

Dais Analytic Corporation Is Positioned For Future Growth As It Offers Better Ways To Clean Water And Improve The Air We Breathe While Being Energy Efficient

**Energy Technology
 Nanotechnology
 (DLYT-OTC: BB)**



Timothy N. Tangredi
Chairman, President and CEO

BIO:

Since 1998, Tim Tangredi has served as chief executive officer of Dais Analytic Corporation. In addition, Tangredi serves as Dais' chairman of the board and president. He has been Director of Dais Analytic Corporation since 1994. During his tenure, Tangredi has executed the strategic purchases of Analytic Power and American Fuel Cell Corporation, initiated four foreign joint ventures, and raised over \$22M for Dais. He is also a founder and a member of the Board of Directors of Aegis Biosciences, LLC ("Aegis"). Prior to joining Dais, Tangredi worked for AT&T, and afterwards grew and sold two businesses. Tangredi earned his BS from Siena College and his MBA from Rensselaer Polytechnic Institute.

Company Profile:

Dais Analytic Corporation (OTCBB-DLYT) is commercializing its nanotech-

nology materials and processes into break-through products to become a leading participant in the applied nanotechnology industry with a specialized focus on the needs of the energy and water industries. Products incorporating Dais' nanotechnology (www.daisanalytic.com) minimize consumption of irreplaceable natural resources and stop degradation of our environment. Dais is located in Odessa, Florida.

Interview conducted by:
Lynn Fosse, Senior Editor
CEOCFOinterviews.com

CEOCFO: Mr. Tangredi, what is Dais Analytic all about?

Mr. Tangredi: Dais' mission is to offer the world-wide market better ways to clean water and improve the air we breathe while vastly increasing energy efficiency and lowering carbon footprint. Our proven technology gives this ability across a platform of new energy and water applications. Dais takes a very simple piece of plastic and adds intelligence to it then, using that intelligence, produces more energy efficient products. Our technology transforms products that use pumps and motors to accomplish the same end goal much more efficiently and normally less expensively using physics and chemistry found in our nanotechnology. The upside is that it is better for the people using it from a dollars and cents standpoint as well as for our environment as we conserve our natural resources.

Key applications of focus for the nanomaterials include (but certainly not limited) to:

- **ConSERV™ & NanoAir™** heating and A/C products: A breakthrough process for all

forms of heating/cooling/refrigeration equipment which uses 50% less energy, lowering harmful emissions by a similar percentage, and uses no fluorocarbon producing refrigerants. The savings is a direct comparison against current generation heating and cooling systems based on the century-old mechanical and fluorocarbon refrigeration based gas process.

- **NanoClear™:** Revolutionizing water cleaning through an eco-friendly, affordable, scalable, and simple process having control and selectivity to filter and remove harmful substances, providing abundant, energy-efficient, affordable clean water from waste water or desalination meeting the latest EPA 'parts per billion' standard.
- **NanoCap™:** A "game changing" energy storage product (an ultracapacitor) which uses Dais' family of materials is showing early test results of being able to exceed lithium-ion energy density by three times, and to be the electric equal in energy density to gasoline. Work and testing has been done with GE's Global R&D Center.

CEOCFO: Would you give us an example?

Mr. Tangredi: The world is running out of clean water. People understand that. Conventional water clean up is conducted

by using pumps and motors to heat up and push salt or brackish water at a very high temperature and high pressure at a plastic membrane with tiny little holes which costs money and consumes excessive energy. This process and membrane is different from ours in that in order to get the water droplet through that tiny hole, the industry puts some type of treatment in the water as it is approaching the membrane. Then, when the water and other particulates come through the tiny hole, the water is post-treated with additional chemicals.

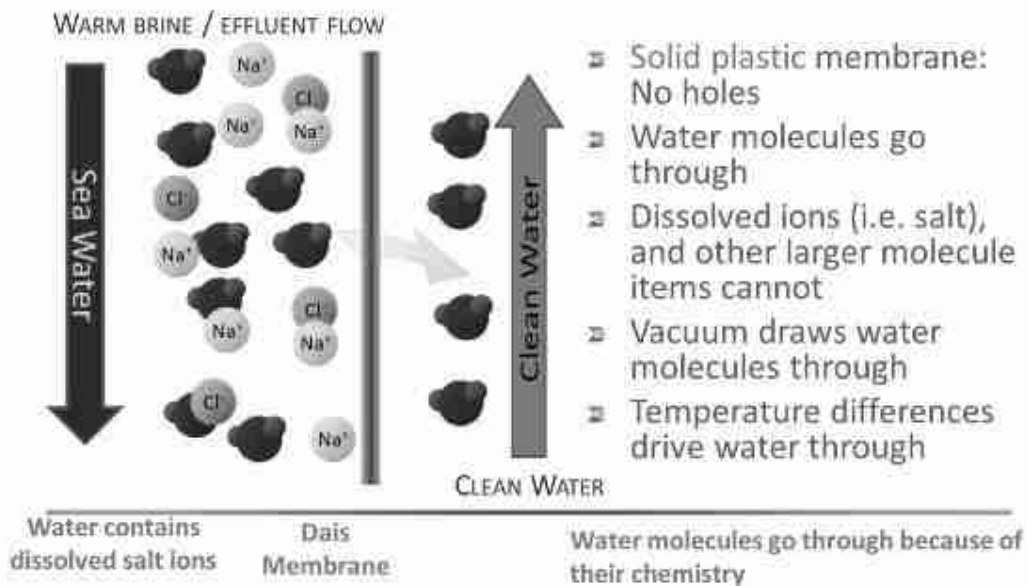
Our model is more focused and simple: There are no holes in our membrane; we do this all on a molecular level. The membrane has the intelligence to say, 'give me only the clean water molecules' and that is what we pass through this solid piece of plastic. I am not David Copperfield; so how can we pass anything through something that is solid?

