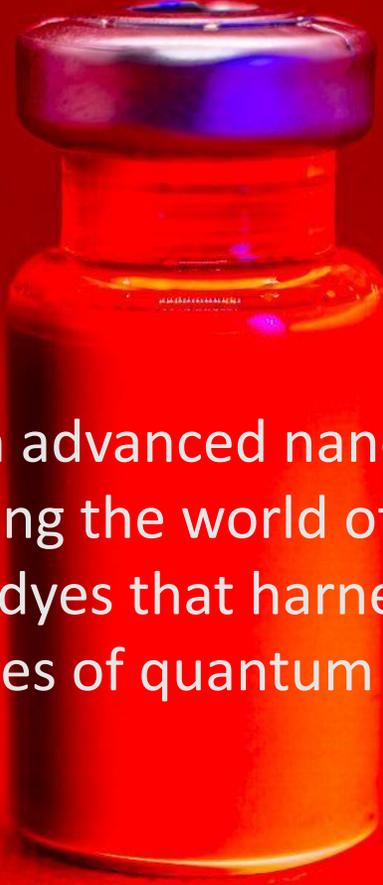




QUANTUM LIGHT

The world of Quantum Pigments



Quantum Light is an advanced nanomaterials company that is revolutionizing the world of colour by creating paints, coatings and dyes that harness the extraordinary optical qualities of quantum confinement.

What are Quantum Dots?

Quantum dots are small particles of **crystalline semiconductors**, typically core/shell structures that exhibit a property known as quantum confinement.

The size of a Quantum Dot determines its wavelength, and thus colour output.



Blue
smaller core



Green
medium core



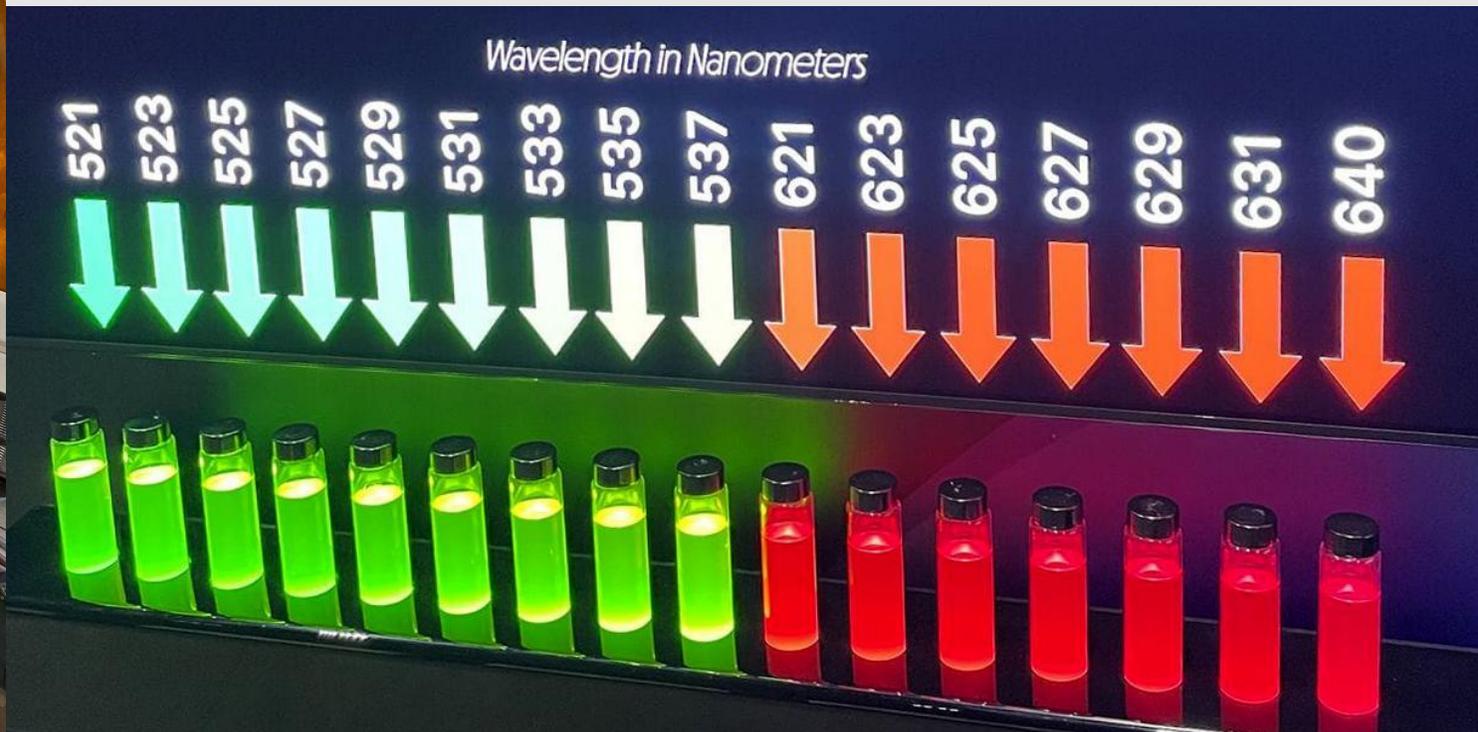
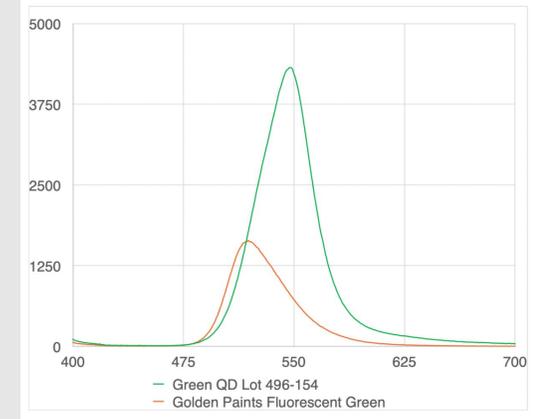
Red
larger core



