company and all rents, royalties, license fees and “accounts” with respect to such intellectual property assets. Pursuant to the Secured Convertible Promissory Note (“Secured Note”), interest in the amount of 10% per annum, calculated on a 365 day year, and the principal amount of \$1,500,000 is due and payable on March 22, 2012, which was subsequently extended to May 7, 2012, but repayment is accelerated upon a qualified firm commitment underwritten public offering (as defined in the note). In the event of such qualified offering, and subject to the terms and conditions of the Secured Note, the outstanding principal and interest under the Secured Note will automatically convert, subject to the limitations on conversion described in the note, into shares of the Company’s common stock at the then-effective conversion price upon the closing of such qualified offering. The initial conversion price is \$0.26 per share which is subject to adjustment for standard anti-dilution provisions. Any principal or interest which is not converted will be repaid by the Company at the earlier of a qualified offering or March 22, 2012, which was subsequently extended to May 7, 2012. No cash fees were paid to any party to the transaction in exchange for lending the money.

On March 22, 2011, in connection with the Financing Agreements, the Company issued a Stock Purchase Warrant to the Investor to purchase 3,000,000 shares of the Company’s common stock at \$0.45 per share, exercisable until March 22, 2016. Pursuant to and during the term of the Secured Note, the Company will not issue or permit to exist any obligation for borrowed money, except for trade payables incurred in the ordinary course of business, purchase money secured indebtedness for equipment or inventory, unsecured and subordinate indebtedness to, or unsecured and subordinate working capital guarantees provided by, the EXIM Bank, the promissory note dated February 19, 2010 issued to RBC Capital Markets- Custodian of Leonard Samuels IRA (as amended) in the principal amount of \$620,000, the Amended and Restated Convertible Promissory Note, dated March 22, 2011, issued to the Investor in the principal amount of \$1,000,000 and other unsecured indebtedness for borrowed money in an amount not to exceed \$750,000.

Pursuant to the Patent Security Agreement issued in connection with the Note and Warrant Purchase of March 22, 2011, the Company shall not, without the Investor’s prior consent, sell, dispose or otherwise transfer all or any portion of the Collateral, except for license grants in the ordinary course of business. In addition, the Company will take all actions reasonably necessary to prosecute applications for patents and maintain all patents, and to seek to recover damages for infringement, misappropriation or dilution of the Collateral with limited exceptions.

#### Employment Agreements

In addition we have the following employment agreements with our officers and significant employees:

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 September 14, 2011, sets forth Mr. Tangredi’s compensation level and eligibility for salary increases, bonuses, benefits, and option grants. Mr. Tangredi’s employment agreement provides for an initial term of three years commencing on September 14, 2011 with the term extending on the second anniversary thereof for an additional two-year period and on each subsequent anniversary of the commencement date for an additional year period. Mr. Tangredi’s initial base salary is \$200,000. Mr. Tangredi’s base salary shall be increased annually, if applicable, by a sum equal to his current base salary multiplied by one third of the percentage increase in our yearly revenue compared to our prior fiscal year revenue; provided however any annual increase in Mr. Tangredi’s base salary shall not exceed a maximum of 50% for any given year. Any further increase in Mr. Tangredi’s base salary shall be at the sole discretion of our board of directors or compensation committee (if applicable). Additionally, at the discretion of our board of directors and its compensation committee,

Mr. Tangredi may be eligible for an annual bonus, if any, of up to 100% of his then-effective base salary, if he meets or exceeds certain annual performance goals established by the board of directors. In addition to this bonus, Mr. Tangredi may be eligible for a separate merit bonus if approved by the board of directors, for specific extraordinary events or achievements such as a sale of a division, major license or distribution arrangement or merger. Mr. Tangredi is entitled to medical, disability and life insurance, as well as four weeks of paid vacation annually, an automobile allowance, reimbursement of all reasonable business expenses, automobile insurance and maintenance, and executive conference or educational expenses. Under his employment agreement, in addition to any other compensation which he may receive, if we complete a secondary public offering Mr. Tangredi will be granted an option under our 2009 Plan to purchase up to 520,000 shares of our common stock with an exercise price equal to the fair market value per share on the date of grant. This option will become vested and exercisable in thirds, with one third vested upon grant, another third at the one-year anniversary of the grant, and another third upon the second anniversary of the grant. The option shall 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 it 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.

If Mr. Tangredi's employment is terminated for any reason, we will be obligated to pay him his accrued but unpaid base salary, bonus and accrued vacation pay, and any unreimbursed expenses ("Accrued Sums").

In addition to any Accrued Sums owed, if Mr. Tangredi's employment is terminated by us in the event of his disability or without cause or by Mr. Tangredi for good reason, he shall be entitled to:

- (i) an amount equal to the sum of (A) the greater of 150% of the base salary then in effect or \$320,000 plus (B) the cash bonus and/or merit bonus, if any, awarded for the most recent year;
- (ii) health and life insurance, a car allowance and other benefits set forth in the agreement until two years following termination of employment, and thereafter to the extent required by COBRA or similar statute; and
- (iii) all stock options, to the extent they were not exercisable at the time of termination of employment, shall become exercisable in full.

In addition to any Accrued Sum owed, in the event of termination upon death, Mr. Tangredi shall be entitled to (i) and (iii) above.

In addition to any Accrued Sums owed, in the event that Mr. Tangredi elects to terminate employment within one year following a change in control, he shall receive a lump sum payment equal to the sum of (a) the greater of his then current base salary or \$210,000 plus (b) the cash bonus and merit bonus, if any, awarded in the most recent year. In addition, he will be entitled to (ii) and (iii) above.

The employment agreement also contains customary covenants restricting the use of our confidential information and solicitation of employees, which are similarly applicable to our other executive officers. In addition we are obligated to indemnify Mr. Tangredi for any claims made against him in connection with his employment with us, to advance indemnification expenses, and maintain his coverage under our directors' and officers' liability insurance policy.

Under the employment agreement, we and Mr. Tangredi have agreed that we will retain an independent compensation consultant, whose recommendations shall be obtained by January 31, 2012 which may modify the compensation program for Mr. Tangredi and other officers, subject to certain conditions including approval of the board of directors. Notwithstanding the recommendation and board consideration, Mr. Tangredi has the right to continue the current terms of the employment agreement.

Scott G. Ehrenberg. We are party to an employment agreement with Mr. Ehrenberg, our Chief Technology Officer and Secretary. The employment agreement, dated May 24, 2011, sets forth Mr. Ehrenberg's compensation level and eligibility for salary increases, bonuses, benefits, and option grants. Mr. Ehrenberg's employment agreement provides for an initial term of two 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. Mr. Ehrenberg's initial base salary is \$110,000, with an increase to \$165,000 per annum after the date on which we obtain \$10 million or more in equity financing ("Offering"). Additionally, at the discretion of our board of directors and its compensation committee, Mr. Ehrenberg may be eligible for an annual bonus which amount, if any, will not be below 50% of his effective base salary and not exceeding 100% of his then effective base salary; provided that, under certain extraordinary circumstances, Mr. Ehrenberg may be eligible for an annual bonus greater than 150% of his then-effective base salary. Mr. Ehrenberg is entitled to medical, disability and life insurance as generally offered to other and made available to other executive officers of the Company, and after the completion of an Offering, 75% of the regular portion of Executive's Health Benefit. In addition, Mr. Ehrenberg is entitled to four weeks of paid vacation annually, and reimbursement of certain business expenses including expenses for executive conferences or education. After the completion of an Offering, Mr. Ehrenberg is eligible to receive a one-time payment of \$20,000 for each U.S. patent of



which he is the originator and the first name listed on the patent as inventor of the intellectual property described in such patent. In addition to any other compensation which Mr. Ehrenberg may receive under the agreement, he will be granted options to purchase 40,000 shares of common stock at the end of each year or on the annual anniversary of the agreement, whichever is mutually acceptable to the Company and Mr. Ehrenberg. These options will be immediately exercisable, have a term of ten years, shall be exercisable for up to three years after termination of or resignation from employment (unless termination is for cause, in which event they shall expire on the date of termination).

If Mr. Ehrenberg's employment is terminated for any reason, we will be obligated to pay him his accrued but unpaid base salary, bonus and accrued vacation pay, and any unreimbursed expenses ("Accrued Sums").

In addition to any Accrued Sums owed, if Mr. Ehrenberg's employment is terminated by us in the event of his disability or without cause or by Mr. Ehrenberg for good reason, he shall be entitled to:

- (i) an amount equal to the greater of the base salary then in effect or \$175,000;
- (ii) continuation of medical benefits set forth in the agreement until one year following termination of employment or resignation, and beyond such one year period to the extent required by COBRA or similar statute; and
- (iii) all stock options, to the extent they were not exercisable at the time of termination of employment, shall become exercisable in full, and shall remain exercisable for a period of three years following the date of termination or resignation.

In addition to any Accrued Sum owed, in the event of termination upon death, Mr. Ehrenberg shall be entitled to (i) and (iii) above.

In addition to any Accrued Sums owed, in the event that Mr. Ehrenberg elects to terminate employment within 6 months following a change in control, he shall be entitled to 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 resign from employment, a lump sum payment equal to \$400,000 plus cash bonus and equity, if any, awarded to Mr. Ehrenberg for the most recent year. In addition, he will be entitled to (ii) and (iii) above.

The employment agreement also contains customary covenants restricting the use of our confidential information and solicitation of employees, which are similarly applicable to our other executive officers. In addition we are obligated to indemnify Mr. Ehrenberg for any claims made against him in connection with his employment with us, to advance indemnification expenses, and maintain his coverage under our directors' and officers' liability insurance policy.

Patricia K. Tangredi. We are a party to an employment agreement with Patricia Tangredi, wife of Timothy Tangredi, our Chief Executive Officer. The employment agreement, as amended and restated on April 8, 2011, sets forth Ms. Tangredi's compensation level and eligibility for salary increases, bonuses, benefits, and option grants. Ms. Tangredi's employment agreement provides for an initial term of four years with the term extending on the fourth anniversary thereof for an additional one year period and on each subsequent anniversary of the agreement for an additional year period. Ms. Tangredi's initial base salary is \$120,000, with an increase to \$150,000 per annum or such higher sum as our board of directors may set after the date on which we obtain \$10 million or more in equity or debt financing. Ms. Tangredi is entitled to, and we will pay 50% of her, medical, vision, dental, accidental death and travel insurance as provided under company plans. In addition, Ms. Tangredi is eligible to receive four weeks of paid vacation annually. In addition to any other compensation which she may receive under the agreement, Ms. Tangredi shall be granted options to purchase a minimum of 50,000 shares of our common stock which shall be issued at year end or upon the anniversary of this agreement, as the parties shall agree. These options 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), 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.

If Ms. Tangredi's employment is terminated for any reason, we will be obligated to pay her accrued but unpaid base salary, bonus and accrued vacation pay, and any unreimbursed expenses ("Accrued Sums").

