SQUIDTEK®

The Future of Thermoregulatory Technology

A Bio-Inspired, Sustainable Platform Technology for a Wide Range of Industry Applications

Contact: **James Mohan** / (303) 884.2348 / james@squidtekinc.com

THE PROBLEM

In the world of **thermoregulating material technology**, there hasn't been a material that **DYNAMICALLY** regulates temperature.

Most warming, or cooling technology is **STATIC**, thus **limited** when interacting with your skin or any temperature fluctuations.

THE SOLUTION

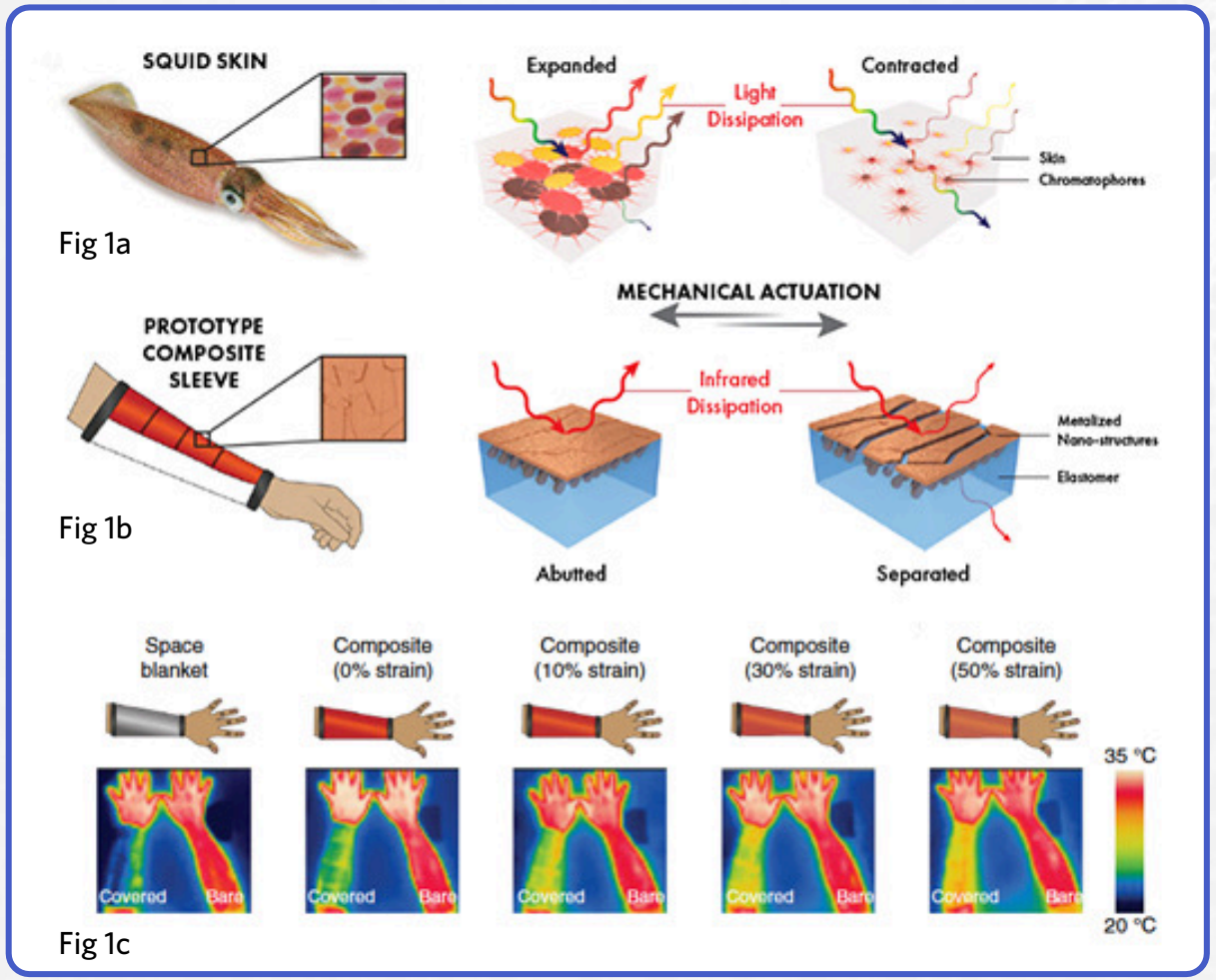


Fig 1a

Fig 1b

Fig 1c

BIOMIMICRY

- **Engineered, cutting-edge, platform technology**
- **Inspired** by cephalopods (squid skin)
- **Patent-Pending,** composite materials are relatively low cost, very lightweight, and user-tunable
- **Sustainable:** Materials use post-consumer copper metal and recyclable plastics – keeping **waste streams** and **carbon emissions** at a minimum

Fig 1a. Showing the bio-inspiration from a squid's skin.