It is done with chemistry. We are taking a very simple plastic, processing it in such a way to retain its solid characteristics but allow water molecules and very little else to pass through. So instead of a little water droplet that also has your neighbor's hormones or heart medication in it, our plastic is able to selectively say, 'all I want is the water molecule, I don't want anything else.' We clean to *parts per billion (ppb)* level which exceeds other technologies including reverse osmosis which cleans to parts per million (ppm). Why is that a big deal? Well obviously, you should not be drinking your neighbor's hormones or any of the other drugs that weren't known in 1972 when the current clean water act was passed.

This membrane has intelligence that allows it to discriminate based on what it lets through and what it does not. The diagram below helps to illustrate the process:

CEOFO: What creates the intelligence?

Mr. Tangredi: This resin comes to us as a simple plastic that looks like a rubbery powder. Then we use our patented process to synthesize it. Like a witches brew, you put this white material in this big cauldron, put it in some other solvents and chemicals, stir it and heat it up, then just at the right point you stop it. That process changes the molecular structure of that very plain resin. That resin in all



probability is in your shoe soles, wall-board, paint, and cars. It is one of the most popular resins on the market. As our raw material, it is very inexpensive, but by modifying it in the synthesis process we add intelligence. The channels that form, while not holes, have chemically modified charges touching one another. These charges allow molecules with high dielectric constants, such as water molecules, to pass through from one side to the other. The channels further restrict other molecules based on size. The net result is water molecules and very little else passes through the nano-structured membrane.

CEOFO: Does the industry believe you can do it?

Mr. Tangredi: Sure.

CEOFO: Where are you in the development process?

Mr. Tangredi: We have scaled the material. If you think back to chemistry in high school, you could make almost anything in a one-liter container. However, if you want to make something that is say 5,000 liters, 20,000 liters, or 100,000 liters, the chemistry and process to produce those volumes is not linear. So while you can make 72 dozen cookies by multiplying the ingredients used to make 6 dozen cookies, it simply does not work when trying to scale a chemical reaction. We have invested a lot of time to develop our synthesis and casting process to be

able to make this material in membrane form. We now have a commercial product called ConsERV™, an Energy Recovery Ventilator used in the HVAC industry to reduce energy consumption and CO emissions

while improving indoor air quality. The ConsERV fits between the incoming fresh air from outside and the exhaust air sent out of the building. The following diagram best illustrates the process.

In addition to the benefits already mentioned, when you turn over more air inside of a space, you lessen the conditions for mold, as well as the known triggers for allergies and asthma.

CEOFO: You certainly have a far-reaching product!

Mr. Tangredi: It is incredible! Our technology is something that is so pervasive that you can use it so many different ways. It is limited really by your imagina-

tion and the laws of physics and thermo dynamics.

Nanotechnology is extremely flexible; you can do so many things with it. We have identified over four dozen uses for these materials; I just talked about water and energy. Recently, however, we received the coveted, highly competitive, Advanced Research Project Agency-Energy Grant (ARPA-E Grant). This grant further proves that America is making investments in energy efficient technology. We will be using this grant to further the development of NanoAir™ which is an air conditioning/refrigeration system that uses no CFC or HFC refrigerant gases. In the HVAC space today, an air conditioner has Freon in it, which is awful for the environment and very expensive. As an air conditioner works to cool the air, the first thing it does is lower temperature down to about 49 degrees. At this point, the latent heat (moisture) drops

out of the air as this is the point at which condensation forms. Then it does the dumbest thing; it heats it up again to 65 degrees and sends it out. You say, "Well wait a minute. Why do you do something like that? That doesn't make sense." But that is the way conventional technology works. It was developed in 1903 and has changed little since. We have come up with a better way. We use our plastic to vacuum out moisture as it enters the NanoAir system. The air may enter the system at 75-80% relative humidity but exits in the mid-20% range. We're able to control humidity without lowering the temperature. Splitting the management of moisture and temperature allows us to

efficiently cool the now super dry air. Again using our membrane, we pull a vacuum on one side pulling water molecules through, and then recondense it back into liquid to create a refrigerant loop without any refrigerant. We have come up with a way using plastic, water, and vacuum, to do the same thing Willis Carrier created in the early 1900's with 50% less energy and at least 50% less CO emitted.

CEOCFO: With all the opportunity, how do you decide where to focus?

