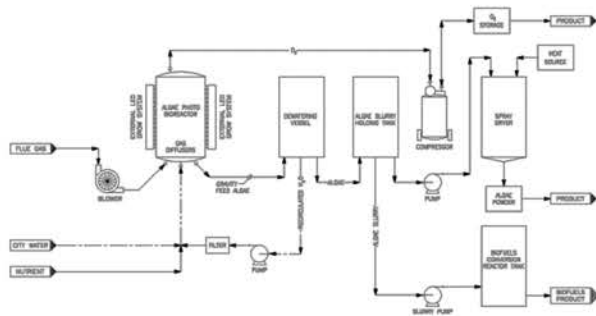


# The Process

1. Given light, water, nutrient and CO<sub>2</sub>, the algal culture will grow by consuming the CO<sub>2</sub> in flue gas and nutrients in the culture until it reaches an optical density (OD) where the light can no longer penetrate the core of the Bioreactor.
2. At this point, the system's Automation Control opens the drain valve in the Bioreactor and 10% of the Bioreactor flows by gravity into a Settling Tank where a bio-coagulant-flocculent is used to separate the algae from the water in the culture.
3. Excess water is drained off, filtered & recycled to the Bioreactor with nutrients & makeup water added. The algal slurry in the Settling Tank is then pumped through a spray dryer, converted to powder, vacuum packed & stored for shipping.
4. This operation cycles every 90 minutes, mitigates the Greenhouse Gas emissions 24/7 and produces 50-75 lbs of algae and 17,000 cubic feet of oxygen per day for sale from one Bioreactor.



# HY-TEK Bio, LLC

**HY-TEK Bio** LLC is an emerging global leader in the reduction of Greenhouse Gas (GHG) emissions & replacing it with pure oxygen and algae to produce high value products for a worldwide market.



HY-TEK Bio R&D Facility

**HY-TEK Bio** technology uses a unique strain of algae (HTB1) - isolated from thousands of strains - to absorb up to 100 percent of the GHG emissions from flue gases produced in industrial manufacturing & power generation.

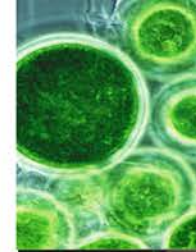


Founder & CEO Bob Mroz

[www.hytekbio.com](http://www.hytekbio.com)

5602 Micro Drive, Dayton, MD 21036

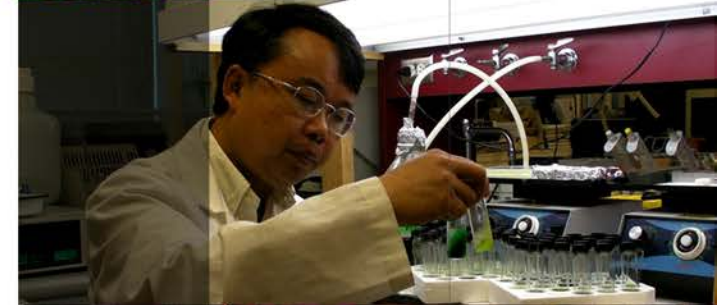
410.262.5113



# HY-TEK Bio, LLC

5602 Micro Drive, Dayton, MD 21036

410.262.5113



While its primary product is the mitigation of GHG emissions through its patented process, HY-TEK Bio has developed related and cost-efficient technologies.

- Algae production
- Containment
- Gas injection
- LED grow lighting
- Nutrients

Clean Energy from Fossil Fuels  
Reduction of Greenhouse Gas emissions using algae

[www.hytekbio.com](http://www.hytekbio.com)

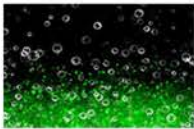
# Products



HTB-1 is singular among thousands of strains of algae excelling in wider ranges of tolerance for temperature & pH, 100% CO2 levels, accelerated reproduction & high market value.



Inexpensive, portable bioreactors of laminated Mylar with carbon fiber & Kevlar structural support with a 7,000 lb. breaking strength reinforced by sonically welded seams. Used for a multitude of purposes, including storage of liquids & solids.



Injection of micron sized bubbles into solution promotes maximum dissolution effect, enabling a high volume (cfm) of gas flow for numerous industrial processes.



The use of only photosynthetic wavelength LED light optimized for maximum use of light energy & cell life, & minimal power consumption & heat generation.



HY-TEK Bio has developed a process to use chicken manure as a viable inexpensive, odorless & colorless liquid to be used as an effective nutrient and fertilizer.

[www.hytekbio.com](http://www.hytekbio.com)

# The *HY-TEK Bio* Difference



**Breakthrough technology** for mitigation of CO2 and other Greenhouse Gas emissions using an optimized indigenous strain of algae and a patent-pending photo bioreactor system design.

**Validated** with over 12,000 hours of operating experience backed by credible third party. Innovative LED lighting enhances algal growth, reduces power consumption and increases CO2 mitigation & volume of culture.

**Flexible design** allows application as a carbon capture recovery solution for corresponding multi-pollutant quality control systems.

**Modular and scalable** design speeds implementation and works with any generating capacity - from small landfills to large power plants.

**Original Equipment Manufacturer (OEM)** of patent-pending Algae-based GHG Mitigation System.

**Ability** to harvest algae and capture oxygen as marketable off-take products provides a positive cash flow to pay back initial investment, cover ongoing O&M and still produce considerable profit for HY-TEK Bio and its investors.

**Early Adopters** will have their operating cost covered, reducing the need for an increased O&M Budget

**No added risk** or O&M cost for chemical purchase, or hazardous byproducts Our project is designed to repay the investment in seven to ten years

**100% mitigation** of CO2, NOx and SOx (not usually present in methane fired equipment) exceeds the 2015 EPA requirements.

**Public Acceptance** by adding HY-TEK Bio green technology.

**Patented technology** used in the HY-TEK process has a multitude of industrial & commercial applications, including containment, LED lighting, gas injection & nutrients.



*Bioreactors weigh just 65 lbs.*



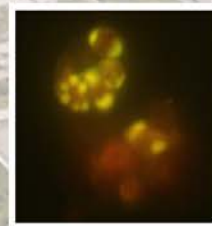
*Bioreactors have 7000 lb. breaking strength*



*Bioreactors use HTB-1 algae in mitigation process.*



*Micron-sized bubbles promote dissolution*



*HTB-1 is heavy in lipids*



*Algal slurry has high market value*