Nobel Prize
Awarded Technology

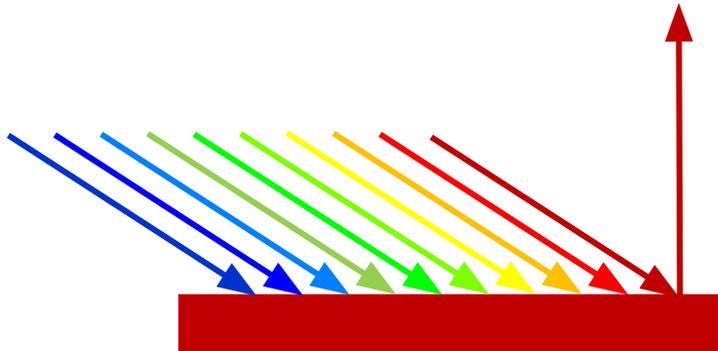
Laser pure emission

Quantum dots produce exceptionally pure colour because they emit light in very narrow, precisely defined wavelengths. Unlike conventional pigments, which reflect a broad mix of wavelengths, quantum dots generate colour through direct light emission, resulting in high saturation, vivid intensity, and outstanding colour accuracy, often described as laser-pure emission.



CONVENTIONAL PIGMENT

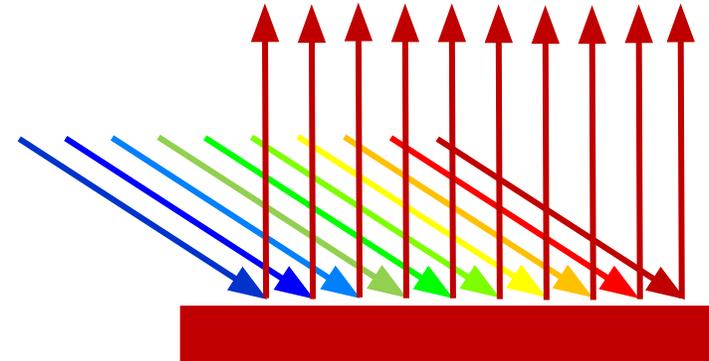
Fractions of ambient white light spectrum reflected by pigments



