QustomDot
Technologiepark 66
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QD 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 QD 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 a QD Chemist, you will oversee the synthesis of highly luminescent QDs in our new, state-of-the-art chemical lab. You will guide developments in the synthetic procedure of our semiconductor nanocrystals, and you will be closely involved with the further stages of QD processing, which will serve as a feedback for the synthetic protocols.

Profile
Qualifications:
- PhD/Master's degree in (Chemical) Engineering, Chemistry, Material Science, or equivalent
- Experience in colloidal synthesis of nanocrystals (min. 4 years)
- Experience in characterization of nanomaterials through absorption and luminescence spectroscopy, Fourier-transform infrared spectroscopy and electron microscopy
- Experience in characterization of nanocrystal surface chemistry with NMR or other techniques
- Experience in processing nanocrystals into polymer matrices
- Open to working in a small international team and agile environment, willingness to travel and spend time at a customers' facilities abroad

Beneficial skills:
- Experience in an industrial R&D/production environment
- Hands-on experience with ink-jet printing, spin-coating, photolithography, or other deposition and/or patterning techniques
- Knowledge of the chemistry of adhesives, self-assembled monolayers, or other surface treatment techniques
- 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.

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Interested?

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