

Biocatalysis uses enzymes to initiate and facilitate chemical reactions to synthesize industrially relevant compounds. Zymtronix is focused on leading the next wave of biocatalysis. By optimizing and stabilizing any enzyme to create unique and sustainable processes, our technology will allow industrial scale biocatalysis without compromising on cost effectiveness or activity of enzymes. From its licensed core technology, Zymtronix is developing and commercializing innovative ways to immobilize enzymes at full performance for key markets

Major new markets in need of more stable and longer lasting enzymes



Biocatalysis, as a green technology, has become increasingly popular in chemical manufacturing over traditional expensive and inefficient processes. However, when producing chemicals at an industrial scale, enzymes can suffer drastic losses in activity and loadings, causing a significant drop in performance. ZymTrap[™] offers a solution to deliver industrial biocatalysis for your process chemistries with better activity, productivity and quality.

Crop protection

Pathogens can affect crops at any stage in their cycle, from storage and travel to germination and growth. With a growing need for more food around the world, we cannot afford crop losses due to plant pathogens. Pesticides are used heavily, but these have negative impacts on the environment and human health. ZymGuard[™] and ZymPure[™] utilize biocidal and fungicidal enzymes to fight plant pathogens at the seed level to prevent losses and protect crops.



Toxicity Testing

Today, 80,000 consumer chemicals are currently in use with 2,000 being added to the market every year. To ensure chemicals and their metabolites don't cause adverse effects on human health, thorough testing is needed to ensure consumer safety. **ZymTox**[™] provides toxicity assays with metabolic enzymes suitable for thorough, highthroughput screening and determine if chemicals and their products, after conversion in the body, are safe.

Entry **Markets**

Competitive **Advantage**

(oxidations) Universal Continuous flow

\$500m

\$230m (vegetable seeds)

Broad spectrum Co-formulation

\$500m (metabolic enzymes)

High-throughput Low clearance metabolism

zymtronix.com



Zymtronix is driven by a multi-disciplinary team of scientists and business leaders. We provide cuttingedge enzyme immobilization and stabilization technology, tailored to address specific industry needs. As the leader of the next wave of biocatalysis, we implement green chemistry processes, while achieving the standards of quality and performance clients need at all scales of production.

Technology

Our technology uses highly magnetic materials to deliver a unique and universal method of enzyme entrapment. These materials self assemble and immobilize enzymes without interfering with their individual properties.

By helping to stabilize, support and enable enzyme and whole systems of enzymes, Zymtronix technology can be used to surpass industry standards in biocatalysis and achieve better results and greater returns.

Game changing capabilities

Meets large unfilled demand for key enabling technology used to significantly enhance the use of enzymes starting with toxicology screening, ingredients manufacturing and crop protection products.

Assets include

2 issued patents licensed from Cornell University, 6 patents & applications protected in key territories; trade secrets. Technical publications driving discussions & partnerships with key strategic players. Extensive proof-of-concepts show that the technology works in all three verticals (Phase I and II SBIR grants).

Zymtronix is the successful biotech developer of Zym product lines

Cornell University spin-off led by founder and CEO, Dr. Stéphane Corgié. Focused on the development of Tox screening, Ingredients (food and actives) and crop protection pipeline. Zymtronix has assembled a management team and tech team (6 employees) to successfully commercialize the business and seeks partners/investors.

3-year goal is to establish Zymtronix products for:

- Tox screening (Seed round Jan 2018 : \$1.4 M) : development and 3rd party validation.
 Seeking \$1M for commercialization
- Crop protection: **Seeking \$2M** *in vivo* efficacy testing on the current formulations field crops.
- Process Chemistry: Seeking \$2.5M 3rd party strategic contracts and partnership for material, processes and scale-up.

Seeking \$5.5M series A equity to commercialize the Zymtronix-related businesses

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