QustomDot
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Device engineer

Introduction
Colorful, functional, and efficient: discover the possibilities of quantum dots (QDs) with QustomDot. QustomDot is an advanced materials company that develops QD technology for future microLED display applications.

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 onset 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 engineers to strengthen our team. For the position of device specialist, we are looking for a profile as listed below. As device specialist, you will assist our CPO in defining product specs and defining customer projects from an application perspective. You will help develop automated characterization tools for color conversion modules, both on die level and on wafer level. You will help our partners achieve color conversion in their devices by supervising projects, analyzing customer samples, performing modelling assignments, etc.

Profile
Qualifications:

- PhD/Master's degree in a relevant field
- Hands/on expertise in LED/display applications (LCD, OLED, microLED etc.)
- Understanding of physics and engineering related to optical design and measurement of light
- Experience in an industrial R&D/production environment
- Open to working in a small team and flexible environment, willingness to travel and spend time at a customers' facilities abroad

Beneficial skills:

- Process understanding of, and experience with a wide variety of semiconductor process technologies such as lithography, etch, deposition (PECVD, ALD, PVD), CMP, metallization, etc., including related metrology technologies;
- Hands-on experience in design and development of (color-converted) displays, optical modelling, characterization of produced samples, etc.
- Hands-on experience in programming using MATLAB, Python or any other programming languages, particularly to interface with hardware like Arduino, Raspberry Pi or similar
- Experience in color-conversion of microLEDs

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.