Fig 1b. MVP Sleeve prototype regulating infrared (heat) dissipation due to expansion and contraction of metalized "nano-fragments"

Fig 1c. Thermal imagery showing skin temperature change from actuated sleeve material.

Reviewed in Nature Communications, nature.com

BUSINESS MODEL

REVENUE CHANNELS

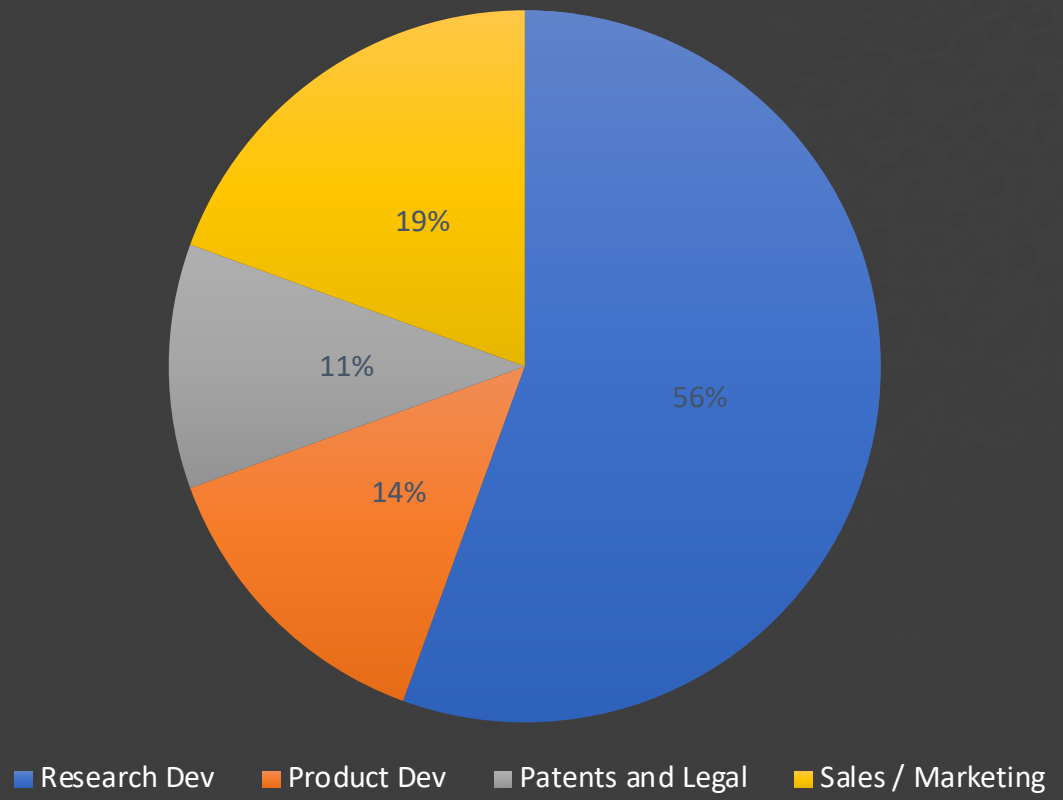
- Target customers (B2B): DOD, technical brands, e.g.: The North Face, Under Armour, and/or ingredient textile companies
- Target customer (DTC): Specialty Retail Commerce, Etc.

