

LED NANOTECHNOLOGY WATER PURIFICATION

Green, Lean, and Mean

Mark Owen, CEO
Beaverton, OR

www.puralytics.com



The Problem



**Competition: Multi-Stage
Reverse Osmosis System**

❖ Wasteful:

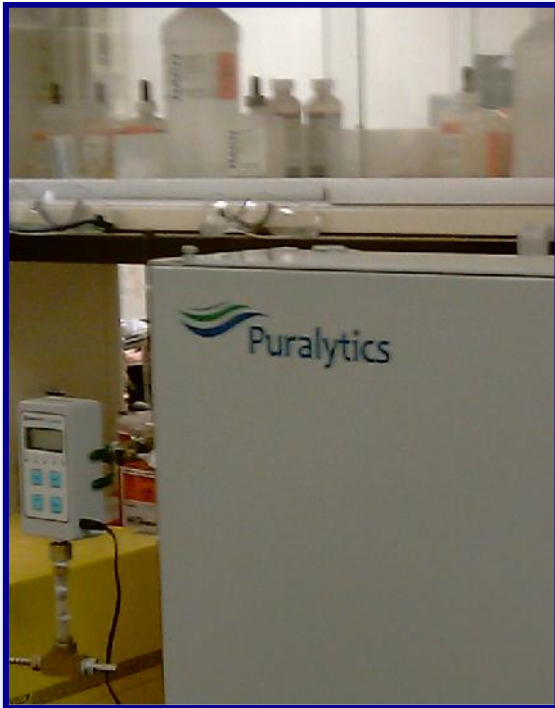
- ❖ Many Consumables
- ❖ 80% water wasted

❖ Costly: High OPEX

❖ Weak:

- ❖ Pharmaceuticals
- ❖ Pesticides
- ❖ Petrochemicals
- ❖ Requires customer to be a water technician.

Puralytics Solution



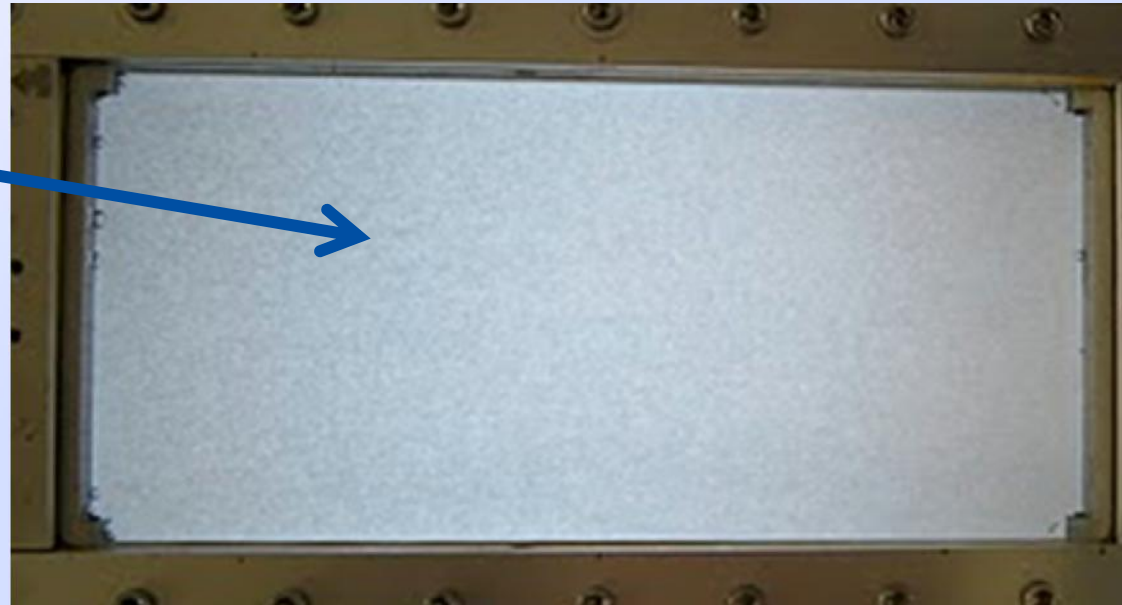
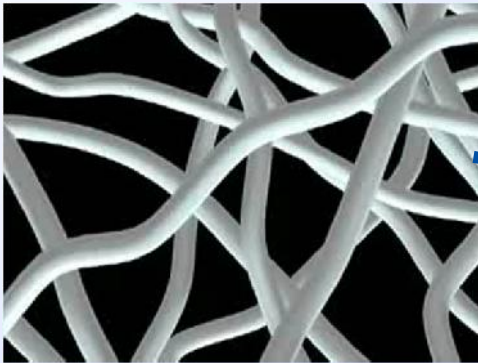
Shield 500 – world's first solid state water purification system



- ❖ Novel LED-activated nanotechnology coated mesh for water purification
 - ❖ **Green:**
 - ❖ Water and electricity reduced
 - ❖ Contaminants destroyed
 - ❖ **Lean:**
 - ❖ Operating Expenses reduced 80%
 - ❖ 18 Month Payback
 - ❖ **Mean:**
 - ❖ Eliminates contaminants competitive systems can't

Destroying Contaminants with Light

LEDs excite a nanotechnology coated mesh
which destroys germs and chemicals



4 Patent Apps Filed, 3 Grants, Field tests successful

Market Opportunity

**\$3.3 Billion* Total Available Market
Growing >15% CAGR**

Industrial Water Purification

- ❖ Process water – incoming and waste
- ❖ Organic Contaminants – greatest unmet market need.
- ❖ 400,000 labs in US alone.