In addition to any Accrued Sums owed, if Ms. Tangredi's employment is terminated by us in the event of her disability or without cause or by Ms. Tangredi for good reason, Ms. Tangredi shall also be entitled to:

- (i) an amount equal to the greater of the base salary then in effect or \$150,000;
- (ii) continuation of the health and other insurance coverage and other benefits set forth in the agreement until one year following termination of employment or resignation, and beyond such one year period to the extent required by COBRA or similar statute; and
- (iii) all stock options, to the extent they were not exercisable at the time of termination of employment, shall become exercisable in full and shall remain exercisable for a period of three years following the date of termination or resignation.

In addition to any Accrued Sum owed, in the event of termination upon death, Ms. Tangredi shall be entitled to (i) and (iii) above.

In addition to any Accrued Sums owed, in the event that Ms. Tangredi elects to terminate employment within six months following a change in control, she shall receive a lump sum payment equal to three times the sum of the greater of her then current base salary or \$150,000. In addition, she will be entitled to (ii) and (iii) above.

The employment agreement also contains customary covenants restricting the use of our confidential information and solicitation of employees, which are similarly applicable to our other executive officers. In addition we are obligated to indemnify Ms. Tangredi for any claims made against her in connection with her employment with us, to advance indemnification expenses, and maintain her coverage under our directors' and officers' liability insurance policy.

#### Executive Compensation Agreement

On January 11, 2012, we entered into an Executive Compensation Agreement with Tim Tangredi. Under this agreement, upon closing of an offering of equity securities and receipt by us of gross proceeds of \$6 million or more, Mr. Tangredi's accrued compensation through the closing date in the approximate amount of \$1.05 million shall be paid with a combination of (a) cash, which we estimate at this time to be approximately \$380,000, which is intended to cover payment of income and other taxes due from the payment of such accrued compensation, and (b) shares of restricted common stock at a price equal to the price per share paid by investors in the equity offering (which is estimated at 2,568,785 shares of common stock).

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.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

Audit Fees

The aggregate audit fees billed for the years ended December 31, 2011 and 2010 was \$42,000 and \$43,000, respectively. Audit services include the audits of the financial statements included in the Company's annual reports on Form 10-K and reviews of interim financial statements included in the Company's quarterly reports on Form 10-Q.

Audit-Related Fees

None.

Tax Fees

None

All Other Fees

Aggregate other fees billed for the year ended December 31, 2011 and 2010 was \$20,571 and \$8,047, respectively for general consulting services related to the filing of our registration statements and other general questions.

Audit Committee Pre-Approval Policies and Procedures

We do not have an audit committee and, as a result, our Board of Directors evaluates the scope and cost of the engagement before the auditor renders audit or non-audit services. The Board of Directors has considered the services provided by CFR as disclosed above in the captions audit fees and all other fees and has concluded that such services are compatible with the independence of CFR as our principal accountant.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES.

No.	Exhibit
3.1	Certificate of Incorporation of The Dais Corporation filed April 8, 1993 (Incorporated by reference to Exhibit 3.1 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
3.2	Certificate of Amendment of the Certificate of Incorporation of The Dais Corporation filed February 21, 1997 (Incorporated by reference to Exhibit 3.2 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
3.3	Certificate of Amendment of the Certificate of Incorporation of The Dais Corporation filed June 25, 1998 (Incorporated by reference to Exhibit 3.3 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
3.4	Certificate of Amendment of the Certificate of Incorporation of Dais Analytic Corporation filed December 13, 1999 (Incorporated by reference to Exhibit 3.4 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
3.5	Certificate of Amendment of the Certificate of Incorporation of Dais Analytic Corporation filed September 26, 2000 (Incorporated by reference to Exhibit 3.5 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
3.6	Certificate of Amendment of the Certificate of Incorporation of Dais Analytic Corporation filed September 28, 2000 (Incorporated by reference to Exhibit 3.6 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
3.7	Certificate of Amendment of the Certificate of Incorporation of Dais Analytic Corporation filed August 28, 2007 (Incorporated by reference to Exhibit 3.7 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
3.8	Certificate of Amendment of the Certificate of Incorporation of Dais Analytic Corporation filed March 20, 2008 (Incorporated by reference to Exhibit 3.8 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
3.9	Bylaws of The Dais Corporation (Incorporated by reference to Exhibit 3.9 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
3.10	Certificate of Amendment of the Certificate of Incorporation of Dais Analytic Corporation filed December 17, 2009 (Incorporated by reference to the exhibits included with the Definitive Proxy Statement Form DEF 14A as filed on October 9, 2009)
3.11	Form of Certificate of Amendment of the Certificate of Incorporation of Dais Analytic Corporation (Incorporated by reference to the exhibits included with the Definitive Proxy Statement Form DEF 14A as filed on October 27, 2010)
4.1	

Form of Non-Qualified Stock Option Agreement (Incorporated by reference to Exhibit 4.1 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)

4.2 Form of Non-Qualified Option Agreement (Incorporated by reference to Exhibit 4.2 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)

- 4.3 Form of Warrant (Daily Financing) (Incorporated by reference to Exhibit 4.3 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 4.4 Form of Warrant (Financing) (Incorporated by reference to Exhibit 4.4 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 4.5 Form of Warrant (Robb Trust Note and Additional Financing) (Incorporated by reference to Exhibit 4.5 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 4.6 Form of Placement Agent Warrant (Financing) (Incorporated by reference to Exhibit 4.6 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 4.7 Form of 9% Secured Convertible Note (Financing) (Incorporated by reference to Exhibit 4.7 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 4.8 Form of Note (Robb Trust Note) (Incorporated by reference to Exhibit 4.8 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 4.9 Form of Amendment to Note (Robb Trust Note) (Incorporated by reference to Exhibit 4.9 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 4.10 Form of Warrant (Note Conversion) (Incorporated by reference to the Exhibits 4.1 included with the Current Report on Form 8-K, as filed March 13, 2009)
- 4.11 Form of Warrant (2009 Purchases) (Incorporated by reference to the Exhibits 4.2 included with the Current Report on Form 8-K, as filed March 13, 2009)
- 4.12 Unsecured Promissory Note from Gostomski, dated December 8, 2009 (Incorporated by reference to the exhibits included with the Annual Report on Form 10K as filed on March 30, 2010)
- 4.13 Unsecured Promissory Note from Platinum-Montaur, dated December 17, 2009 (Incorporated by reference to the exhibits included with the Current Report on Form 8-K/A as filed on December 22, 2009)
- 4.14 Unsecured Promissory Note from Samuels, dated February 19, 2010 (Incorporated by reference to the exhibits included with the Current Report on Form 8-K as filed on February 23, 2010)
- 4.15 Unsecured Promissory Note from RBC Capital Markets - Custodian for Leonard Samuels IRA, dated February 19, 2010. (Incorporated by reference to the exhibits included with the Current Report on Form 8-K as filed on February 23, 2010)
- 4.16 First Amendment to Unsecured Promissory Note from Platinum-Montaur, dated June 28, 2010 (Incorporated by reference to exhibits included in Quarterly Report on Form 10Q as filed August 16, 2010)
- 4.17 First Amendment to Unsecured Promissory Note from Samuels, dated June 28, 2010 (Incorporated by reference to exhibits included in Quarterly Report on Form 10Q as filed August 16, 2010)
- 4.18

- First Amendment to Unsecured Promissory Note from RBC Capital Markets- Custodian for Leonard Samuels IRA, dated June 28, 2010 (Incorporated by reference to exhibits included in Quarterly Report on Form 10Q as filed August 16, 2010)
- 4.19 Second Amendment to Unsecured Promissory Note from Platinum-Montaur, dated September 30, 2010 (Incorporated by reference to exhibits included in Quarterly Report on Form 10Q as filed November 15, 2010)
- 4.20 Second Amendment to Unsecured Promissory Note from Samuels, dated September 30, 2010 (Incorporated by reference to exhibits included in Quarterly Report on Form 10Q as filed November 15, 2010)
- 4.21 Second Amendment to Unsecured Promissory Note from RBC Capital Markets- Custodian for Leonard Samuels IRA, dated September 30, 2010 (Incorporated by reference to exhibits included in Quarterly Report on Form 10Q as filed November 15, 2010)
- 4.22 Third Amendment to Unsecured Promissory Note from Platinum-Montaur, dated December 29, 2010 (Incorporated by reference Exhibit 4.22 to Registration Statement on Form S-1 (File No. 333-172259), as filed February 14, 2011)
- 4.23 Third Amendment to Unsecured Promissory Note from RBC Capital Markets- Custodian for Leonard Samuels IRA, dated December 31, 2010 (Incorporated by reference Exhibit 4.23 to Registration Statement on Form S-1 (File No. 333-172259), as filed February 14, 2011)
- 4.24 Form of Non-Qualified Stock Option Agreement – 2009 Long-Term Incentive 2009 Plan – Directors and certain designated employees (Incorporated by reference Exhibit 4.24 to Registration Statement on Form S-1 (File No. 333-172259), as filed February 14, 2011)
- 4.25 Form of Non-Qualified Option Agreement -2009 Long-Term Incentive 2009 Plan – employees (Incorporated by reference Exhibit 4.25 to Registration Statement on Form S-1 (File No. 333-172259), as filed February 14, 2011)



- 4.26 Amended and Restated Convertible Promissory Note by and between Dais Analytic Corporation and Platinum-Montaur Life Sciences, LLC dated March 22, 2011 (Incorporated by reference to Exhibit 10.2 to Current Report on Form 8-K, as filed March 28, 2011)
- 4.27 Form of Warrant by and between Dais Analytic Corporation and Investors dated 2007 and 2008. (Incorporated by reference to Exhibit 10.3 to Current Report on Form 8-K, as filed March 28, 2011)
- 4.28 Amendment to 2007 Warrant by and between Dais Analytic Corporation and Platinum-Montaur Life Sciences, LLC dated March 22, 2011 (Incorporated by reference to Exhibit 10.4 to Current Report on Form 8-K, as filed March 28, 2011)
- 4.29 Amendment to 2009 Warrant by and between Dais Analytic and Platinum-Montaur Life Sciences, LLC dated March 22, 2011 (Incorporated by reference to Exhibit 10.5 to Current Report on Form 8-K, as filed March 28, 2011)
- 4.30 Stock Purchase Warrant by and between Dais Analytic Corporation and Platinum-Montaur Life Sciences, LLC dated March 22, 2011 (Incorporated by reference to Exhibit 10.6 to Current Report on Form 8-K, as filed March 28, 2011)
- 4.31 Secured Convertible Promissory Note by and between Dais Analytic and Platinum-Montaur Life Sciences, LLC dated March 22, 2011 (Incorporated by reference to Exhibit 10.8 to Current Report on Form 8-K, as filed March 28, 2011)
- 4.32 Stock Purchase Warrant by and between Dais Analytic Corporation and Platinum-Montaur Life Sciences, LLC dated March 22, 2011 (Incorporated by reference to Exhibit 10.9 to Current Report on Form 8-K, as filed March 28, 2011)
- 4.33 Fourth Amendment to Unsecured Promissory Note from Platinum-Montaur, dated February 28, 2011 (Incorporated by reference to Exhibit 4.26 to Annual Report on Form 10-K, as filed March 31, 2011)
- 4.34 Fourth Amendment to Unsecured Promissory Note from RBC Capital Markets – Custodian for Leonard Samuels IRA, dated February 28, 2011 (Incorporation by reference to Exhibit 4.27 to Annual Report on Form 10-K, as filed March 31, 2011)
- 4.35 Fifth Amendment to Unsecured Promissory Note from RBC Capital Markets – Custodian for Leonard Samuels IRA, dated April 29, 2011 (Incorporation by reference to Exhibit 4.36 to Quarterly Report on Form 10-Q, as filed May 16, 2011)
- 4.36 Amendment to 2007 Warrant by and between Dais Analytic Corporation and RBC Capital Markets-Custodian for Leonard Samuels IRA dated May 12, 2011 (Incorporation by reference to Exhibit 4.37 to Quarterly Report on Form 10-Q, as filed May 16, 2011)
- 4.37 Amendment to 2009 Warrant by and between Dais Analytic Corporation and RBC Capital Markets-Custodian for Leonard Samuels IRA dated May 12, 2011 (Incorporation by reference to Exhibit 4.38 to Quarterly Report on Form 10-Q, as filed May 16, 2011)
- 4.38 Stock Purchase Warrant by and between Dais Analytic Corporation and RBC Capital Markets- Custodian for Leonard Samuels IRA dated May 12, 2011(Incorporation by reference to Exhibit 4.39 to Quarterly Report on Form 10-Q, as filed May 16, 2011)