COMPETITIVE LANDSCAPE

BRAND	DESCRIPTION	THERMAL	STATIC	DYNAMIC	TUNABLE
SQUIDTEK	Thermoregulatory composite material	✓	✓	✓	✓
OROS	"SOLARCORE™" (aerogel) thermal foam	✓	✓	X	X
Columbia	"Omni-Heat" infrared reflective material	✓	✓	X	X
TRIZAR	Infrared nanomaterial for emissivity regulation	✓	✓	X	X
HEIQ	Created "SMARTEMP™" - convective cooling tech	✓	✓	X	X
PRIMALOFT	Synthetic "wool-like" insulation	✓	✓	X	X

INVESTMENT

***FUNDING USES:**



- **SEED ROUND:** Raising **$1,500,000** in Dilutive Equity
- **PREVIOUS FUNDING:** DARPA / IN-Q-TEL had previously funded over **$3M** (grants) for Research and Development
- We are currently at **PRE-REVENUE** Stage

*Funding for next eighteen months

SQUIDTEK®

MANAGEMENT TEAM

JAMES MOHAN
Cofounder / Interim CEO

- **25 years of product design**, advanced concepts, innovation and **material development**
- Designed products at global brands such as **Nike**, **Under Armour**, and **ASICS**
- Pioneered cutting-edge fabrics including thermoregulation
- Previous **startup** experience
- Global network partnerships with turnkey manufacturing

ALON GORODETSKY
Cofounder / Head of Research

- **Associate Professor**, Department of Chemical and Biomolecular Engineering, **UC Irvine**; PhD in Chemistry; BS in Engineering Physics and Materials Science
- Develops **DARPA** funded technologies
- Advanced development of bio-inspired materials with thermal management and infrared camouflage abilities
- Recognition in media such as **Popular Mechanics**, **NY Times**, **Newsweek**, **Wired**, **NPR**, **BBC** and **CNN**

IRINA GORODETSKAYA
CFO / Treasurer

- **Patent Scientist** and **Technology Transfer Analyst** at **Invention Transfer Group** and **UC Irvine**
- BS in Chemistry; PhD at MIT; PhD from **California Institute of Technology**
- Former Analyst for the **Department of Defense**
- Broad background in chemistry, materials science academic research and government policy

