

Hemp Processing Company Launches Extraction Equipment for CBD Oil Production



Dr. Jon Thompson PH.D
Chief Executive Officer

United Science

www.unitedscience.com

extraktlab.com holuscdbd.com nemadji.co

Contact:

(651) 538-1468

jthompson@unitedscience.com

Interview conducted by:
Lynn Fosse, Senior Editor
CEOCFO Magazine

CEOCFO: *Dr. Thompson, what is the vision and focus at United Science?*

Dr. Thompson: United Science is a company that helps people get into the cannabis oil extraction business. Extraction is the process of getting essential oils out of a plant so that it can be converted into [pure cbd oil distillate](#) and cbd crystals. Our company manufactures hemp and [cannabis extraction equipment](#) [wiped film evaporation](#) and [falling film evaporation equipment](#). We also provide formulations, for example, for cbd pills. We are most well known for our [supercritical CO2 extractor](#) that we sell under the ExtraktLAB brand. We offer small systems up to ten-ton-per-day industrial processing installations.

We also have a consultancy where we help customers comply with city, state, and federal regulations. The focus is to get people started making cannabidiol oil quickly and at a low cost. Second, we train them on operational excellence. We have put many farmers into the hemp oil business. On the other hand, we have also helped highly regulated pharmaceutical companies get into the cannabis business. It has been an adventure and with customers all over the United States, Canada, and in Europe.

CEOCFO: *On a fundamental level, what do you understand about the cannabis industry?*

Dr. Thompson: The benefits of hemp oil, cbd oil and cbg oil have been debated and subjected to clinical trials. CBG is short for cannabigerol, a CBD like compound that has many of the same benefits as CBD. There are so many different addressable health conditions, like multiple sclerosis, for example, where cannabis and hemp proponents claim that CBD is effective. However, we also know that there are always risks and side effects that may outweigh hemp oil benefits. I'm eager to collaborate on research projects that investigate minor cannabinoids, the endocannabinoid system, and also cbd side effects. It has to be science driven.

The best thing about the cannabis and hemp industry is that it is split into two parts. The cannabis industry is the like the first born and hemp is the illegitimate heir, both laying claim to the throne. The hemp industry focuses on hemp oil, hemp seed oil, cbg oil, and cbd oil. There is a lot of research that is being done right now on the clinical benefits and health benefits of the hemp plant. The explosion of CBD use has blown the lid off of the positive health aspects of the plant.

CBD and CBG are not a psychoactive component of the plant and have been shown to be safe according to the World Health Organization. It is not only safe to use but it is reported to be effective for many different indications. The beauty of the industry is that it is helping people.

CEO CFO: *How do you reach out to potential clients and how would someone find you if they are looking for help?*

Dr. Thompson: People who would like to talk with us can call our offices or visit us on the web at extraktlab.com. We host webinars with potential clients every day and go through the fundamentals, requirements, investment capital required, and other important topics. We are also at trade shows. We get a lot of our business from word-of-mouth.

People go online and read about us, they look at what we do. Sometimes they are looking for someone to help guide them through setting up batch records. Oftentimes they will come and visit our demonstration facility. We set up a five-ton per day bioprocessing facility in Wisconsin and people come there to take a look at the equipment, look at our processes and procedures. That is how they get to know us.

Typically we would get to know a customer; we would get to know what their goals were. Sometimes it is an entrepreneur, sometimes it is an investor and sometimes it is a farmer. For example, a farmer says they have a crop and they want to upgrade their crop, and will ask for CO2 extraction machines. We will put them into business with an extraction system, help them get pure CBD oil and distillate, train them and get them the equipment they need and help them with facility specifications. It is a wonderful aspect of this industry.

"The best thing about the cannabis and hemp industry is that it is split into two parts. The cannabis industry is the like the first born and hemp is the illegitimate heir, both laying claim to the throne."- Dr. Jon Thompson PH.D

CEO CFO: *How do you stay on top of changing regulations as well changing techniques and technologies?*

Dr. Thompson: We are the cutting edge of technology for the hemp processing industry and as a consequence, we invest in cutting edge research and intellectual property development. Our designs and equipment are quite unique in the industry because we let science, engineering, and design pave the road to new innovation.

Regulations are important for safety for the consumer. Right now in the cannabis industry regulations are governed state by state. Each state has their own office of cannabis and they promulgate safety, efficacy, and claim regulations. That is how people are dealing with the regulations right now; they are complying with their state regulations. In the case of hemp however, the passage of the 2019 Farm Bill which ended the era of hemp prohibition in America, left a vacuum for regulation. The US FDA is now contemplating its next steps which has the effect of injecting a great amount of uncertainty into the industry.

The USDA has just come out recently and said that any testing that is going to be done has to be done in a USDA accredited laboratory. This is a good move. In Canada, they are under GPP regulations which is very similar to the US FDA. Health Canada has a whole set of rules and you have to know which rules you have to conform. There are rules and we help our customers understand what those regulations are and how to apply them to the business.

CEO CFO: *We came upon United Science from a press release about extraktLAB announcing new equipment for hemp and CBD oil production. Would you tell us about that and how the company is divided up into several divisions?*

Dr. Thompson: United Science is a company that has several brands of equipment. We have a supercritical CO2 extraction brand called extraktLAB, and a distillation equipment brand called clearSTILL which is another piece of equipment that is required for ethanol extraction. We also have an evaporation brand called fracTron. A filtration and winterization brand called DrainDroyd. We have what is called a bucking machine called the shuckNBuck that takes the buds off of the stems. United Science has a whole series of products that address manufacturing, from the very beginning when you get the plant in all the way to the end product which would be either an oil, lotion or lip balm or something along those lines. We have a whole line of equipment, all kinds of brands and in order to do that we employ many scientists, PhD scientists, master chemists, process engineers. We also have many mechanical and chemical engineers. We operate right now in approximately 40 thousand square ft. on the manufacturing side where we build this equipment.