Emission: 0%

QUANTUM PIGMENT

All light below Quantum Dot band gap converted to bandgap emission



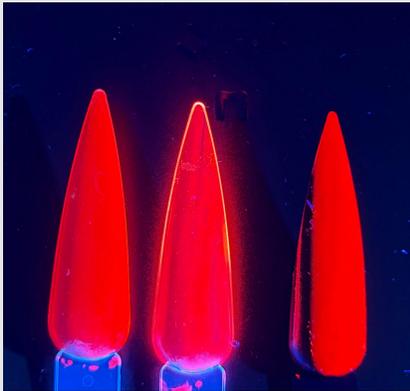
Emission: 98% QY

Conventional pigments create colour by reflecting part of the incoming light and absorbing the rest, which inherently limits their brightness and efficiency.

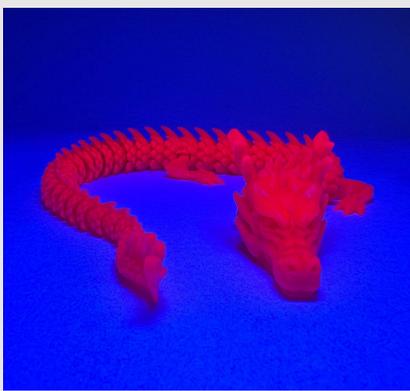
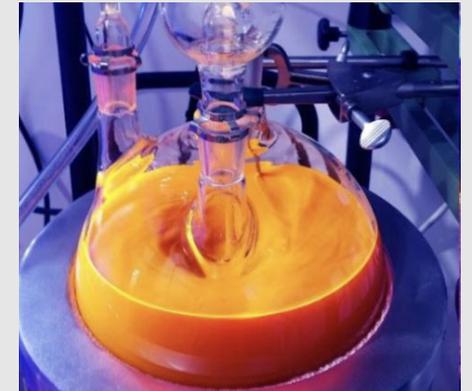
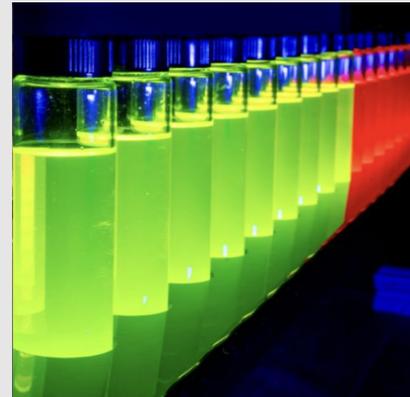
Quantum pigments behave **fundamentally differently**: they not only **absorb several times more light**, typically **200–500% more than conventional pigments** at relevant wavelengths, but also actively convert that absorbed light into emitted light. Rather than losing energy as heat, quantum dots re-emit it as photons. For example, a red quantum pigment can achieve a quantum yield of 98%, meaning that **98% of the light it absorbs is converted into emitted photons**, resulting in exceptional brightness, colour purity, and optical efficiency.



Product Portfolio



- Nail polish
- High Performing - Pigments



- 3D Printing Filament
- Automotive Coatings -



- Masterbatch
- Coatings for - electronics



The background features a series of concentric, overlapping circular bands in various shades of light gray, creating a sense of depth and movement. The bands are not perfectly aligned, giving the impression of a dynamic, layered structure.

Traction

Quantum Light was invited to present at major global events such as CES, the most important technology show in the world, the Oxford Entrepreneurship Forum by the Oxford University, Kingpins Show in Amsterdam and New York and was a nominee for the Innovation of the Year Award of Innovate Textiles Award.