Decentralized drinking water

- ❖ 45m US wells, 50% WW



Labwater Application

Two Product Families



Shield 500

- LEDs – rapid improvement
- Scalable – 500-20,000 gal/day
- High value water, low barriers
- Industrial & Residential

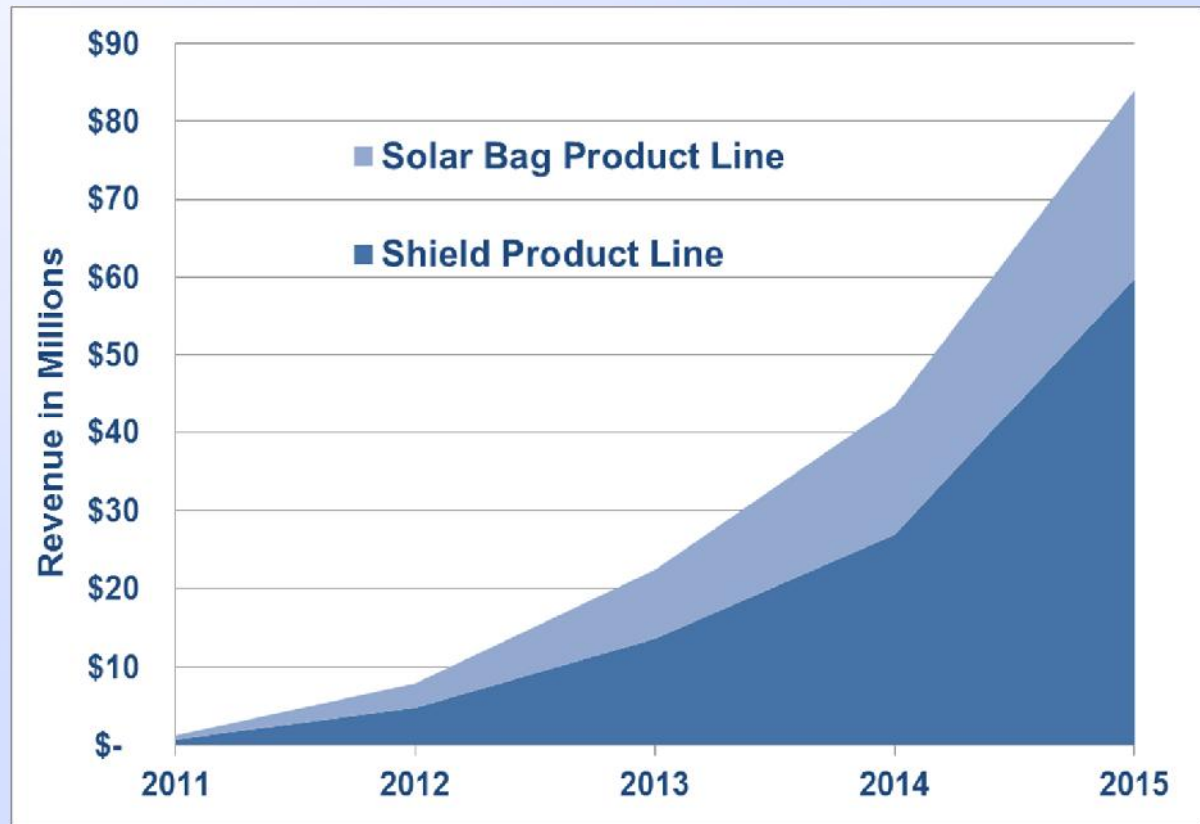
SolarBag 3L – Recreation, Disaster

- 3L in <4 hrs, Reuseable
- Sunlight-activated, self cleaning
- Kills pathogens, reduces heavy metals, pesticides and petrochemicals
- Government, NGOs, Retail



Go to Market Plan

- ❖ Penetrate with Partners
- ❖ Products, not projects
- ❖ Scale-up with Hartz's Law



Management Team

Mark Owen, CEO

Phoseon Technology – Founding CEO - VC financed UV LED light sources for industrial photo-curing of inks, coatings, and adhesives.

Agilent Technologies, MVT, Electro-Scientific Industries – Business Development, Marketing, R&D Mgr. .MVT acquired by Agilent for \$100m.

~\$1B in revenues from products involving his patents. MAMT, BScME

Ed Kolasinski, Chief Operating Officer

President and CFO of United Pipe and Supply, three other startups through exit.