- 4.39 Stock and Warrant Purchase Agreement dated May 12, 2011 (Incorporation by reference to Exhibit 4.40 to Quarterly Report on Form 10-Q, as filed May 16, 2011)
- 4.40 First Amendment to Secured Convertible Promissory Note by and between Dais Analytic and Platinum-Montaur Life Sciences, LLC dated March 22, 2011\*
- 4.41 Amendment to Amended and Restated Convertible Promissory Note by and between Dais Analytic Corporation and Platinum-Montaur Life Sciences, LLC dated March 22, 2012\*
- 10.1 2000 Equity Compensation Plan (Incorporated by reference to Exhibit 10.1 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 10.2 Form of Employee Non-Disclosure and Non-Compete Agreement (Incorporated by reference to Exhibit 10.2 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 10.3 Amended and Restated Employment Agreement between Dais Analytic Corporation and Timothy N. Tangredi dated July 29, 2008 (Incorporated by reference to Exhibit 10.3 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 10.4 Amended and Restated Employment Agreement between Dais Analytic Corporation and Patricia K. Tangredi dated July 29, 2008 (Incorporated by reference to Exhibit 10.4 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 10.5 Commercial Lease Agreement between Ethos Business Venture LLC and Dais Analytic Corporation dated March 18, 2005 (Incorporated by reference to Exhibit 10.6 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)

- 10.6 First Amendment of Lease Agreement between Ethos Business Venture LLC and Dais Analytic Corporation dated November 15, 2005 (Incorporated by reference to Exhibit 10.7 to Registration Statement on Form S-1 (File No. 333- 152940), as filed August 11, 2008)
- 10.7 Form of Subscription Agreement (Daily Financing) (Incorporated by reference to Exhibit 10.8 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 10.8 Form of Subscription Agreement (Financing) (Incorporated by reference to Exhibit 10.9 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 10.9 Form of Registration Rights Agreement (Financing) (Incorporated by reference to Exhibit 10.10 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 10.10 Form of Secured Patent Agreement (Financing) (Incorporated by reference to Exhibit 10.11 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 10.11 Placement Agent Agreement between Dais Analytic Corporation and Legend Merchant Group, Inc., dated October 5, 2007 (Incorporated by reference to Exhibit 10.12 to Registration Statement on Form S-1 (File No. 333-152940), as filed August 11, 2008)
- 10.12 Consulting Agreement between Dais Analytic Corporation and Harold Mandelbaum dated August 12, 2009 (Incorporated by reference to Exhibit 10.12 to Quarterly Report on Form 10-Q, as filed August 14, 2009)
- 10.13 Exclusive Distribution Agreement, dated August 21, 2009 between the Company and Genertec America, Inc. (Incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on August 27, 2009)
- 10.14 Employee Non-Disclosure and Non-Compete Agreement entered into between Judith Norstrud and Dais Analytic Corporation on October 15, 2009 (Incorporated by reference to the exhibits included with the Current Report on Form 8-K, as filed October 16, 2009).
- 10.15 2009 Long Term Incentive Plan (Incorporated by reference to the exhibits included with the Definitive Proxy Statement Form DEF14A as filed on October 9, 2009).
- 10.16 Technical and Sales Agreement between Dais Analytic Corporation, Beijing Jiexun-CAST Systems Control Technology Co., Ltd. and Genertec America, Inc. dated April 8, 2010, incorporated by reference to the exhibits included with the Current Report on Form 8-K, as filed on April 9, 2010.
- 10.17 Amended and Restated Employment Agreement between Dais Analytic Corporation and Timothy N. Tangredi dated April 11, 2011(Incorporated by reference to exhibit 10.17 to Amendment 1 to Pre-Effective Registration Statement on Form S-1, as filed April 13, 2011).
- 10.18 Amended and Restated Employment Agreement between Dais Analytic Corporation and Patricia K. Tangredi dated April 8, 2011. (Incorporated by reference to exhibit 10.18 to Amendment 1 to Pre-Effective Registration Statement on Form S-1, as filed April 13, 2011).
- 10.19 Securities Amendment and Exchange Agreement by and between the Dais Analytic Corporation and Platinum-Montaur Life Sciences, LLC dated as of March 22, 2011. (Incorporated by reference to Exhibit

10.1 to Current Report on Form 8-K, as filed March 28, 2011).

10.20 Note and Warrant Purchase Agreement by and between Dais Analytic Corporation and Platinum-Montaur Life Sciences, LLC dated March 22, 2011. (Incorporated by reference to Exhibit 10.7 to Current Report on Form 8-K/A, as filed July 6, 2011) (1)

10.21	Patent Security Agreement by and between Dais Analytic Corporation and Platinum-Montaur Life Sciences, LLC dated March 22, 2011. (Incorporated by reference to Exhibit 10.10 to Current Report on Form 8-K/A, as filed July 6, 2011) (1)
10.22	Second Amendment of Lease Agreement between Ethos Business Venture LLC and Dais Analytic Corporation dated May 23, 2011. (Incorporated by reference to Registrant's Registration Statement on Form S-1/A filed on May 26, 2011)
10.23	Amended and Restated Employment Agreement between Dais Analytic Corporation and Timothy N. Tangredi dated May 23, 2011. (Incorporated by reference to Registrant's Registration Statement on Form S-1/A filed on May 26, 2011)
10.24	Employment Agreement between Dais Analytic Corporation and Scott G. Ehrenberg dated May 24, 2011. (Incorporated by reference to Registrant's Registration Statement on Form S-1/A filed on May 26, 2011)
10.25	Executive Compensation Agreement dated June 17, 2011 between Dais Analytic Corporation and Timothy Tangredi. (Incorporated by reference to Registrant's Registration Statement on Form S-1/A filed on June 22, 2011)
10.26	Executive Compensation Agreement dated September 14, 2011 between Dais Analytic Corporation and Timothy N. Tangredi (Incorporated by reference to Exhibit 10.26 to Registration Statement on Form S-1/A, filed September 19, 2011)
10.27	Amended and Restated Employment Agreement between Dais Analytic Corporation and Timothy Tangredi dated September 14, 2011 (Incorporated by reference to Exhibit 10.1 to Current Report on Form 8-K as filed September 15, 2011)
10.28	Executive Compensation Agreement dated January 11, 2012 between Dais Analytic Corporation and Timothy Tangredi (Incorporated by reference to Exhibit 10.48 to Registration Statement on Form S-1/A, filed January 13, 2012)
10.29	First Amendment to Executive Compensation Agreement dated January 11, 2012 between Dais Analytic Corporation and Timothy Tangredi*
14.1	Code of Ethics (Incorporated by reference to Exhibit 14.1 to Annual Report on Form 10-K, as filed March 31, 2009)
31.1	Certification of Chief Executive Officer pursuant to section 302 of the Sarbanes-Oxley Act of 2002*
31.2	Certification of Chief Financial Officer pursuant to section 302 of the Sarbanes-Oxley Act of 2002*
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
101.INS **	XBRL Instance Document

101.SCH \*\* XBRL Taxonomy Extension Schema Document

101.CAL \*\* XBRL Taxonomy Extension Calculation Linkbase Document

101.DEF \*\* XBRL Taxonomy Extension Definition Linkbase Document

101.LAB \*\* XBRL Taxonomy Extension Label Linkbase Document

101.PRE \*\* XBRL Taxonomy Extension Presentation Linkbase Document

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\* Filed herewith.

\*\* XBRL (Extensible Business Reporting Language) information is furnished and not filed or a part of a registration statement or prospectus for purposes of Sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

(1) Portions of this exhibit have been omitted pursuant to a request for confidential treatment.

SIGNATURES

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

DAIS ANALYTIC CORPORATION

Dated: March 30, 2012

By:

/s/ TIMOTHY N. TANGREDI  
Timothy N. Tangredi  
Chairman of the Board  
Chief Executive Officer and Director  
(Principal Executive Officer)

Dated: March 30, 2012

By:

/s/ JUDITH C. NORSTRUD  
Judith C. Norstrud  
Chief Financial Officer and Treasurer  
(Principal Financial and Accounting  
Officer)

Signatures	Title	Date
/s/ TIMOTHY N. TANGREDI Timothy N. Tangredi	Chairman of the Board, Chief Executive Officer and Director	March 30, 2012
/s/ ROBERT W. SCHWARTZ Robert W. Schwartz	Director	March 30, 2012
/s/ RAYMOND KAZYAKA SR. Raymond Kazyaka Sr.	Director	March 30, 2012

Financial Statements

Dais Analytic Corporation

Years Ended December 31, 2011 and 2010  
Report of Independent Registered Public Accounting Firm



Dais Analytic Corporation

Financial Statements

Years Ended December 31, 2011 and 2010

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Report of Independent Registered Public Accounting Firm

Board of Directors and Stockholders  
Dais Analytic Corporation  
Odessa, Florida

We have audited the accompanying balance sheets of Dais Analytic Corporation (“the Company”) as of December 31, 2011 and 2010, and the related statements of operations, stockholders’ deficit, and cash flows for the years then ended. These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal controls over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company’s internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Dais Analytic Corporation as of December 31, 2011 and 2010, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2, the Company has incurred significant losses since inception and has a working capital deficit and stockholders’ deficit of \$3,222,163 and \$4,900,910 at December 31, 2011. These factors raise substantial doubt about the Company’s ability to continue as a going concern. Management’s plans in regard to these matters are also discussed in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Cross, Fernandez & Riley LLP