THANK YOU

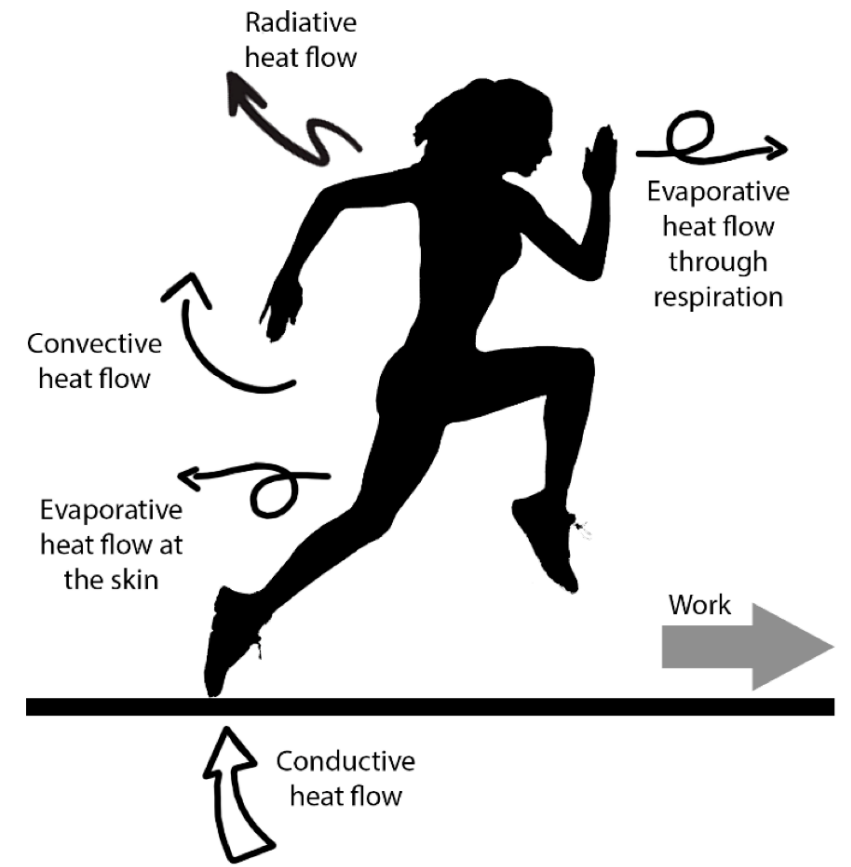
June 2023 - Do Not Distribute

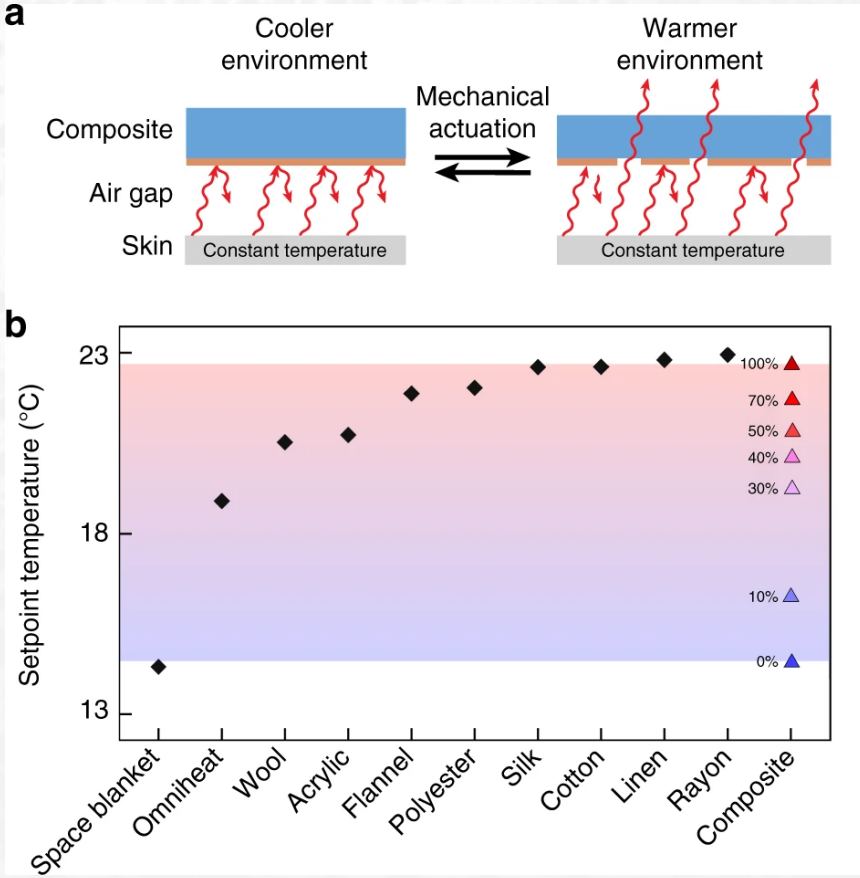
Contact: **James Mohan** / (303) 884.2348 / james@squidtekinc.com

SQUIDTEK®

APPENDIX

BENCHMARKING – For Adaptive Wearable Thermoregulation



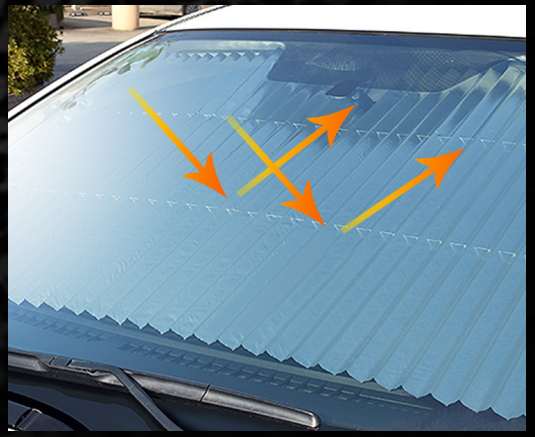


F. Fantozzi, G. Lamberti. Determination of thermal comfort in indoor sports facilities located in moderate environments. *Atmosphere* 10, 769 (2019).
E. M. Leung, M. C. Escobar, G. T. Stiubianu, S. R. Jim, A. L. Vyatskikh, Z. Feng, N. Garner, P. Patel, K. L. Naughton, M. Follador, E. Karshalev, M. D. Trexler, A. A. Gorodetsky. A dynamic thermoregulatory material inspired by squid skin. *Nat. Commun.* 10, 1497 (2019).