Then we have an 80 thousand square ft. building for demonstration purposes. It is where we have a full operating plant. That is the genesis of United Science.

CEO CFO: *Might customers take advantage of range of services, or is it usually one or two?*

Dr. Thompson: Customers typically buy an entire package. We supply them with an equipment list, and install the equipment and give them advice and specifications on the facility and then we will land with the equipment and by the time we leave, their people are trained and running on their own.

CEO CFO: *How do you help through the steps for someone to getting started in the cannabis business?*

Dr. Thompson: Typically an entrepreneur or investor has a dream. We interview them to find out what their goals are, and if they have a license. We will ask if they have financing or access to capital. We have helped customers get through that portion of the fuzzy front-end; just talking with them about the business. I have had hundreds of conversations with people who want to get in the business but for one reason or another it was not the right timing or they did not have the right funds, license or partner. We can sometimes help them understand if the business is right for them. It's not just about selling equipment. Our knowledge can help you build a strong foundation for success.

Sometimes we help people with connections. We will connect investor A to operator B. In some cases when the entrepreneur has difficult with the city or regulatory body we will get on a call with them. I have even personally attended government meetings with the client or help the potential client as an expert witness for city council if they are wondering about what a marijuana facility looks like. We have been pretty successful partnering with our clients and at the end of the day we emerge from that activity as pretty good friends. I would say 99% of our clients become close. We have highly trained installers and scientists and they are on the phone with our customers and they get invited to weddings. It is just fun.

CEO CFO: *How do you help someone new to the industry to understand the challenges and all the moving parts without overwhelming them?*

Dr. Thompson: I use my own story. My own story is one of struggle. We have not had access to banking that most businesses have had. It is just about step-by-step and not giving up. There is an encouragement aspect to it. About I did this and you can do this too. A lot of times it is just instilling the belief that, "Hey this can be done." However, you cannot sugarcoat it. I always intersperse my encouragement with doses of reality.

CEO CFO: *Did you anticipate you would enjoy this venture as much as you seem to?*

Dr. Thompson: I have always said that I enjoyed everything I had the chance to do. I worked for my dad and brother in high school and in college I was working as a carpenter and then I worked in a cabinet shop. I liked the hands-on outlet while studying chemistry, biochemistry and molecular biology. I went to graduate school at the University of Minnesota and I enjoyed learning the fundamentals of analytical chemistry from the world's leading professor of separation science.

I then went to work in a small business and I learned from an excellent mentor about small business and about being an entrepreneur. I think I am one of those guys that enjoys whatever it is I am doing. I like the people I get to work with too. I am pretty contented.

I had many startup businesses before I got into cannabis. We made equipment for NASA and we made equipment for the Air Force and we made sensors, but it was a struggle. We ended up not working but we still enjoyed the journey.

To start a business, you have to be able to enjoy that fuzzy front end and really not knowing and take solace in the knowledge that you will win. If you are the type of person that needs to know every little thing before you start something, you are never going to get started. Sometimes you need one of these entrepreneurial guys or gals to take your hand and partner with someone that wants to know everything and then someone who believes. If you get that combination together it is a really good combination for starting a business.

CEO CFO: *Are you strictly working with cannabis or are there other areas?*

Dr. Thompson: Yes, we work in cannabis, hemp processing and CBD oil production. We build hemp processing facilities around the world using supercritical Co2 extractors as our primary extraction equipment. We have equipment and processes that will create pure CBD oil, CBD crystals, and distillate. We have other lines of business specifically in a field

called chromatography and filtration that addresses other markets. We also manufacture nano structured carbon materials for sorption and drug delivery.

CEOCFO: *What is next for United Science?*

Dr. Thompson: Our current focus is on separations of minor cannabinoids such as CBG. We have equipment that is effective at doing this. We are also very active in the education of consumers on ethanol vs. CO₂. CO₂ as an extraction media is clean and leaves no chemical impurities in the oil. Chemicals such as ethanol sometimes used in extraction processes have massive amounts of contaminants that end up making their way into consumer products. The contaminants may be in the extract at a low level, but who would want to consume, say, acetone on a daily basis?

We are going to continue to build value for our investors, serve our customers and make investments in furthering the science of hemp extraction. We are going to continue to put out new products because that is what we like to do. We are going to continue to improve our products and invent new processes that will revolutionize our industry. Equipment is always advancing and that requires more engineering and science. We also recently commissioned our Institute for the Advancement of BioProcessing and Formulations at a 5 ton-per-day hemp processing facility.

We have also invested in a CBD brand called, Holus that is a consumer products goods CBD brand. What is wonderful about that is we made the product and then we hired some former sales and marketing executives for Jack Links Beef Jerky, and they really have taken those products and really brought them out into literally thousands of stores. We are excited to see where that is going to go and see how that is going to build value.

CEOCFO: *Why pay attention to United Science?*

Dr. Thompson: United Science and extraktLAB is unique in the hemp and cannabis industries because it provides full turnkey solutions for investors and entrepreneurs. These are the ones who are building the foundations of the industry. We can help a customer with a small hemp extraction facility to large multi-ton-per-day hemp processing. If you are thinking about getting into or investing in a cannabis, CBD or hemp business or if you are thinking about building a facility to produce CBD oil or produce cannabis products, it really is in your best interest to give us a call or contact us at extraktlab.com. We can really help you leapfrog over months of pain.

