

ceocfointerviews.com All rights reserved! Issue: June 12, 2017

## HY-TEK Bio, LLC.

## Revolutionary Strain of Algae that Consumes CO2 and Green House Gas Emissions from Flue Gases produced in Manufacturing Plants and Power Generating Facilities



Robert M. Mroz or Bob Mroz Founder / Chief Executive Officer

HY-TEK Bio LLC www.hytekbio.com

Contact: Robert M. Mroz 410-262-5113 bob@hytekbio.com

Interview conducted by: Lynn Fosse, Senior Editor CEOCFO Magazine "We have a technology that will allow us to provide clean energy from fossil fuels, and along with it brings a moral mandate to get the world to use it!"- Robert (Bob) M. Mroz

CEOCFO: Mr. Mroz, what is the idea behind HY-TEK Bio? Would you tell us about the company?

Mr. Mroz: HY-TEK Bio's core mission is mitigation of greenhouse gas. We do that through intellectual property using a special strain of algae that consumes all of the CO2 and nitrogen oxides in greenhouse gasses from exhaust gas and other industrial processes.

## CEOCFO: What is it about the algae that allows it to absorb?

**Mr. Mroz:** It took us two years and state funding to isolate a strain of algae from one hundred and twenty-eight thousand strains of fresh water algae – testing it to survive in a high level of CO2 and a wide range of pH. Algae, in nature, uses CO2 basically as its building blocks to make more algae. As we breathe oxygen, it breaths CO2 and releases oxygen while we release CO2, so it is just the opposite from the human body. It "breathes" in CO2 and the nitrogen in the nitrogen oxides is what it uses for fuel or food. It separates the nitrogen from the oxygen and uses the nitrogen for fuel for photosynthesis to fix the carbon in the CO2. Therefore, it is a natural for mitigation of greenhouse gas.

CEOCFO: Was it a matter of finding the right algorithm to test it? Was there physical lab work testing? Did you just get lucky at some point? How do you go through one hundred and twenty-eight thousand strains?

**Mr. Mroz:** With state funding; we had the University of Maryland Center for Environmental Science (UMCES) in Baltimore as our partner. All of those state funds would go to the university and we would add our required share to it. They would then do the work for us. We have Dr Feng Chen (Professor) that was contracted under the grant who he is an expert in the isolation of strains of algae. That is what he has done his whole career.

Therefore, we used the University of Maryland's collection of strains of algae and the University of Texas' collection of algae. Again, we used only the freshwater strains, because I didn't want salt water in the valves, so I used only fresh water strains of algae. It was not a matter of luck or getting lucky. It was a matter of a lot of hard work on the part of the University of Maryland. They used these trays of very small, basically one half inch in diameter, wells. There are ninety-six wells per tray and they will go through hundreds and hundreds of trays, putting them into a three percent CO2, five percent, seven percent, or ten percent. Most algae will die around ten to twelve percent CO2. Much of it dies in less than that. Our goal was to find a strain of algae that would thrive at 50% CO2.