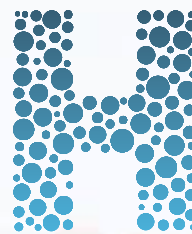


# 'Hydropore's fuel pellets will increase commercial drone flight time or payloads by least 3x.'



**HYDROPORE**

**Fueling the Drone Economy**  
[hydropore.com](http://hydropore.com)

- **Longer flight times and larger payloads are desperately needed** by commercial drone operators. Even the best batteries are only good for 30-50minutes of flight.
- **Hydropore fuel pellets + water = lots of hydrogen gas.** Delivering 3x performance of lithium ion batteries.
- **Underlying technology is proven and patented.** Product development and scale-up is now underway.
- **Follow-on use cases are also commercially viable.** After drone power, back-up, and remote electricity/ hydrogen generation will follow.
- **Product:** Hydropore will sell fuel pellets manufactured using our patented electro-chemical process. Operators load the fuel pellets on site into their hydrogen fuel cell powered commercial drones. No extra equipment is needed for 3x improved flight time.
- **Customers:** Commercial drone operators working in industries such as power line inspections, agriculture, off-shore windmills, search & rescue, filming, and photography. Our 3-year goal is to capture 1% of the \$2bn drone battery market.

**Peter Lorenzi – CEO**  
 15 Years R&D & High Tech

**Eric Detsi Ph.D – Co-Founder**  
 Stephenson Term Asst. Professor of Material Sciences & Engineering Penn

**John Corsi – Co-Founder**  
 Inventor, PhD Candidate Penn

Ruby Chandy – Advisor  
 Non-exec Director

Marc Doyle Ph.D – Advisor  
 Former CEO, DuPont

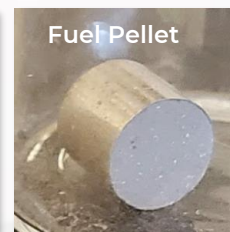
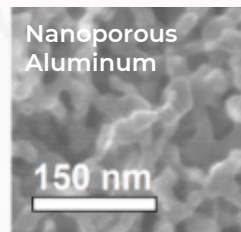
Michael Poisel – Director  
 Penn's Center for Innovation Ventures, Satellite Engineer

## - Global Markets:

Hydrogen Generation Market  
\$200bn in 2023  
 8% CAGR

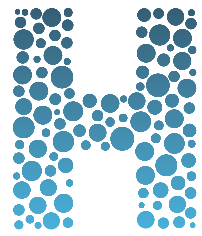
Commercial Drone Market  
\$25bn in 2023  
 18% CAGR

Drone Battery Market  
\$2bn in 2023  
 14.5% CAGR



- **Our competitive advantage:** Aluminum reacts naturally with water to produce hydrogen but is stopped by a protective layer of aluminum hydroxide. In Hydropore's nanoporous structured fuel, all the aluminum has already reacted by the time that layer is formed. Our patent covers the production of nanoporous aluminum. No other method exists. We are also able to 'tune' the pellet recipe for desired stability/ reaction speed characteristics.
- **Competitor technology:** A compressed H2 tank drone holds the world record flight time but requires delivery of hydrogen to the take off site and a \$20k recharge compressor for the 6,000 PSI flight tank. Gasoline drones (e.g., Amazon Prime Air) also have good range, but vibration, noise and maintenance costs are an issue. A Hydropore fueled drone has equal to better performance than compressed H2 or gasoline and has a lower total cost for operators.
- **Numerous exit possibilities:** Strong interest from commercial drone operators, fuel cell manufacturers, hydrogen supply chain specialists, and industrial chemical companies.

Phase	1. Flying Prototype	2. Beat Li-Ion	3. World Record	4. First sale
Duration	6mo	3mo	3mo	6mo
OpEx (Engineers, Space)	Financials available upon request			
CapEx (Equipment)				



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## The Team



**Pete Lorenzi, CEO**

15 Years R&D & High Tech  
Former VP R&D Operations, GSK  
BSc Theoretical Physics  
Chartered Accountant



**Michael Poisel, Board Member**

Executive Director, PCI Ventures  
10 Years Private Equity  
GE/Lockheed Satellite Programs  
MS Systems Engineering  
Wharton MBA



**Eric Detsi PhD, Co-founder, Inventor**

Stephenson Term Chair Assistant Professor  
in Materials Science & Engineering  
PhD Materials Science & Engineering  
NSF EAGER Award (2018)



**Ruby Chandy, Advisor**

Senior P&L & Marketing Exec.,  
Independent Board Member  
Listed Corporations  
Materials Sciences (MIT)



**John Corsi, Co-founder, Inventor**

PhD Student  
Materials Science & Engineering  
University of Pennsylvania  
New England Scholar (2014, 2015)



**Marc Doyle, Advisor**

Former CEO, DuPont  
  
PhD Chemical Engineering

*'...Please put me down to be your first customer!'*

*Nader Elm,  
CEO Exyn Technologies  
Drones to Inspect Mines*

*'...I cannot overstate how big a deal it would be to solve the H2 tank issue for fuel cell powered drones.'*

*Max Tubman  
President BFD Systems  
Commercial Drone Manufacturers*

*'I'm excited about what you're trying to accomplish at Hydropore ... happy to help however I can!'*

*Marc Doyle  
former CEO, DuPont*

*'...Even if you don't get this on a drone, we'd be interested in the fuel for remote hydrogen generation to put in our compressed hydrogen tanks. The hydrogen supply chain is a real issue.'*

*VP and head of Flight Division,  
Leading global fuel cell manufacturer.*