Orlando, Florida  
March 30, 2012

DAIS ANALYTIC CORPORATION  
BALANCE SHEETS

	December 31, 2011	December 31, 2010
<b>ASSETS</b>		
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$262,740	\$304,656
Accounts receivable, net	686,648	828,632
Other receivables	73,648	59,526
Inventory	342,908	294,069
Prepaid expenses and other current assets	215,096	258,136
<b>Total Current Assets</b>	<b>1,581,040</b>	<b>1,745,019</b>
Property and equipment, net	188,162	147,911
<b>OTHER ASSETS:</b>		
Deposits	2,280	3,280
Patents, net of accumulated amortization of \$128,962 and \$112,240 at December 31, 2011 and 2010, respectively	89,869	74,363
<b>Total Other Assets</b>	<b>92,149</b>	<b>77,643</b>
<b>TOTAL ASSETS</b>	<b>\$1,861,351</b>	<b>\$1,970,573</b>
<b>LIABILITIES AND STOCKHOLDERS' DEFICIT</b>		
<b>CURRENT LIABILITIES:</b>		
Accounts payable, including related party payables of \$58,367 and \$151,440 at December 31, 2011 and 2010, respectively	\$552,660	\$620,196
Accrued compensation and related benefits	1,405,606	1,426,022
Accrued expenses, other	404,409	241,861
Current portion of deferred revenue	298,459	647,804
Current portion of notes payable	-	50,000
Current portion of notes payable, related party	2,142,069	1,620,624
<b>Total Current Liabilities</b>	<b>4,803,203</b>	<b>4,606,507</b>
<b>LONG-TERM LIABILITIES:</b>		
Warrant liability	1,888,218	3,958,318
Deferred revenue, net of current portion	70,840	127,840
<b>Total Long-Term Liabilities</b>	<b>1,959,058</b>	<b>4,086,158</b>
<b>STOCKHOLDERS' DEFICIT</b>		
Preferred stock; \$0.01 par value; 10,000,000 shares authorized; 0 shares issued and outstanding	-	-
Common stock, \$0.01 par value; 200,000,000 shares authorized; 37,774,817 and 33,563,428 shares issued and 37,517,604 and 33,306,215 shares		

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outstanding at December 31, 2011 and 2010, respectively	377,749	335,635
Capital in excess of par value	33,966,619	29,852,347
Accumulated deficit	(37,973,166)	(35,637,962 )
	(3,628,798 )	(5,449,980 )
Treasury stock at cost, 257,213 shares	(1,272,112 )	(1,272,112 )
Total Stockholders' Deficit	(4,900,910 )	(6,722,092 )
<b>TOTAL LIABILITIES AND STOCKHOLDERS' DEFICIT</b>	<b>\$ 1,861,351</b>	<b>\$ 1,970,573</b>

The accompanying notes are an integral part of these financial statements.

DAIS ANALYTIC CORPORATION  
STATEMENTS OF OPERATIONS

	Years Ended December 31,	
	2011	2010
<b>REVENUE:</b>		
Sales	\$3,422,054	\$3,260,468
License fees	82,000	82,000
	3,504,054	3,342,468
<b>COST OF GOODS SOLD</b>	<b>2,563,250</b>	<b>2,290,041</b>
<b>GROSS MARGIN</b>	<b>940,804</b>	<b>1,052,427</b>
<b>OPERATING EXPENSES</b>		
Research and development expenses, net of government grant proceeds of \$769,154 and \$99,732, respectively	52,275	238,182
Selling, general and administrative expenses	2,992,156	2,693,092
<b>TOTAL OPERATING EXPENSES</b>	<b>3,044,431</b>	<b>2,931,274</b>
<b>LOSS FROM OPERATIONS</b>	<b>(2,103,627 )</b>	<b>(1,878,847 )</b>
<b>OTHER EXPENSE (INCOME)</b>		
Other (income)	(1,200 )	(36,003 )
Change in fair value of warrant liability	(1,204,483 )	(618,801 )
Amortization of discount on convertible note payable	1,141,445	-
Interest expense	297,010	209,550
Interest income	(1,195 )	-
<b>TOTAL OTHER EXPENSE (INCOME)</b>	<b>231,577</b>	<b>(445,254 )</b>
<b>NET LOSS</b>	<b>\$(2,335,204 )</b>	<b>\$(1,433,593 )</b>
<b>NET LOSS PER COMMON SHARE, BASIC AND DILUTED</b>	<b>\$(0.07 )</b>	<b>\$(0.05 )</b>
<b>WEIGHTED AVERAGE NUMBER OF COMMON SHARES OUTSTANDING, BASIC AND DILUTED</b>	<b>35,793,914</b>	<b>29,985,632</b>

The accompanying notes are an integral part of these financial statements.

DAIS ANALYTIC CORPORATION  
STATEMENTS OF STOCKHOLDERS' DEFICIT

	Common Stock Shares	Common Stock Amount	Capital in Excess of Par Value	Accumulated Deficit	Treasury Stock	Total Stockholders' Deficit
Balance, December 31, 2009	29,352,930	\$ 293,530	\$ 27,926,893	\$ (34,204,369)	\$ (1,272,112)	\$ (7,256,058)
Issuance of common stock and warrants for services	888,692	8,887	503,993	-	-	512,880
Issuance of common stock for conversion of notes payable	1,000,384	10,004	190,073	-	-	200,077
Stock based compensation	-	-	651,032	-	-	651,032
Issuance of common stock in exchange for debt settlement	2,321,422	23,214	580,356	-	-	603,570
Net loss	-	-	-	(1,433,593 )	-	(1,433,593)
Balance, December 31, 2010	33,563,428	\$ 335,635	\$ 29,852,347	\$ (35,637,962)	\$ (1,272,112)	\$ (6,722,092)
Issuance of common stock for services	225,192	2,252	78,993	-	-	81,245
Stock based compensation	-	-	916,935	-	-	916,935
Issuance of common stock for settlement of accounts payable	202,703	2,027	72,973	-	-	75,000
Warrant issued with convertible note payable, related party	-	-	435,240	-	-	435,240
Beneficial conversion feature on convertible note payable, related party	-	-	1,064,760	-	-	1,064,760

Issuance of common stock in exchange for debt settlement	2,667,503	26,675	666,875	-	-	693,550
Cashless exercise of warrants	1,115,991	11,160	(11,160 )	-	-	-
Reclassification of warrant liability upon warrant exercise	-	-	865,617	-	-	865,617
Revaluation of common stock issued to vendors for services	-	-	24,039	-	-	24,039
Net loss	-	-	-	(2,335,204 )	-	(2,335,204)
Balance, December 31, 2011	37,774,817	\$ 377,749	\$ 33,966,619	\$ (37,973,166)	\$ (1,272,112)	\$ (4,900,910)

The accompanying notes are an integral part of these financial statements.

DAIS ANALYTIC CORPORATION  
STATEMENTS OF CASH FLOWS

	Years Ended December 31,	
	2011	2010
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net loss	\$ (2,335,204)	\$ (1,433,593)
Adjustments to reconcile net loss to net cash and cash equivalents used by operating activities:		
Depreciation and amortization	52,658	15,276
Issuance of common stock, stock options and stock warrants for services and amortization of common stock issued for services	127,400	287,035
Stock based compensation expense	916,935	651,034
Change in fair value of warrant liability	(1,204,483)	(618,801 )
Amortization of deferred loan costs	53,378	-
Amortization of discount on convertible note payable	1,141,445	-
Bad debt expense	56,356	-
Increase in allowance for doubtful accounts	24,771	-
(Increase) decrease in:		
Accounts receivable	(289,143 )	(641,198 )
Other receivables	(14,122 )	(59,526 )
Inventory	(48,839 )	(144,083 )
Prepaid expenses and other assets	22,313	(4,984 )
Increase (decrease) in:		
Accounts payable and accrued expenses	243,562	380,835
Accrued compensation and related benefits	(20,416 )	111,666
Deferred revenue	(56,345 )	275,491
Net cash used by operating activities	(1,329,734)	(1,180,848)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Increase in patent costs	(32,207 )	(6,819 )
Purchase of property and equipment	(76,208 )	(113,305 )
Net cash used by investing activities	(108,415 )	(120,124 )
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Proceeds from issuance of notes payable, related party	1,500,000	620,000
Payments on notes payable, related party	(50,000 )	(100,000 )
Payments for loan and offering costs	(53,767 )	-
Net cash provided by financing activities	1,396,233	520,000
Net decrease in cash and cash equivalents	(41,916 )	(780,972 )
Cash and cash equivalents, beginning of period	304,656	1,085,628
Cash and cash equivalents, end of period	\$ 262,740	\$ 304,656



**SUPPLEMENTAL CASH FLOW INFORMATION:**

Cash paid for interest	\$ 21,882	\$ -
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**NON-CASH FINANCING AND INVESTING ACTIVITIES:**

Settlement of accounts payable with the issuance of 202,703 shares of common stock	\$ 75,000	\$ -
Issuance of 1,115,991 for conversion of warrants	\$ 11,160	\$ -
Issuance of 888,692 shares of common stock and warrants for services	\$ -	\$ 512,880
Reclassification of warrant liability to equity upon warrant exercise	\$ 865,617	\$ -
Application of proceeds due and payable under note, including accrued interest, to purchase 2,667,503 and 2,321,422 shares of common stock, respectively, at \$0.26 per share	\$ 693,550	\$ 603,570
Issuance of note payable with a beneficial conversion feature	\$ 1,064,760	\$ -
Issuance of note payable with a discount equivalent to the relative fair value of the accompanying warrant	\$ 435,240	\$ -
Issuance of 1,000,384 shares of common stock in conversion of notes payable and accrued interest	\$ -	\$ 200,077

The accompanying notes are an integral part of these financial statements.

Dais Analytic Corporation

Notes to Financial Statements  
Years Ended December 31, 2011 and 2010

1. Background Information

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. The Company was incorporated in April of 1993 with its corporate headquarters located in Odessa, Florida.

The Company is 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, this would create a delay in production.

For the years ended December 31, 2011 and 2010, four and seven customers accounted for approximately 57% (four customers represented the following percentages of sales 18%, 15%, 12%, and 12%) and 61% (seven customers represented the following percentages of sales 13%, 13%, 9%, 7%, 7%, 6% and 6%) of the Company’s total revenue, respectively. At December 31, 2011 and 2010 amounts due from these customers was approximately 51% and 61% of total accounts receivable, respectively.

2. Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. For the year ended December 31, 2011, the Company incurred a net loss of \$2,335,204 and has incurred significant losses since inception. As of December 31, 2011, the Company has an accumulated deficit of \$37,973,166, negative working capital of \$3,222,163 and a stockholders’ deficit of \$4,900,910. The Company used \$1,329,734 and \$1,180,848 of cash from operations during 2011 and 2010, 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.

3. We filed a registration statement on Form S-1 with the SEC which was declared effective on March 13, 2012. Pursuant to the registration statement, we registered 40 million shares of our common stock at a price per share of \$0.26.

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.

### 3. Significant Accounting Policies

The significant accounting policies followed are:

**Use of estimates** - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**Cash and cash equivalents** - Cash and cash equivalents are maintained at financial institutions and, at times, balances may exceed federally insured limits. The Company has never experienced any losses related to these balances. All non-interest bearing cash balances were fully insured at December 31, 2011 due to a temporary federal program in effect from December 31, 2010 through December 31, 2012. Under the program, there is no limit to the amount of insurance for eligible accounts. Beginning 2013, insurance coverage will revert to \$250,000 per depositor at each financial institution, and the Company's non-interest bearing cash balances may again exceed federally insured limits.

