



## **Coatings + Formulation Scientist**

### **Full Time Position**

Cypris Materials, Inc.

Alameda, CA

Estimated Salary: \$75,000 – \$100,000 + early employee equity package

### **Company Overview**

Color is a crucial component to nearly every consumer market and is understandably the first feature that product design teams focus on when differentiating their new product. Color is the primary reason consumers say they've purchased a certain product over another. Yet, the industry has not changed in design nor underlying technology in the last few decades. Currently, chemists must painstakingly produce one color at a time, leading to endless recipes for production, the use of dangerous contaminants, and one-off manufacturing processes. New methods to generate color are necessary to overhaul the highly pollutive methods of current manufacturing and expand the global color gamut. Cypris wants to give the industry a much-needed make-over.

Structural color has been viewed by environmentalists as the holy grail to realize a safer alternative to toxic organic dyes, pigments, and effect pigments. Recognized by the Biomimicry Institute and funded by the Environmental Protection Agency and National Science Foundation, Cypris' team creates polymers (referred to as "binders") that when formulated into a paint or ink and applied to virtually any surface will self-assemble into structured coatings upon drying that reflect specific wavelengths of light based on the size of the polymers. This mechanism for creating color, called "structural color", is similar to how the Cypris Morpho butterfly achieves the vivid blue color on its wing.

Cypris Materials decouples color production from the messy "one-chemistry one-color" status quo, setting color free from limitation. The company was founded in Berkeley and has over 14 issued or pending patents to commercialize a color platform that broadens the color gamut, reduces manufacturing hassle, simplifies formulation, and doesn't pollute the environment.

### **Position Profile**

Cypris is looking for a motivated coatings & formulation scientist who is driven by the opportunity to make a significant impact at the ground level of a small energetic team with an innovative technology. The successful candidate will be a curious and fast learner that can work efficiently and balance multiple projects. The phenotype for this candidate is one who gets excited about building a product from the ground up and working with customers to meet industry specifications and get to market. They will have the ability to wear many hats and adapt to changing environments, making good, independent judgement calls and work well in a team to accomplish the highest priority goals.

The person will have a direct responsibility for strengthening the company's performance:

- Formulating new paints and inks for various end use applications including spray, screen printing, flexographic printing, and inkjet printing
- Developing SOPs for masterbatch formulations, characterization, application, and QA/QC of produced coatings
- Optimizing, scaling, and improve coating quality and manufacturability
- Interfacing with partners and fulfilling customer sample orders
- Driving internal R&D and pursuing fundamental discoveries that strengthen the next generation of Cypris offerings

The individual will report to the senior materials engineer to catalyze the development and optimization of Cypris Materials' structural color with external customers for translation to market.

### **Background and Experience**

The ideal candidate will have a background in ink, paint, coating, and/or formulation development and application. They will demonstrate the ability to address technical challenges and provide creative solutions to compelling scientific questions. Key skills and previous experience:

- B.S. in chemistry, materials science, chemical engineering, or related scientific discipline
- Wet chemistry lab experience required, hands-on formulation and application development a strong plus.
- Familiarity with solvent- and water-borne formulations, and UV curable/crosslinking chemistries
- Experience with scaling-up formulation and processes for production
- Experience with common deposition techniques including spray, screen printing, flexographic printing, and inkjet printing a strong plus
- Excellent organization, communication, and project reporting skills



- Understanding of material structure-property relationships
- Familiarity with common coating testing methods (ASTM or similar)

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