TAM

Market Opportunity: ~\$15B Global TAM

1. Plastics & Polymer Compounds (Primary)

- Masterbatches & polymer compounds
- Consumer, industrial, and packaging plastics
- Specialty and functional colour applications

TAM: \$4–6B

2. Advanced Coatings & Functional Materials (Expansion)

- Automotive, industrial, and architectural coatings
- Specialty and functional surface treatments

TAM: \$5–7B

3. Fluorescent Pigments (Standalone Wedge)

- High-visibility applications (incl. safety-related use cases)
- Fluorescent coatings and surfaces
- Fluorescent plastics and molded parts

TAM: \$0.5–1B

4. Commercial Security & Authentication (Strategic)

- Brand protection and commercial authentication
- Secure packaging features and markers
(Excludes banknotes and government documents)

TAM: \$2–4B

~\$15B Global TAM

Ordered by execution readiness: Plastics → Coatings → Fluorescent → Security

Path to Commercialisation – De-risking Overview

Stage	Key Proof Points	Status / Signal
1. Material, IP & Performance	<ul style="list-style-type: none"> • >2.5 stronger than existing fluorescent pigments • Proven longevity in polymers; stable up to 280°C • Dispersion in water, mineral oil & MEK • Encapsulation approaches underway • Expansion of IP Portfolio 	Core material risk removed; IP position strengthening
2. Application & Cost	<ul style="list-style-type: none"> • Masterbatches at ~0.1% QD loading • Cost-effective vs incumbents • 100% successful pilot testing 	First application and unit economics validated
3. Regulatory & Scale	<ul style="list-style-type: none"> • Passed customer regulatory reviews including cosmetics • Toxicity testing ongoing to strengthen SDS • Manufacturing partner scaled production 	Regulatory & supply risk substantially reduced
4. Commercial Engagement	<ul style="list-style-type: none"> • First customer order received • Customers paying for samples • 100% customer retention • No expected supply bottlenecks 	Clear demand signal; transition to revenue

Commercialisation follows standard specialty materials qualification cycles; focus is on systematic removal of technical, regulatory, supply, and market risk.

Commercial Pipeline Overview

Engaged
Early discussions

14 Active accounts

Fabrics and textiles, consumer electronics, toys, anodised aluminium companies, plastics

Pilot / POC Testing

17 Accounts

Fluorescent pigments, sporting goods, polymers, fabrics and textiles, consumer electronics