**Accounts receivable** - Accounts receivable consist primarily of receivables from the sale of our ERV products. The Company regularly reviews accounts receivable for any bad debts based on an analysis of the Company's collection experience, customer credit worthiness, and current economic trends. After all attempts to collect a receivable have failed, the receivable is written off against the allowance. Based on management's review of accounts receivable, we have recorded an allowance for doubtful accounts of \$24,771 at December 31, 2011. No allowance for doubtful accounts was considered necessary at December 31, 2010. At December 31, 2011, the days sales outstanding was 76, as compared to 93 at December 31, 2010. The decrease in the number of days to collect our receivables is primarily a result of internal policies to collect receivables by their respective due dates.

**Inventory** - Inventory consists of raw materials and work-in-process and is stated at the lower of cost, determined by first-in, first-out method, or market. Market is determined based on the net realizable value, with appropriate consideration given to obsolescence, excessive levels, deterioration and other factors. At December 31, 2011 and 2010, the Company had \$9,344 and \$11,869 of in-process inventory, respectively. A reserve is recorded for any inventory deemed excessive or obsolete. No reserve is considered necessary at December 31, 2011 and 2010.

**Property and equipment** - Property and equipment are recorded at cost. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets ranging from 5 to 7 years. Depreciation expense was approximately \$36,000 and \$10,400 for the years ended December 31, 2011 and 2010, respectively. Gains and losses upon disposition are reflected in the statement of operations in the period of disposition. Maintenance and repair expenditures are charged to expense as incurred.

**Intangible assets** - Identified intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The Company's existing intangible assets consist solely of patents. Patents are amortized over their estimated useful or economic lives of 15 years. Patent amortization expense was approximately \$16,700 and \$4,900 for the years ended December 31, 2011 and 2010, respectively. Total patent amortization expense for the next five years is estimated to be approximately \$18,000 per year.

Long-lived assets - Long-lived 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. There have been no significant impairments of long-lived assets during the two-year period ended December 31, 2011.

Research and development expenses, and grant proceeds - Expenditures for research, development, and engineering of products are expensed as incurred. For the years ended December 31, 2011 and 2010, the Company incurred research and development costs of approximately \$821,400 and \$337,900, respectively. The Company accounts for proceeds received from government grants for research as a reduction in research and development costs. For the years ended December 31, 2011 and 2010, the Company recorded approximately \$769,200 and \$99,000, respectively, in grant proceeds against research and development expenses on the statements of operations.

Stock issuance costs - Stock issuance costs are recorded as a reduction of the related proceeds through a charge to stockholders' equity.

Common stock - The Company records common stock issuances when all of the legal requirements for the issuance of such common stock have been satisfied.

Revenue recognition - Generally, the Company recognizes revenue for its products upon shipment to customers, provided no significant obligations remain and collection is probable. This policy applies to all of our customers, including Genertec America (a distribution agreement) and CAST Systems Control Technology Co. (an agreement for the purchase of specific goods).

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. The Company has recorded an accrual of approximately \$47,400 and \$11,500 for future warranty expenses at December 31, 2011 and 2010, respectively.

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. The Company recognized revenue of \$82,000 from license agreements for both years ended December 31, 2011 and 2010.

Government Grants - Grants are recognized when there is reasonable assurance that the grant will be received and that any conditions associated with the grant will be met. When grants are received related to Property and Equipment, the Company reduces the basis of the assets on the balance sheet, resulting in lower depreciation expense over the life of the associated asset. Grants received related to expenses are reflected as a reduction of the associated expense in the period in which the expense is incurred.

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 will be 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 with the following assumptions for options granted during the years ended December 31, 2011 and 2010:

	Years Ended December 31,			
	2011		2010	
Dividend rate	0	%	0	%
	1.45% –		1.96% –	
Risk free interest rate	2.93	%	3.68	%
	6.5 – 10		5 – 6.5	
Expected term	years		years	
Expected volatility		%	97% – 112%	

180% –  
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The basis for the above 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 activity.

Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Based on historical experience of forfeitures, the Company estimated forfeitures at 0% for each of the years ended December 31, 2011 and 2010.

Non-employee stock-based compensation - The Company's accounting policy for equity instruments issued to consultants and vendors in exchange for goods and services follows the provisions of EITF 96-18, "Accounting for Equity Instruments That are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling Goods or Services," now ASC 505 and EITF 00-18 "Accounting Recognition for Certain Transactions Involving Equity Instruments Granted to Other Than Employees," now ASC 505. The measurement date for the fair value of the equity instruments issued is determined at the earlier of (i) the date at which a commitment for performance by the consultant or vendor is reached or (ii) the date at which the consultant or vendor's performance is complete. In the case of equity instruments issued to consultants, the fair value of the equity instrument is recognized over the term of the consulting agreement. Stock-based compensation related to non-employees is accounted for based on the fair value of the related stock or options or the fair value of the services, whichever is more readily determinable in accordance with ASC 718.

The fair value of warrants issued in 2010 was calculated using the Black-Scholes model with the following assumptions: Expected life in years: 5-10 years; Estimated volatility 96% - 100%; Risk-free interest rate: 2.38% - 2.57%; Dividend yield: 0%. There were no warrants issued to non-employees in conjunction with selling goods or services during the year ended December 31, 2011.

Financial instruments - The Company accounts for financial instruments in accordance with FASB Accounting Standards Codification (ASC) 820 "Fair Value Measurements and Disclosures" (ASC 820). ASC 820 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. ASC 820 defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. ASC 820 also establishes a fair value hierarchy that distinguishes between (1) market participant assumptions developed based on market data obtained from independent sources (observable inputs) and (2) an entity's own assumptions about market participant assumptions developed based on the best information available in the circumstances (unobservable inputs). The fair value hierarchy consists of three broad levels, which gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described below:

Level 1 - Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2 - Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly, including quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates); and inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 - Inputs that are both significant to the fair value measurement and unobservable.

Fair value estimates discussed herein are based upon certain market assumptions and pertinent information available to management as of December 31, 2011. The Company uses the market approach to measure fair value for its Level 1 financial assets and liabilities, which include cash equivalents of \$108,612 at December 31, 2011. The market approach uses prices and other relevant information generated by market transactions involving identical or comparable assets and liabilities.

The respective carrying value of certain on-balance sheet financial instruments approximated their fair values due to the short-term nature of these instruments. These financial instruments include cash, accounts receivable, other receivables, accounts payable, accrued compensation and accrued expenses. The fair value of the Company's non convertible notes payable is estimated based on current rates that would be available for debt of similar terms which is not significantly different from its stated value. The fair value of the Company's convertible notes payable is discussed



in Note 7.

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The Company's financial liabilities measured at fair value consisted of the following as of December 31, 2011 and were valued as discussed in Note 11:

	Fair Value Measurements at December 31, 2011			
	Total carrying value	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Warrant liability	\$ 1,888,218	\$ —	\$ —	\$ 1,888,218

A reconciliation of the beginning and ending fair values of financial instruments valued using significant unobservable inputs (Level 3) is presented as follows:

	Warrant Liability
Balance at December 31, 2010	\$ 3,958,318
Reclassification to equity upon warrant exercise	(865,617)
Changes in fair value	(1,204,483)
Balance at December 31, 2011	\$ 1,888,218

Income 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.

The Company identifies and evaluates uncertain tax positions, if any, and recognizes the impact of uncertain tax positions for which there is a less than more-likely-than-not probability of the position being upheld when reviewed by the relevant taxing authority. Such positions are deemed to be unrecognized tax benefits and a corresponding liability is established on the balance sheet. The Company has not recognized a liability for uncertain tax positions. If there were an unrecognized tax benefit, the Company would recognize interest accrued related to unrecognized tax benefits in interest expense and penalties in operating expenses. The Company's remaining open tax years subject to examination by the Internal Revenue Service include the years ended December 31, 2008 through 2011.

Loss per share - Basic and diluted loss per share are computed based on the weighted-average common shares and common share equivalents outstanding during the period. Common share equivalents consist of stock options, warrants and convertible notes payable. Common share equivalents of 54,641,797 and 39,026,278 were excluded from the computation of diluted earnings per share for the years ended December 31, 2011 and 2010, respectively, because their effect is anti-dilutive.

Derivative Financial Instruments - The Company does not use derivative instruments to hedge exposure to cash flow, market or foreign currency risk. Terms of convertible promissory note instruments are reviewed to determine whether or not they contain embedded derivative instruments that are required under ASC 815 "Derivative and Hedging" (ASC 815) to be accounted for separately from the host contract, and recorded on the balance sheet at fair value. The fair value of derivative liabilities, if any, is required to be revalued at each reporting date, with corresponding changes in fair value recorded in current period operating results.

Freestanding warrants issued by the Company in connection with the issuance or sale of debt and equity instruments are considered to be derivative instruments and are evaluated and accounted for in accordance with the provisions of ASC 815. Pursuant to ASC 815, an evaluation of specifically identified conditions is made to determine whether fair value of warrants issued is required to be classified as equity or as a derivative liability.

#### Recent Accounting Pronouncements

Recent accounting pronouncements issued by FASB (including EITF), the AICPA and the SEC did not or are not believed by management to have a material impact on the Company's present or future financial statements.

## 4. Property and Equipment

Property and equipment consist of the following:

	December 31,	
	2011	2010
Furniture and fixtures	\$ 38,764	\$ 38,764
Computer equipment	66,980	64,305
Demonstration equipment	169,129	104,871
Office and lab equipment	225,523	216,248
	500,396	424,188
Less accumulated depreciation	312,234	276,277
	\$ 188,162	\$ 147,911

## 5. Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following:

	December 31,	
	2011	2010
Prepaid expenses	\$ 5,695	\$ 31,070
Prepaid insurance	34,012	29,948
Prepaid services paid for with common stock	—	172,118
Deferred loan costs and deferred offering costs	175,389	25,000
	\$ 215,096	\$ 258,136

## 6. Accrued Expenses, Other

Accrued expenses, other consist of the following:

	December 31,	
	2011	2010
Accrued expenses, other	\$ 18,296	\$ 39,850
Accrued registration rights penalty	5,000	5,000
Accrued interest	—	14,676
Accrued interest, related party	320,548	157,683
Accrued warranty costs	47,365	11,452
Contractual obligation	13,200	13,200
	\$ 404,409	\$ 241,861

## 7. Notes Payable

Notes payable consist of the following:

	December 31,	
	2011	2010
Convertible notes payable; interest at 9%; collateralized by the Company's patents and patent applications; settled in 2011	\$ —	\$ 50,000
Convertible note payable, related party; interest at 10% per annum; due May 7, 2012	1,000,000	1,000,000
Secured convertible note payable, related party; interest at 10% per annum; due May 7, 2012	1,500,000	—
Note payable, related party; 10% interest; unsecured; settled with common stock during 2011	—	620,000
Note payable; related party	624	624
	2,500,624	1,670,624
Less unamortized discount	(358,555)	—
Less amounts currently due, net of unamortized discount	(2,142,069)	1,670,624
Long-term portion	\$ —	\$ —

In December 2009, we secured a 10% 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. The note's maturity date was extended to April 30, 2011. On March 22, 2011, the Company entered into a Securities amendment and exchange agreement and an amended and restated convertible promissory note ("Convertible Note", collectively "Exchange Agreements") with this investor. Pursuant to the terms and subject to the conditions set forth in the Exchange Agreements, the Company and the Investor amended and restated the \$1,000,000 unsecured promissory note to, among other things, add a conversion option and extend the maturity date to March 22, 2012 (as amended and restated, the "2011 Convertible Note") subsequently extended to May 7, 2012. Subject to the terms and conditions of the 2011 Convertible Note, including limitations on conversion, the outstanding principal and interest under the 2011 Convertible Note will automatically convert into shares of the Company's common stock at the then-effective conversion price upon the closing of a qualified firm commitment underwritten public offering or may be voluntarily converted by the investor at anytime during the debt term. The initial conversion price is \$0.26 per share. Any principal or interest which is not converted will be repaid by the Company at the earlier of a qualified offering, (as defined in the 2011 Convertible Note which is filed as an exhibit to the Form 8K filed with the Securities and Exchange Commission on March 28, 2011), or March 22, 2012, subsequently extended to May 7, 2012. Pursuant to and during the term of the 2011 Convertible Note, the Company will not issue or allow to exist any obligation for borrowed money, except for subordinate indebtedness in payment and priority, trade payables incurred in the ordinary course of business, purchase money secured indebtedness for equipment or inventory, unsecured and subordinate, or unsecured and subordinate working capital guarantees provided by, the Export Import Bank of the United States (the "EXIM Bank"), and indebtedness evidenced by the promissory note dated February 19, 2010 issued to RBC Capital Markets- Custodian of Leonard Samuels IRA (as amended) in the principal amount of \$620,000.

