



QustomDot

QustomDot
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Ink formulation chemist

Introduction

Colorful, functional, and efficient: discover the possibilities of quantum dots (QDs) with QustomDot. QustomDot is an advanced materials start-up founded in January 2020, and a Ghent University spin-off. We develop QD technology for future applications in color conversion.

QDs are semiconductor nanoparticles that can transform UV or blue light into pure colors such as green and red, through a process known as down-conversion. The emission color of the QDs is determined by the size of the QDs, which we precisely control through state-of-the-art synthetic procedures. A strong advantage of QDs is that they are obtained as a colloidal dispersion, which opens industrially relevant processing strategies such as direct printing or photolithography. As we speak, QDs are at the birth of the next technological revolution in the display industry, after LCD and OLED. Current QD technologies, however, suffer from instabilities under the influence of high light flux and elevated operating temperatures. We at QustomDot have developed a technology that renders QDs suitable to be used as down-converter directly on LED chips, thereby moving into the application field of microLEDs, *the next big thing*.

QustomDot aims to realize the full potential of QDs in the imaging and display industries and for that, we are looking for talented and motivated scientists to strengthen our team. For the position of ink formulation chemist, we are looking for a profile as listed below. If your profile matches several points from the list, we are interested in talking to you. As ink formulation chemist, you will oversee processing of our photostable QDs-polymer mixtures into photoresists or inks for QD (thin) films and patterns. You will be involved in formulating the QD resins and in the evaluation of the morphology and optical properties in view of the application.

Profile

Qualifications:

- PhD/Master's degree in (Chemical) Engineering, Chemistry, Material Science, or equivalent
- Hands-on experience in development/formulation of materials for at least one of the following techniques: photolithography, thin film coating techniques, ink-jet printing, 3D-printing or other deposition and/or patterning techniques at small scale (<50 μm)
- Open to working in a small team and flexible environment, willingness to travel and spend time at a customers' facilities abroad

Beneficial skills:

- Experience in an industrial R&D/production environment
- Experience in encapsulating techniques used for electronics or other relevant fields
- Knowledge of the chemistry of adhesives, self-assembled monolayers, or other surface treatment techniques
- Knowledge of colloidal nanoparticle synthesis and/or surface chemistry engineering
- Experience in working in a clean room
- Experience with design of experiment

Our offer

We offer a full-time position in a growing company working at the cutting edge of display technology.

Interested?

Let us know via info@qustomdot.com by sending us your C.V. and motivation letter.