Mr. Tangredi: Great question. We are very excited about the opportunity to save energy and clean water and reduce CO . Market awareness and acceptance of our

CEOCFO: What about China?

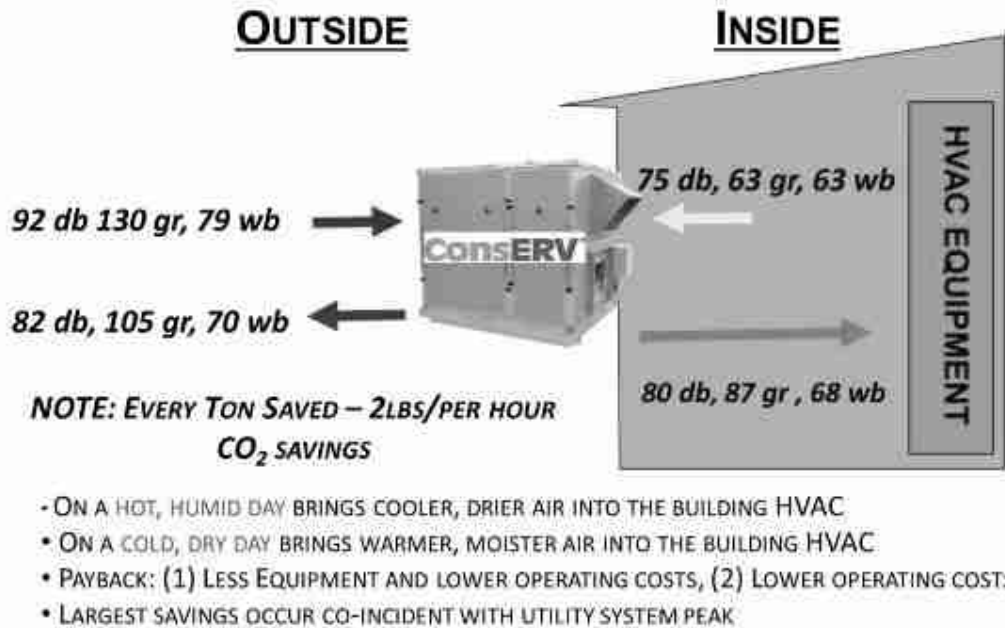
Mr. Tangredi: China is an interesting place. They are a trading partner and though their way of doing business is different than ours, I think it's in our best interest to learn how to do business with China. In May of this year (2010), Secretary Locke took 24 CEOs from different companies. I was honored to be a part of the trip. We had a very productive dialog with the Chinese. They loved nanotechnology and the things we are doing. It is a great opportunity, but one that requires we work very closely with our trading partners there. We need a presence in that country in order to do anything of value. Anybody that thinks they can fly over there once every month and run a

relationship that way, I am sorry I don't agree. You need to have your own people in the country to make the most of the Chinese relationship. They are hungry for any form of technology – especially 'green' technology – but to have a successful business relationship, you

have to be credible and earn respect of those with whom you hope to do business.

CEOCFO: What is the financial picture like for Dais Analytic today?

Mr. Tangredi: We are very excited about our future. We have an extremely strong, experienced, brilliant and dedicated senior management team. In addition, our Board of Directors is focused and providing strong leadership. We are a small public company with incredible technology. If you only looked at the Ks and Qs you might miss that the ConsERV business as is actually showing good cash flow. Right now, we have \$63 million



ConsERV is growing quickly. I believe in three to five years the Energy Recovery Ventilator will be standard equipment on every air conditioning and heating unit sold worldwide. You might not know what it does or even that it's in your system. You'll simply think of it as something that makes your air conditioner more efficient and provides fresher air in your home or commercial facility. As new residential ventilation requirements effective in January, 2010, are implemented, I think you will see the major HVAC manufacturers work very hard to put in the highest efficiency energy recovery ventilator in their air conditioners. It's just a matter of time, I believe.

worth of signed orders and are working with partners to get those orders out.

CEO CFO: Are you making the product in China?

Mr. Tangredi: No, we are exporting. We're creating US jobs both directly and indirectly. Our staff is up 43% over last year and we're working with regional suppliers and outsourcing production and development activities using local firms as often as we can. As a result, additional jobs are being created here in the states.

CEO CFO: What is the competitive landscape for Dais?

Mr. Tangredi: Our technology is so unique we don't see many competitors. Our team comes to work every day and works hard to perfect our technology and increase its applications.

CEO CFO: What kind of outreach are you doing to reach the investment community?

Mr. Tangredi: Recently we retained an investor relations firm. They are helping us nationwide to position ourselves in the investment community. We continue to make the rounds sharing our story. We are meeting with people every day from local business leaders, to public elected officials to consumers interested in learning more. We are very optimistic about

the traction and encourage people to contact us for more information.

CEO CFO: In closing, why should potential investors pay attention to Dais Analytic?

Mr. Tangredi: We are a life-changing company. We have a strong team and brilliant people. Our technology is fascinating and has seemingly countless applications. What makes Dais very compelling is that we are providing real clean tech solutions for perplexing problems in a cost effective way. You don't get much better than that.

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