Design-in / Development

7 Accounts

Polymers, packaging inks, automotive coatings, nail polish

Commercial Revenue

1 Customer

Initial revenue of ~\$12k

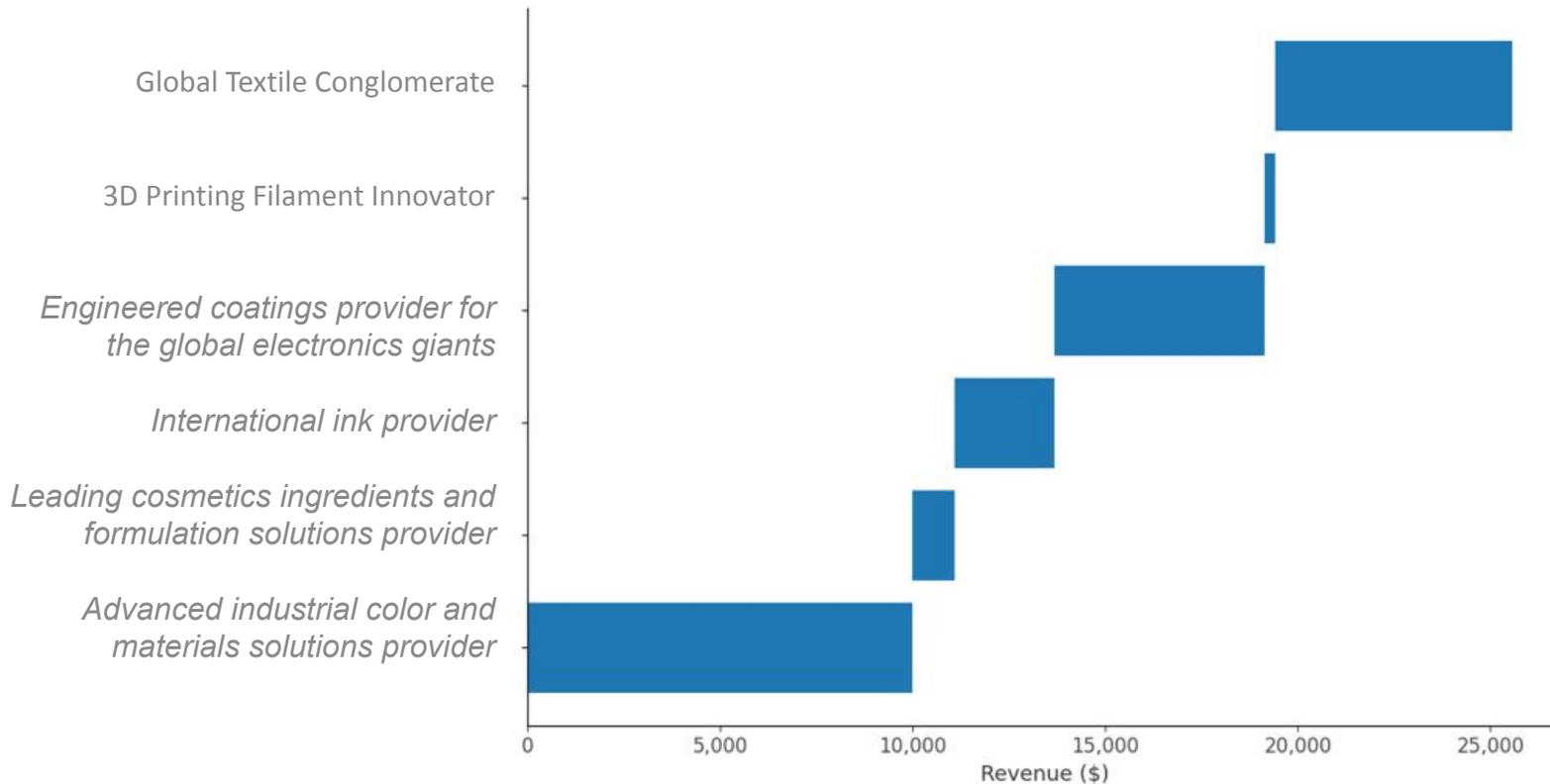
Logos not shown due to confidentiality.

Pipeline reflects active discussions, pilots, and early commercial agreements across sectors

Early Commercial Traction

Quantum Light early revenue validating demand

Cumulative Revenue Waterfall



- First commercial order agreed for January 2026
- Evaluation licensing agreement being signed with one of the most iconic electronics consumer brands
- Our products are currently being reviewed and tested by global manufacturers and brands in the areas of plastics, automotive, fashion, fluorescent pigments, cosmetics and consumer electronics.



The Team



Olga Alexopoulou
Founder & CEO

Olga attended the Ruskin School of Art at Oxford University and created the first ever quantum pigment at Berkeley National Laboratories. Her work has been exhibited in galleries and museums from Tokyo to New York.



Alex Sifniotis
Chief Operating Officer

Alex is an experienced operations executive and a Venture Partner at RVP. He is a six-sigma black belt and has held numerous operational roles including COO EMEA for TMF-Group.



Dr. Andrew Loxley
Chief Technology Officer

As the inventor of electronic ink (used in Kindle), and decades in nanotechnology development, Andrew brings unparalleled expertise in pigment innovation and encapsulation, making him a key figure in advancing next-generation materials.



Jason Hartlove
Founder

Jason is the Vice President and Head of XDO at Meta and the former President & CEO of Nanosys. Jason made Nanosys the world's leading manufacturer of Quantum Dots. He is also the co-inventor of the billion selling optical mouse.