On March 22, 2011, in connection with the above Exchange Agreements, the Company entered into amendments to existing warrant agreements with the investor to extend the terms of the existing stock purchase warrants, dated on or about December 31, 2007 and March 12, 2009, respectively, to March 22, 2016 and to provide for cashless exercise unless such warrant shares are registered for resale under a registration statement. In addition, on March 22, 2011, the Company issued an additional stock purchase warrant to the investor to purchase 1,000,000 shares of the Company's

common stock at \$0.45 per share, exercisable commencing on the earliest of the consummation of the qualified offering (as defined in the Exchange Agreements), the date of conversion of the Convertible Note in full, or the date of conversion of the Convertible Note by the investor in the greatest number of shares of the Company's common stock not to exceed 9.99% beneficial ownership of Company outstanding common stock and terminating on March 22, 2016.

The 2011 Convertible Note is a hybrid financial instruments that blends characteristics of both debt and equity securities. The note embodies settlement alternatives to the holder providing for either redemption of principal and interest in cash (forward component) or conversion into the Company's common stock (embedded conversion feature). The forward component was valued using the present value of discounted cash flows arising from the contractual principal and interest payment terms and the embedded conversion feature was valued using the Monte Carlo simulation method. The fair value of the 2011 Convertible Note was estimated to be \$1,964,905 on the date of the exchange, which resulted in a loss on extinguishment of debt of \$964,905. Further, in accordance with ASC 470-20-25 and ASC 470-50-40, the net premium of \$964,905 associated with the 2011 Convertible Note was reclassified to capital in excess of par value under the presumption that such net premium represented a capital contribution. Consequently, the 2011 Convertible Note is being carried at face value. The fair value of the additional warrant to purchase 1,000,000 shares and the value associated with the previously issued warrants that were amended was determined to be \$716,890 using the Black-Scholes option model and is included in the aggregate loss on extinguishment of \$1,681,795. Since the loan is held by a related party, the loss on extinguishment has been treated as a capital transaction and, as a result, this transaction had no effect on capital in excess of par value.

Also, on March 22, 2011, the Company entered into a 10% note and warrant purchase agreement, secured convertible promissory note and patent security agreement ("financing agreements") with the investor. Pursuant to the terms and subject to the conditions set forth in the financing agreements, the investor has provided a bridge loan in the amount of \$1,500,000 to the Company, which is secured by all patents, patent applications and similar protections of the Company and all rents, royalties, license fees and "accounts" with respect to such intellectual property assets. Pursuant to the secured convertible promissory Note ("Secured Note"), interest in the amount of 10% per annum, calculated on a 365 day year, and the principal amount of \$1,500,000 is due and payable on March 22, 2012, subsequently extended to May 7, 2012, but repayment is accelerated upon a qualified offering (as defined in the note). In the event of such qualified offering, and subject to the terms and conditions of the Secured Note, the outstanding principal and interest under the Secured Note will automatically convert, subject to the limitations on conversion described in the note, into shares of the Company's common stock at the then-effective conversion price upon the closing of such qualified offering. The initial conversion price is \$0.26 per share. Any principal or interest which is not converted will be repaid by the Company at the earlier of a qualified offering or March 22, 2012, subsequently extended to May 7, 2012. No cash fees were paid to any party to the transaction in exchange for lending the money.

On March 22, 2011, in connection with the above financing agreements, the Company issued a stock purchase warrant to the investor to purchase 3,000,000 shares of the Company's common stock at \$0.45 per share, exercisable until March 22, 2016. The warrant was fair valued on the date of issuance, which amounted to \$1,204,787. The warrant value was recorded as a debt discount based on the relative fair value of the warrant to the total proceeds received, which amounted to \$435,240. The warrant was fair valued using the Black-Scholes-Merton valuation model. In addition, the debt contained a beneficial conversion feature, which was valued at the date of issuance at \$1,762,163; however, since this amount is in excess of the net value of the debt less the warrant discount, the beneficial conversion feature will be limited to \$1,064,760 and recorded as a discount on the loan. The total debt discount of \$1,500,000 is being amortized using the effective interest method over the 12-month term of the Secured Note. For the year ended December 31, 2011, the Company recognized \$1,141,445 in additional expense representing amortization of this debt discount.

The fair value of warrants issued in 2011 related to the above debt transaction were calculated using the Black-Scholes model with the following assumptions: Expected life in years: 5-10 years; Estimated volatility 115%-117%, Risk-free interest rate: 1.89%-2.07%; Dividend yield: 0%.

In connection with a qualified offering, and subject to the terms and conditions of the Convertible Note, the Company will use reasonable efforts to include the investor's securities in such offering. Pursuant to the terms and conditions of the Exchange Agreements, the investor will not, if requested in writing by the underwriter, sell, offer to sell or

otherwise transfer or dispose of (other than to affiliates) any securities of the Company held by it for a period of 180 days from the date of the final prospectus relating to such qualified offering, except for certain limited sales as more fully described in the Exchange Agreements.



Pursuant to and during the term of the Secured Note, the Company will not issue or permit to exist any obligation for borrowed money, except for trade payables incurred in the ordinary course of business, purchase money secured indebtedness for equipment or inventory, unsecured and subordinate indebtedness to, or unsecured and subordinate working capital guarantees provided by, the EXIM Bank, the promissory note dated February 19, 2010 issued to RBC Capital Markets- Custodian of Leonard Samuels IRA (as amended) in the principal amount of \$620,000, the 2011 Convertible Note, dated March 22, 2011, issued to the investor in the principal amount of \$1,000,000 and other unsecured indebtedness for borrowed money in an amount not to exceed \$750,000.

Pursuant to the Patent Security Agreement issued in connection with the Note and Warrant Purchase of March 22, 2011, the Company shall not, without the investor's prior consent, sell, dispose or otherwise transfer all or any portion of the collateral, except for license grants in the ordinary course of business. In addition, the Company will take all actions reasonably necessary to prosecute to allowance applications for patents and maintain all patents, and to seek to recover damages for infringement, misappropriation or dilution of the Collateral with limited exceptions.

On February 19, 2010, the Company issued an unsecured promissory note to RBC Capital Markets- Custodian of Leonard Samuels IRA in the principal amounts of \$620,000. Pursuant to the terms of the note, the Company is to pay the holder simple interest at the rate ten percent per annum commencing on the date of issuance with all interest and principal due and payable in cash on or before May 31, 2011. After receipt of proceeds on the foregoing loans, we may not incur more than \$500,000 in debt without the holders' prior approval and said additional debt may not be senior to these promissory notes without holder's permission. During the term of the note, the note holder has the right to participate, by investing additional funds the total amount of which may not exceed the outstanding balance of the holder's note, in any subsequent financings undertaken by the Company. Any such participation shall be upon the same terms as provided for in the subsequent financing. If an event of default were to occur and said default is not cured within the allotted period, the holders may declare all principal and accrued and unpaid interest due and payable without presentment, demand, protest or notice. Further, in addition to all remedies available under law, each holder may in the event of a default opt to convert the principal and interest outstanding under its note into any debt or equity security which Company issued after the date of its note and prior to the date of full payment of its note in accordance with the same terms as the subsequent financing. On May 12, 2011, the investor elected to apply all of the proceeds due and payable under the promissory note, including all accrued interest, to the purchase of the Company's Common Stock. Pursuant to this transaction, the investor subscribed for and received 2,667,503 shares of Common Stock at a purchase price of \$0.26 per share resulting in an aggregate purchase price of \$693,550. As part of the purchase, the investor also received a five-year warrant to purchase 962,500 shares of Common Stock, at an exercise price of \$0.45 per share. The warrant is immediately exercisable and subject to adjustment for standard anti-dilution events, including but not limited to stock dividends, split-up, reclassification or combination of Company's shares, exchange of stock for other Company stock, or certain capital reorganizations or reclassification of the capital stock or consolidation, merger or sale of substantially all Company's assets. In addition, as part of this transaction, the warrants issued to this investor on December 20, 2007, December 31, 2007 and October 15, 2009 were amended to include a cashless exercise provision.

The number of shares issued was based upon an agreed-upon per share price of \$0.26, which was below the underlying fair value of the Company's common stock on May 12, 2011 of \$0.40 resulting in a loss on extinguishment of debt of \$373,450. The fair value of the five year warrant that was issued was determined to be \$310,652 using the Black-Scholes option model and is included in the aggregate loss on extinguishment of \$684,102. Since the investor is a related party, the loss on extinguishment has been recorded as a capital transaction and, as a result, had no effect on capital in excess of par.

Accrued interest on the above outstanding notes was \$320,548 and \$157,683 at December 31, 2011 and 2010, respectively.



## 8. Related Party Transactions

Timothy N. Tangredi, our Chief Executive Officer and Chairman, is a founder and a member of the board of directors of Aegis BioSciences, LLC (“Aegis”). Mr. Tangredi currently owns 52% of Aegis’ outstanding equity and spends approximately one to two days per month on Aegis business for which he is compensated by Aegis. Aegis has two exclusive, world-wide licenses from us under which it has the right to use and sell products containing our polymer technologies in biomedical and health care applications. As a result of a \$150,000 payment made by Aegis, the first license is considered fully paid and as such no additional license revenue will be forthcoming. Pursuant to the second license Aegis made an initial one-time payment of \$50,000 and 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.

The Company rents a building that is owned by two stockholders of the Company, one of which is the Chief Executive Officer. Rent expense for this building is \$3,800 per month. The Company recognized rent expense of approximately \$49,000 in each of the years ended December 31, 2011 and 2010. At December 31, 2011 and 2010, \$58,459 and \$151,440, respectively, were included in accounts payable for amounts owed to these stockholders for rent.