PLATFORM TECHNOLOGY

PACKAGING (FOOD/BEVERAGE)
FOOTWEAR
TEXTILES AND WEARABLES

SPECTRAL CAMOFLAUGE
MILITARY OPERATIONS
WINDOW INSULATION



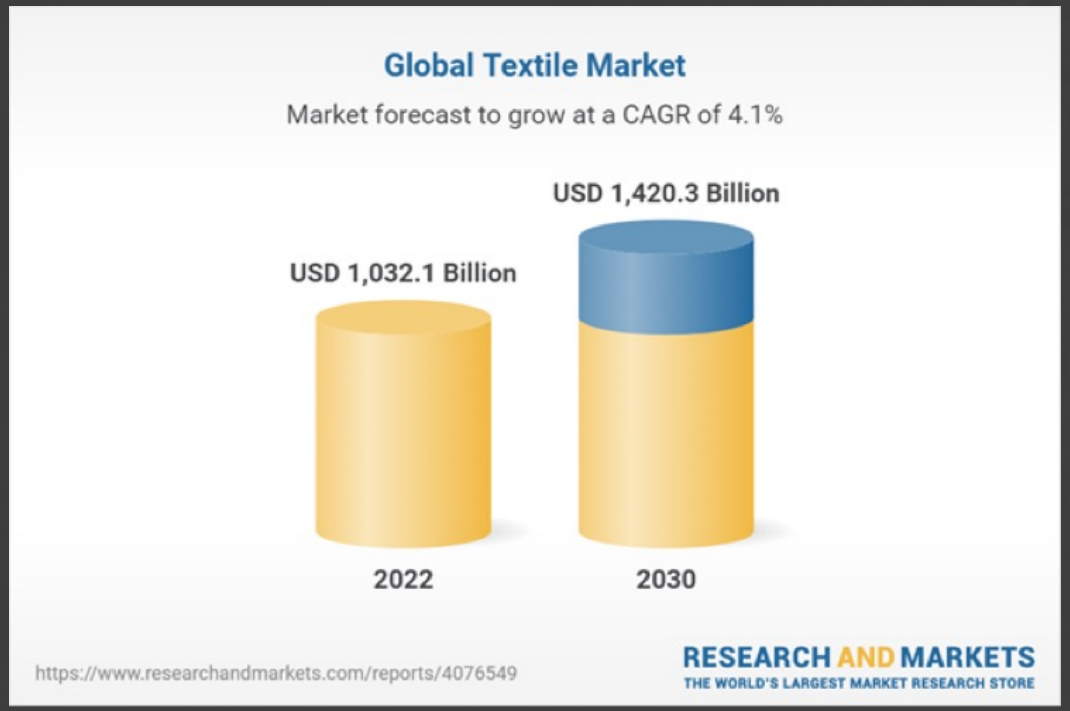
SQUIDTEK®

BUSINESS MODEL - Revenue Projections at the Current Technological Development Stage

Key Financials (in USD $m)							
	2023F	2024F	2025F	2026F	2027F	2028F	CAGR
Revenue	0.6	3.0	21.2	63.6	111.4	194.9	218%
Gross Margin ($)	0.4	2.0	13.9	41.8	73.3	128.4	218%
Gross Margin	65.5%	65.5%	65.6%	65.7%	65.8%	65.9%	
EBIT	0.1	1.0	9.0	28.2	50.0	88.4	266%
EBIT Margin	22.5%	32.6%	42.5%	44.4%	44.9%	45.4%	
Net Income	(0.1)	0.5	6.5	20.9	37.3	66.3	
Net Profit Margin	(20.6%)	17.0%	30.8%	32.9%	33.5%	34.0%	
Free Cash Flow							
	2023F	2024F	2025F	2026F	2027F	2028F	
Free Cash Flow	(1.0)	(0.5)	3.7	14.9	14.5	69.7	

* Model Overview is based on manufacturing YARDAGE of CURRENT composite materials (as a synthetic textile) – with COGS ~ @$.10-$1.25 per yard

TEXTILE MARKET – B2B



Resource: Research and Markets, August 2022

- The Global Textile Market (including Natural and Synthetics) was valued over $1 Trillion in 2020 and expected to reach $1.4 Trillion by 2030 with a 4.1% CAGR
- The US Textile Market is valued at $42.2B in 2022
- The Global Technical (Synthetic) Textile Market is expected to be worth over $285.9B by 2028 (5.15% CAGR)

GLOVE MARKET - DTC

Resource: Global News Wire, August 2022

PROTECTIVE	TACTICAL	SPORTS
$273M – Market	$338M - Market	$689M - Market
• Work Wear	• Military	• Ski
• Moto	• Police	• Team Sports
	• Hunting	• Sailing
		• Golf

- U.S. Market was estimated at $443M in 2021 (including markets such as tactical, winter sports, team sports, hunt, weight-lifting, and construction (protective)

- The Global [Sports] Market was $1.3B in 2022 and expected to reach $1.6B by 2026

SQUIDTEK®