George Iannuzzi
Senior Colour Advisor

George is a recognised global colour expert who is currently the Country Manager for Americas at Koel Colours, a leader in high-quality pigment manufacturing with a mass distribution network in over 65+ countries.



Ebru Debbağ
Senior Fashion Industry Advisor

Ebru is a very well respected global leader of innovation in the fashion world. She is also the Executive Director – Global Sales and Marketing of Soorty, one of the biggest suppliers of denim in the world.

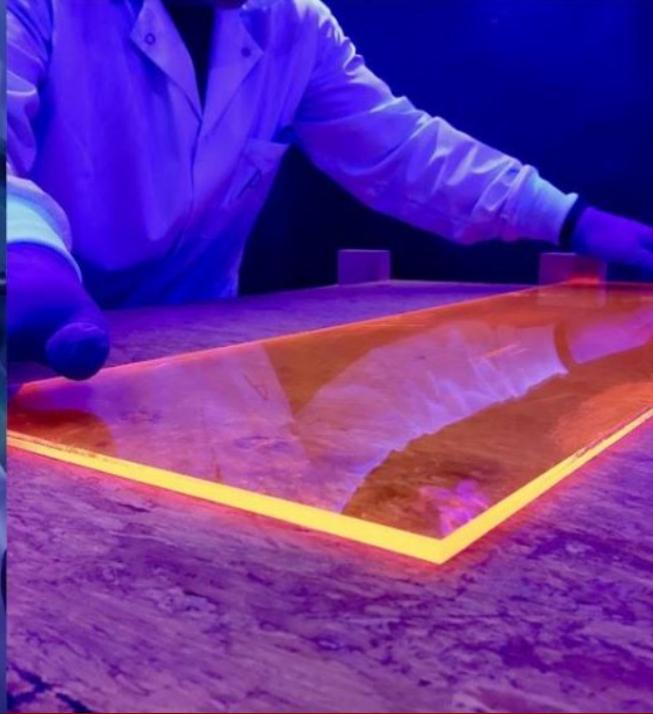
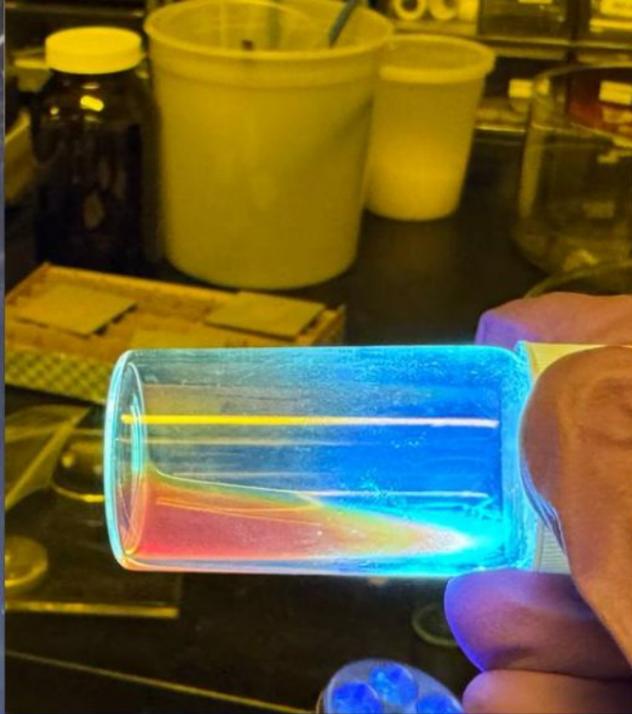


Pre-Seed Extension Round

We are raising this round to extend our runway while we build our product portfolio and develop significant revenue from sales.

Use of funds:

- IP / Patents
- Regulatory approvals and tests
- Hire Chief Technology Officer
- Develop product portfolio
- Build revenue



Thank You

Contact: Alex Sifniotis
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