The Company also has accrued compensation due to the Chief Executive Officer and two other employees for deferred salaries earned and unpaid as of December 31, 2011 and 2010 of \$1,405,606 and \$1,426,022, respectively.

The above terms and amounts are not necessarily indicative of the terms and amounts that would have been incurred had comparable transactions been entered into with independent parties.

## 9. Preferred Stock

The Company’s Board of Directors has authorized 10,000,000 million shares of preferred stock with a par value of \$0.01 to be issued in series with terms and conditions to be determined by the Board of Directors. The Company has designated 400,000 shares of Series A convertible preferred stock; 1,000,000 shares of Series B convertible preferred stock; 500,000 shares of Series C convertible preferred stock; and 1,100,000 shares of Series D convertible preferred stock. The Series A through D convertible preferred stock rank senior to the common stock as to dividends and liquidation. Each share of Series A through D convertible preferred stock is convertible into one share of common stock, except in specified circumstances as defined by the Company’s Certificate of Incorporation, and is automatically converted into common stock upon the occurrence of an initial public offering that meets certain criteria. No dividend or distribution may be paid on any shares of the Company’s common stock unless an equivalent dividend or distribution is paid on the Series A through D convertible preferred stock.

## 10. Stock Options and Warrants

In June 2000 and November 2009, our Board of Directors adopted, and our shareholders approved, the 2000 Incentive Compensation Plan (“2000 Plan”) and the 2009 Long-Term Incentive Plan (“2009 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. The Company’s Board of Directors approved and made available 11,093,882 and 15,000,000 shares of common stock to be issued pursuant to the 2000 Plan and the 2009 Plan, respectively. The 2000 Plan permits grants of options to purchase common shares authorized and approved by our

Board of Directors and shareholders for issuance prior to the enactment of the 2000 Plan. The Plans permit grants of options to purchase common shares authorized and approved by the Company's Board of Directors.

The average fair value of options granted at market during 2011 and 2010 was \$0.32 and \$0.25 per option, respectively. The total intrinsic value of options exercised during the years ended December 31, 2011 and 2010 was \$0 and \$0, respectively.

The following summarizes the information relating to outstanding stock options activity with employees during 2011 and 2010:

	Common Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding at December 31, 2009	12,298,882	\$ 0.26	7.64	\$ 1,052,839
Granted	2,970,000	\$ 0.30		
Forfeited or expired	(371,125)	\$ 0.32		
Outstanding at December 31, 2010	14,897,757	\$ 0.25	7.19	\$ 946,754
Granted	2,825,000	\$ 0.32		
Forfeited or expired	(320,000)	\$ 0.22		
Outstanding at December 31, 2011	17,402,757	\$ 0.32	6.66	\$ 352,065
Exercisable at December 31, 2011	16,308,521	\$ 0.32	6.51	\$ 351,701
Exercisable at December 31, 2010	13,834,563	\$ 0.25	7.02	\$ 940,594

Stock compensation expense was approximately \$917,000 for the year ended December 31, 2011 and \$651,000 for the year ended December 31, 2010. The total fair value of shares vested during the years ended December 31, 2011 and 2010 was approximately \$817,000 and \$556,000, respectively.

As of December 31, 2011, there was approximately \$263,000 of unrecognized employee stock-based compensation expense related to non vested stock options, of which \$166,000, \$83,000 and \$14,000 is expected to be recognized for the years ended December 31, 2012, 2013 and 2014, respectively.

The following table represents our non vested share-based payment activity with employees for the year ended December 31, 2011 and 2010:

	Number of Options	Weighted Average Grant Date Fair Value
Nonvested options - December 31, 2009	347,861	\$ 0.27
Granted	2,970,000	\$ 0.25
Forfeited	(10,004)	\$ 0.28
Vested	(2,244,663)	\$ 0.25
Nonvested options - December 31, 2010	1,063,194	\$ 0.25
Granted	2,825,000	\$ 0.32
Vested	(2,643,958)	\$ 0.31
Forfeited	(150,000)	\$ 0.29
Nonvested options - December 31, 2011	1,094,236	\$ 0.29

#### Warrants

At December 31, 2011, the Company had outstanding warrants to purchase the Company's common stock which were issued in connection with multiple financing arrangements and consulting agreements. Information relating to these warrants is summarized as follows:

Warrants	Remaining Number Outstanding	Weighted Average Remaining Life (Years)	Weighted Average Exercise Price
Warrants-Daily Financing	12,500	.17	\$ 0.55
Warrants-Additional Financing	428,637	.70	\$ 0.55
Warrants-Robb Trust Note	50,000	.42	\$ 0.55
Warrants-Financing	17,000,000	1.75	\$ 0.30
Warrants-Placement Agent Warrants	401,333	1.08	\$ 0.25
Warrants-Tangredi	3,000,000	1.25	\$ 0.36
Warrants-Ehrenberg	250,000	1.59	\$ 0.30
Warrants-Consulting Agreement	825,000	2.77	\$ 0.30
Warrants-Note Conversions	2,302,538	2.42	\$ 0.39
Warrants-Stock Purchases	1,720,770	3.50	\$ 0.40
Warrants-Services	400,000	3.06	\$ 0.50
Total	26,390,778		

#### Common Stock Issued For Services

The Company issued 207,692 shares of common stock during the year ended December 31, 2011 valued at \$74,769 for legal services. For the year ended December 31, 2011, the Company has recorded \$74,769 as legal expense related to these services in its statements of operations.

The Company issued 17,500 shares of common stock during the year ended December 31, 2011 valued at \$6,475 for consulting services.

On September 6, 2011, the Company issued 202,703 shares of common stock valued at \$75,000 to legal counsel, Richardson and Patel, LLP, in settlement of accounts payable for services rendered.

The Company entered into an agreement for consulting services in April 2010. The term of the agreement is for seventeen months and calls for the Company to issue the consultant 100,000 shares of common stock upon execution of the agreement and an additional 100,000 shares of common stock after six months of service. The agreement also calls for a monthly cash payment of \$6,000 for the first six months and \$7,500 per month for the remainder of the agreement. The Company has fair valued the initial 100,000 shares of common stock at \$53,000 and the additional 100,000 shares of common stock at \$36,000 and is expensing the fair value of those shares over life of the agreement. For the year ended December 31, 2010, the Company has recorded \$68,000 as consulting expense on its statement of operations and included \$21,000 as prepaid expenses in the balance sheet. The \$21,000 of prepaid expenses was recognized as consulting expense during 2011.

The Company issued 207,692 shares of common stock during the year ended December 31, 2010 valued at \$64,384 for legal services to be provided from January 1, 2010 through December 31, 2010. For the year ended December 31, 2010, the Company has recorded \$64,384 as legal expense in its statement of operations.

On November 4, 2010, the Company entered into an agreement for legal services in exchange for 375,000 shares of Common Stock valued at \$150,000. For the year ended December 31, 2011 and 2010, the Company has recorded \$150,000 as prepaid expenses in the accompanying balance sheet.

## 11. Derivative Financial Instruments

In September 2008, the FASB ratified the consensus reached on EITF Issue No. 07-5, Determining Whether an Instrument (or an Embedded Feature) is Indexed to an Entity's Own Stock ("EITF 07-5") (codified as ASC 815-40-15-5). This EITF provides guidance for determining whether an equity-linked financial instrument (or embedded feature) is indexed to an entity's own stock. The EITF applies to any freestanding financial instrument or embedded feature that has all the characteristics of a derivative under ASC 815-10-15-13 through 15-130, Accounting for Derivative Instruments and Hedging Activities, for purposes of determining whether that instrument or embedded feature qualifies for the first part of the scope exception. The EITF also applies to any freestanding financial instrument that is potentially settled in an entity's own stock, regardless of whether the instrument has all the characteristics of a derivative under ASC 815-10-13 through 15-130, for purposes of determining whether the instrument is within the scope of EITF No. 00-19 Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock ("EITF 00-19") (codified as ASC subtopic 815-40). EITF No. 07-5 was effective beginning the first quarter of fiscal 2009.

Due to certain adjustments that may be made to the exercise price of the warrants issued in December 2007, January 2008 and August 2008, if the Company issues or sell shares of its common stock at a price which is less than the then current warrant exercise price, these warrants have been classified as a liability as opposed to equity in accordance with the Derivatives and Hedging Topic of the FASB ASC 815-10-15 as it was determined that these warrants were not indexed to the Company's stock. As a result, the fair market value of these warrants was remeasured on January 1, 2009 and marked to market at each subsequent financial reporting period. The change in fair value of the warrants is recorded in the statement of operations and is estimated using the Black-Scholes option-pricing model with the following assumptions:

	For the Years Ended December 31,	
	2011	2010
Exercise price	\$ 0.25	\$ 0.25
Market value of stock at end of period	\$ 0.25	\$ 0.29
Expected dividend rate	N/A	N/A
Expected volatility	143% – 146%	158% – 165%
Risk-free interest rate	0.12% – 0.25%	0.61% – 0.82%
Expected life in years	0.95 – 1.08	2.00 – 2.58
Shares underlying warrants outstanding classified as liabilities	13,401,333	15,543,641

All warrants issued by the Company other than the above noted warrants are classified as equity.





During the fourth quarter of the year ended December 31, 2010, the Company applied the guidance of Accounting Standards Codification 815-40 (ASC 815-40) and recorded a \$618,801 gain on the fair value of the warrant liability for the year then ended. The warrants had been issued in December 2007, January 2008 and August 2008, in connection with convertible promissory notes and were originally accounted for as an equity instrument. Upon further review of the warrants, it was determined that these warrants were not indexed to the Company's stock and therefore required derivative accounting treatment. If the Company would have recorded these warrants as a derivative liability upon initial adoption of ASC 815-40, the Company would have recorded the following amounts in its balance sheets and statements of operations in the periods indicated:

	Total Liabilities		Total Liabilities		Stockholders' Deficit		Stockholders' Deficit	
	As previously Reported	Change	As Restated	As Restated	As previously Reported	Change	As Restated	As Restated
March 31, 2010	\$ 5,117,253	\$ 6,085,147	\$ 11,202,400	\$ 11,202,400	\$ (3,058,161)	\$ (6,085,147)	\$ (9,143,308)	\$ (9,143,308)
June 30, 2010	\$ 5,165,059	\$ 4,250,053	\$ 9,415,112	\$ 9,415,112	\$ (3,094,998)	\$ (4,250,053)	\$ (7,345,051)	\$ (7,345,051)
September 30, 2010	\$ 5,147,657	\$ 4,861,284	\$ 10,008,941	\$ 10,008,941	\$ (3,428,140)	\$ (4,861,284)	\$ (8,289,424)	\$ (8,289,424)

	Other Inc (Exp) As previously Reported	Change	Other Inc (Exp) As Restated	Net Loss As previously Reported	Change	Net (Loss) Income As Restated	EPS As previously Reported	EPS As Restated
For the Three Months Ended:								
March 31, 2010	\$ (46,504)	\$ (1,508,027)	\$ (1,554,531)	\$ (520,038)	\$ (1,508,027)	\$ (2,028,065)	\$ (0.02)	\$ (0.07)
June 30, 2010	\$ (55,233)	\$ 1,835,094	\$ 1,779,861	\$ (624,681)	\$ 1,835,094	\$ 1,210,413	\$ (0.02)	\$ 0.04
September 30, 2010	\$ (55,933)	\$ (611,231)	\$ (667,164)	\$ (555,692)	\$ (611,231)	\$ (1,166,923)	\$ (0.02)	\$ (0.04)

## 12. Deferred Revenue

The Company entered into a licensing agreement during the year ended December 31, 2003 and received an initial fee of \$770,000. This fee is deferred and recognized on a straight-line basis over the life of the license agreement of 10 years. In addition, the Company received royalties of \$100,000 in each of the first three years of the agreement. The Company recognized revenue of approximately \$77,000 for this agreement during each of the years ended December 31, 2011 and 2010.