Dr. Tom Hawkins, VP Engineering

Dir of Engineering at Flextronics Photonics and nLight. Over 20 years optical system design and fabrication. 1 startup through successful acquisition. PhD Physics, Stanford.

Dave Moser, VP Business Development

VP/GM at ESI, Tektronix, Axian, OEM sales and marketing.

Board of Advisors – water industry experts from CH2MHill, Intel, Envirocern, and Haley Brands working with Puralytics

Financial Plan

	2010	2011	2012	2013	2014	2015
Revenue	\$ 305,319	\$ 1,284,115	\$ 7,937,500	\$ 22,438,500	\$ 43,506,428	\$ 83,956,351
Gross Margin	\$ 151,249	\$ 472,012	\$ 3,468,875	\$ 10,639,100	\$ 21,661,428	\$ 42,613,852
Gross Margin %	50%	37%	44%	47%	50%	51%
Research & Development	\$ 73,781	\$ 1,100,039	\$ 2,110,025	\$ 3,168,508	\$ 5,648,433	\$ 10,008,964
Sales & Marketing	\$ 46,117	\$ 332,465	\$ 1,371,256	\$ 3,205,994	\$ 6,071,412	\$ 11,129,008
General & Admin	\$ 134,798	\$ 397,850	\$ 1,675,249	\$ 2,832,208	\$ 5,041,399	\$ 7,551,494
EBIT	\$ (103,447)	\$ (1,358,342)	\$ (1,687,655)	\$ 1,432,390	\$ 4,900,186	\$ 13,924,386
EBIT %	-34%	-106%	-21%	6%	11%	17%
Key Metrics						
Total Employees	7	20	36	53	79	99
US Distributors		4	10	12	15	20
International Distributors	3	6	10	12	20	25
Corporate & OEM	1	5	10	16	25	40
Total Customers	4	15	30	40	60	85
Net Cash From Financing	\$ 228,260	\$ 5,050,000	\$ 4,000,000	\$ -	\$ -	\$ -
Ending Cash Balance	\$ 106,552	\$ 3,168,963	\$ 4,060,896	\$ 1,630,170	\$ 1,710,224	\$ 3,613,158

Exit Strategy

Deal:

\$1.5m Note (\$0.6m left)

\$5 Million Series A

Exit:

Large Market

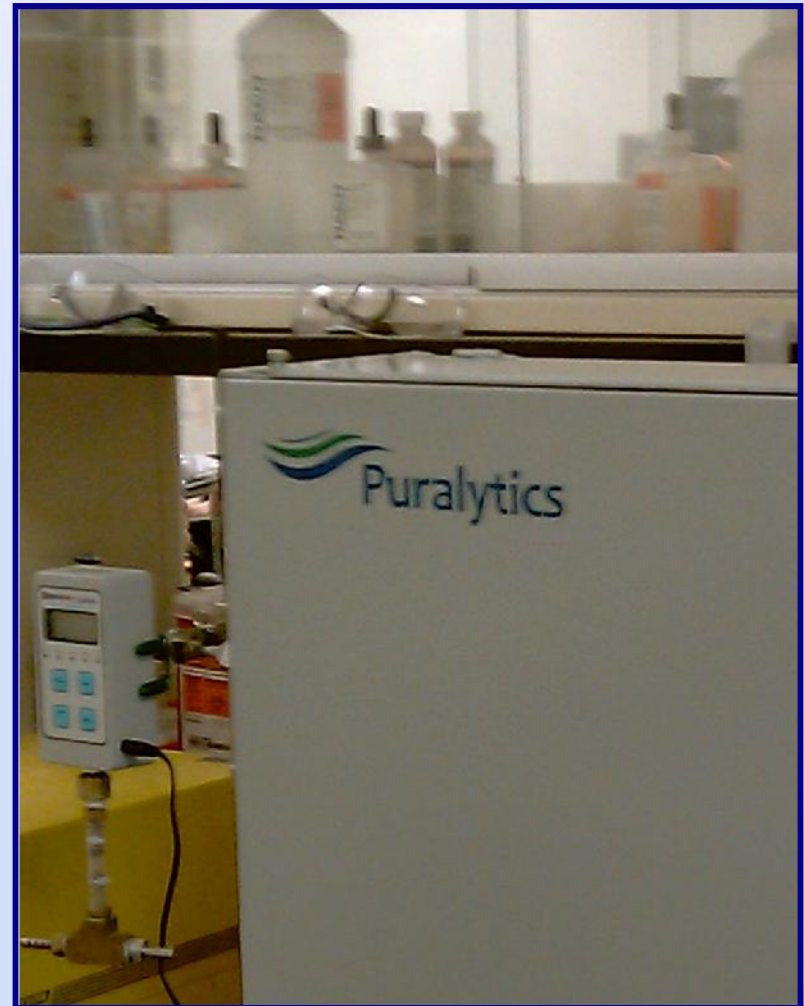
Disruptive technology

High Gross Margins

Over 500 water M&A and
IPO in the last decade

High multiple exit

Triple Bottom Line



Questions?

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