SPARXELL RAISES $3.2 MILLION TO ADVANCE DEVELOPMENT OF SUSTAINABLE PIGMENTS

Global funds invest in bio-inspired technology which eliminates synthetic chemicals from colourants.

Cambridge, UK ● April 2024 – Sparxell, the UK-based developer of high-performance, sustainable, plant-based pigments, has completed a $3.2 million funding round (comprising seed investments, grants, and awards) to accelerate development and commercialisation of products which will eliminate synthetic chemicals from colourants in multi-billion dollar markets including in cosmetics, fashion, paint, and packaging.

The Circular Innovation Fund, a global venture capital fund jointly managed by Demeter and Cycle Capital with L’Oréal as an anchor investor, participated in the seed funding alongside others including SpaceX-backer Future Communities Capital, sustainability-focused investor PDS Ventures, impact investor Katapult VC, deeptech funds SNOCAP VC, Granatus Ventures, and biotech and consumer sectors investor Joyance Partners.

Sparxell was founded in 2022 by Cambridge scientists, led by Dr Benjamin Droguet and Professor Silvia Vignolini, who discovered ways to replicate vibrant colours in nature using fully plant-based cellulose, a renewable, biodegradable resource that can be extracted from waste streams. Sparxell’s pigments use the same material that many plants and animals use to produce vivid, durable, and fade-resistant colourants. The products are toxin-free and fully biodegradable with a colour intensity that lasts longer than traditional colourants and pigments on the market.
The business has won significant awards worth more than $350k from Morgan Stanley’s Sustainable Collaborative Prize and the 2023 Ray of Hope Award from the Biomimicry Institute.

“Traditional chemical colourants are causing major environmental harm through every stage of their lifecycle, from manufacture to degradation. Over 10,000 fossil-based chemicals are used in current colouration processes. The textile industry is a well-known emitter of dyes and microplastics, with over 1.5 million tonnes entering the environment every year, while paint has recently been recognised as the largest source of microplastics in the ocean,” said Dr Benjamin Droguet, Sparxell Founder & CEO.

“The global movement towards plant-based alternatives has experienced exceptional growth in recent years with a reshaping of entire industries such as meat and dairy. The same opportunity exists within colourants, driven by a common interest of consumers, brands and regulators to transition to fully sustainable, biodegradable, circular products. Most brands are committed to eliminating synthetic chemicals from manufacturing processes altogether. Our plant-based materials can be grown and sourced locally in a complete rethink of how colours are currently being manufactured while reducing transport emissions. The industrial applications for Sparxell’s products are broad, from cosmetics and textiles to paints and packaging,” added Dr Droguet.

The colourants market is worth an estimated $38 billion and is expected to grow to over $100 billion by 2030*. Sparxell is targeting specific markets including but not limited to beauty (colour cosmetics, personal care, creams, sunscreens, glitter make-up), fashion (textile colouring, embellishments, sequins), packaging (bulk colouring, films, foils), and paint (automotive, building).

Sparxell has already engaged in product innovation partnerships with blue-chip companies across different industries with applications for sustainable colourants, including leading car manufacturers, world-leading high-end fashion brands, and cosmetic goods manufacturers.

Funds raised will enable Sparxell to expand its manufacturing capacity to support pilot production, secure further product development partnerships with brands, undertake more product trials with key manufacturers and distributors, and expand headcount. Based on the growth trajectory and levels of interest in co-developing applications for Sparxell pigments across a range of industries, the company expects to launch a Series A funding round in the coming months to upscale production capacity and accelerate commercialisation.

“The Circular Innovation Fund has invested in Sparxell because its nature-inspired colourants address a range of concerns including plastic waste, carbon emissions, human rights, and water savings. With colourants being such an important component of cosmetics, we are especially excited to see the application of Sparxell products in this sector,” said Stéphane Villécroze, Co-founder and Managing Partner at Circular Innovation Fund.

“When we came across Sparxell we came to realise just how big the market for pigmentation is and how large the potential impact on the climate could be,” said Jørn Haanæs, Investment Director, Partner – Investment Management, at Katapult. “The cosmetics industry alone needs to overhaul its environmental credentials and naturally derived pigmentation not only addresses its CO2 footprint but also the chemical pollution for which the industry is notorious,” added Haanæs.

"With its outstanding leadership and highly novel technology, this company is poised to completely transform the colorant market," said Joyance Partners Venture Partner, Yang Chen. "Due to the flexibility of the pigments, Sparxell’s product has the potential to substantially lessen the immense negative impact across a myriad of historically environmentally devastating industries, and we’re thrilled to support them in their endeavour."

"Sparxell is an incredibly exciting company for SNØCAP because of the vast market implications behind the technology," said Shrina Kurani, GP of SNØCAP VC. "Consumers want cleaner alternatives in the products they buy, and Sparxell is able to deliver on this at a platform level, creating a much bigger climate impact."

Rohit Gupta, Managing Director of Future Communities Capital, added: “The colourant industry is a massive market controlled by a handful of players; it is ripe for disruption. Sparxell has the potential to impact some of the world’s largest industries, leading a powerful shift towards sustainability without sacrificing performance.”
Notes to editors

Sparxell is an innovative green-technology SME focused on the development and manufacture of sustainable, high-performance, plant-based colourants. Sparxell has developed the world’s first entirely sustainable, plant-based performance pigment. Using cellulose, a renewable, biodegradable resource, as a feedstock, Sparxell has created a product that is fully bioinspired, plastic- and toxin-free.

The chemical colourants problem and Sparxell’s solution

Traditional chemical colourants are causing major environmental harm through every stage of their lifecycle, from manufacture to degradation. Through harnessing advanced material science innovation, Sparxell has developed a high-performance pigment that is 100% plant-based and plastic-free, providing a solution to high-impact traditional colourants. Sparxell’s products solve the following sustainability problems:

- **Plastic waste**: 1.5 million tonnes of dyes and microplastics enter the environment every year from colourants used in textiles. These materials take more than 500 years to degrade. Sparxell’s products are plastic-free, toxin-free, and biodegradable meaning that no plastic waste or other harmful pollutants enter the environment.
- **Carbon**: traditional colouration processes use more than 10,000 fossil fuel-based chemicals and the mining processes to extract raw minerals such as titania accounts for 2-3% of global GHG emissions.
- **Water saving**: Sparxell’s process reduces water pollution and usage at every stage of the manufacturing process.
- **Human rights**: all processes are completed in a lab using natural inputs meaning there are no human rights issues associated with supply chains and Sparxell has complete oversight of its processes.

Company history

Sparxell was founded in 2022 by Dr Benjamin Droguet, who worked as part of Professor Vignolini’s group at University of Cambridge to demonstrate the use of industrial machinery to replicate vibrant colours found in nature using plant-based cellulose. Since then, the company has rapidly advanced its technology and in 2023 began to produce product prototypes for potential partners with applications across different industries.

Sparxell’s science has already won several significant awards, including the $100k **2023 Ray of Hope Award from the Biomimicry Institute** and $250k funding as part of the **Morgan Stanley’s Sustainable Collaborative Prize**.

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