The Company entered into a licensing agreement with a biomedical entity during the year ended December 31, 2005 and received an initial license fee of \$50,000. This fee is deferred and recognized on a straight-line basis over the life of the license agreement of 7 years. The Company recognized revenue of approximately \$5,000 for this agreement during each of the years ended December 31, 2011 and 2010.

## 13. Commitments and Contingencies

The Company has employment agreements with some of its key employees and executives. These agreements provide for minimum levels of compensation during current and future years. In addition, these agreements call for grants of stock options and for payments upon termination of the agreements.

Timothy Tangredi. The Company entered into an amended and restated employment agreement with Mr. Timothy N. Tangredi, our President, Chief Executive Officer, and director, dated as of September 14, 2011. Mr. Tangredi's employment agreement provides for an initial term of three years commencing on September 14, 2011 with the term extending on the second anniversary thereof for an additional two year period and on each subsequent anniversary of the commencement date for an additional year. Mr. Tangredi's initial base salary is \$200,000. Mr. Tangredi's base salary shall be increased annually, if applicable, by a sum equal to his current base salary multiplied by one third of the percentage increase in our yearly revenue compared to our prior fiscal year revenue; provided however any annual increase in Mr. Tangredi's base salary shall not exceed a maximum of 50% for any given year. Any further increase in Mr. Tangredi's base salary shall be at the sole discretion of our board of directors or compensation committee (if applicable). Additionally, at the discretion of our board of directors and its compensation committee, Mr. Tangredi may be eligible for an annual bonus, if any, of up to 100% of his then-effective base salary, if he meets or exceeds certain annual performance goals established by the board of directors. In addition to this bonus, Mr. Tangredi may be eligible for a separate merit bonus if approved by the board of directors, for specific extraordinary events or achievements such as a sale of a division, major license or distribution arrangement or merger. Mr. Tangredi is entitled to medical, disability and life insurance, as well as four weeks of paid vacation annually, an automobile allowance, reimbursement of all reasonable business expenses, automobile insurance and maintenance, and executive conference or educational expenses.

Under his employment agreement, in addition to any other compensation which he may receive, if we complete a secondary Public Offering, Mr. Tangredi will be granted an option under our 2009 Plan to purchase up to 520,000 shares of our common stock with an exercise price equal to the fair market value per share on the date of grant. This option will become vested and exercisable in thirds, with one third vested upon grant, another third at the one-year anniversary of the grant, and another third upon the second anniversary of the grant. The option shall 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 it 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.



If Mr. Tangredi's employment is terminated for any reason, we will be obligated to pay him his accrued but unpaid base salary, bonus and accrued vacation pay, and any unreimbursed expenses ("Accrued Sums").

In addition to any Accrued Sums owed, if Mr. Tangredi's employment is terminated by us in the event of his disability or without cause or by Mr. Tangredi for good reason, he shall be entitled to:

- (i) an amount equal to the sum of (A) the greater of 150% of the base salary then in effect or \$320,000 plus (B) the cash bonus and/or merit bonus, if any, awarded for the most recent year;
- (ii) health and life insurance, a car allowance and other benefits set forth in the agreement until two years following termination of employment, and thereafter to the extent required by COBRA or similar statute; and
- (iii) all stock options, to the extent they were not exercisable at the time of termination of employment, shall become exercisable in full.

In addition to any Accrued Sum owed, in the event of termination upon death, Mr. Tangredi shall be entitled to (i) and (iii) above.

In addition to any Accrued Sums owed, in the event that Mr. Tangredi elects to terminate employment within one year following a change in control, he shall receive a lump sum payment equal to the sum of (a) the greater of his then current base salary or \$210,000 plus (b) the cash bonus and merit bonus, if any, awarded in the most recent year. In addition, he will be entitled to (ii) and (iii) above.

The employment agreement also contains customary covenants restricting the use of our confidential information and solicitation of employees, which are similarly applicable to our other executive officers. In addition we are obligated to indemnify Mr. Tangredi for any claims made against him in connection with his employment with us, to advance indemnification expenses, and maintain his coverage under our directors' and officers' liability insurance policy.

Under the employment agreement, we and Mr. Tangredi have agreed that we will retain an independent compensation consultant, whose recommendations shall be obtained by January 31, 2012 which may modify the compensation program for Mr. Tangredi and other officers, subject to certain conditions including approval of the board of directors. Notwithstanding the recommendation and board consideration, Mr. Tangredi has the right to continue the current terms of the employment agreement.

Patricia Tangredi. In April 2011, the Company entered into an employment agreement with the Company's General Counsel, Patricia Tangredi. The employment term is for four years with automatic renewals. The agreement includes an annual base salary of \$120,000 with an increase to \$150,000 upon completion of a successful Secondary Public Offering of at least \$10 million. The agreement also provides for a minimum of 50,000 options to be awarded annually along with other standard employment benefits.

Scott Ehrenberg. May 2011, the Company entered into an employment agreement with Scott Ehrenberg, our Chief Technology Officer and Secretary. The employment agreement provides for an initial term of two 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 includes an initial base salary is \$110,000, with an increase to \$165,000 per annum. Additionally, at the discretion of our board of directors and its compensation committee, Mr. Ehrenberg may be eligible for an annual bonus which amount, if any, will not be below 50% of his effective base salary and not exceeding 100% of his then effective base salary; provided that, under certain extraordinary circumstances, Mr. Ehrenberg may be eligible for an annual bonus greater than 150% of his then effective base salary. Upon completion of a successful secondary Public Offering, Mr. Ehrenberg is eligible to receive a one-time payment of \$20,000 for each U.S. patent of which he is the originator and the first name listed on the

patent as inventor of the intellectual property described in such patent. In addition to any other compensation which Mr. Ehrenberg may receive under the agreement, he will be granted a stock option to purchase 40,000 shares of common stock at the end of each year or on the annual anniversary of the agreement, whichever is mutually acceptable to the Company and Mr. Ehrenberg.

On September 17, 2010, the U.S. Department of Energy approved a grant of up to \$681,322 to the Company for the funding of a project to scale up, in size and field trial, a dehumidification system similar to the Company's NanoAir prototype. The grant is conditioned upon the Company contributing \$171,500 of the proposed total project cost of \$852,822. The Company will receive the grant amount upon submission of reimbursement request for allowable expenses. For the years ended December 31, 2011 and 2010, the Company has incurred \$601,059 and \$79,786, respectively, in expenses and recognized the same amount as revenue related to this grant award.

In December 2010, Pasco County Florida approved a grant of \$254,500 to the Company for the funding of the NanoAir product into commercialization. The grant from Pasco County requires us to pay the county 2% of the gross sales of products using a certain unique pump assembly for 5 years or for a total of \$1,000,000 whichever comes first. For the years ended December 31, 2011 and 2010, the Company has incurred \$168,095 and \$19,946, respectively, in expenses and recognized the same amount as revenue related to this grant award.

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

#### 14. Income Taxes

There is no current or deferred income tax expense or benefit for the years ended December 31, 2011 and 2010.

The provision for income taxes is different from that which would be obtained by applying the statutory federal income tax rate to income before income taxes. The items causing this difference are as follows:

	Year ended December 31,	
	2011	2010
Tax benefit at U.S. statutory rate	\$ (794,000)	\$ (487,000)
State income tax benefit, net of federal benefit	(85,000)	(52,000)
Effect of non-deductible expenses	1,000	1,000
Employee stock-based compensation	312,000	221,000
Change in warrant valuation	(410,000)	(210,000)
Amortization of debt discount	275,000	—
Other adjustments	26,000	154,000
Change in valuation allowance	675,000	373,000
	\$ —	\$ —

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities are as follows:

	December 31,	
	2011	2010
Deferred tax assets (liabilities), current:		
Allowance for doubtful accounts	\$ 9,300	\$ —
Bonus payable	108,300	108,300
Accrued deferred compensation payable	420,600	428,300
Accrued shareholder interest	120,600	—
Stock warrant consideration and other	102,200	84,000
Deferred license revenue	21,400	30,900
Valuation allowance	(782,400)	(651,500)

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	\$	—	\$	—
Deferred tax assets (liabilities), noncurrent:				
Deferred license revenue	\$	36,100	\$	48,100
Depreciation		3,400		3,400
Net operating loss carryforwards		8,100,500		7,544,600
Valuation allowance		(8,140,000)		(7,596,100)
	\$	—	\$	—

As of December 31, 2011 and 2010, the Company had federal and state net operating loss carry-forwards totaling approximately \$21,500,000 and \$20,100,000, respectively, which begin expiring in 2012. The Company has established a valuation allowance to fully reserve all deferred tax assets at December 31, 2011 and 2010 because it is more likely than not that the Company will not be able to utilize these assets. The change in the valuation allowance for the years ended December 31, 2011 and 2010 was an increase of \$675,000 and \$373,000, respectively.



As of December 31, 2011, the Company has not performed an IRC Section 382 study to determine the amount, if any, of its net operating losses that may be limited as a result of the ownership change percentages during 2011. However, the Company will complete the study prior to the utilization of any of its recorded net operating losses.

#### 15. Genertec Agreement

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 Greater China, including mainland 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 \$200 million. 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 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 Genertec 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. During 2011, Genertec expressed a desire to limit its participation in this endeavor as they find NanoAir and NanoClear to have engineering requirements they are not best suited to undertake. Subsequent to year end, we determined that the likelihood of collecting the outstanding receivable would be unlikely, therefore we have reversed the \$350,000 uncollected balance due to the Company from Genertec for the deposit in accounts receivable against deferred revenue in 2011. The parties are continuing to discuss modifications to or termination of this agreement and the CAST agreement (discussed below).

#### 16. CAST Systems Control Technology

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. 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. For the year ended December 31, 2010, we have sold one unit under this agreement and recognized \$300,000 in revenue which has been billed and \$254,000 of which has been collected. Subsequent to year end, the Company has determined that the remainder of the receivable of \$56,356 is not

likely to be collected and it has been recorded as bad debt expense during the year ended December 31, 2011.

17. Subsequent Events

No material events have occurred subsequent to December 31, 2011 that require recognition or disclosure in these financial statements except for those discussed below.

Effective March 20, 2011, the Company and Platinum-Montaur Life Sciences LLC amended the Secured Convertible Promissory Note and Convertible Promissory Note to extend the maturity date to May 7, 2012.