

# Quantum Dot Process Engineer

Munich, Bavaria, Germany · 2 months ago

On-site Full-time

## About the job

Become part of the Quantum Semiconductor R&D Team at SERINO in Munich

At SERINO, we are driven by a shared vision to democratize material analysis and improve data availability through NIR semiconductor innovations. We are pioneering the development of scalable infrared image sensors that help machines achieve enhanced visual capabilities and unlock new functionalities.

Position: Quantum Dot Process Engineer

We are looking for a Quantum Dot Process Engineer to join our Munich-based team. Work with us to push the boundaries of quantum dot synthesis and thin film process technology. You will work closely with the process, integration, and device functions to enhance capabilities and support the transition to large-scale manufacturing.

A typical day may include the following:

- Synthesis and design of colloidal quantum dot semiconductors for infrared sensing applications.
- Modification of synthesis procedures using statistical methods (DoE).
- Collaborate with the R&D team to produce samples and optimize ink formulations for optoelectronic devices.
- Deposition of colloidal quantum dot semiconductor thin films, evaluation of device performance, and correlation with material properties.
- Design and execution of experiments for the optimization of device performance.
- Collaboration and exchange with internal and external project partners and passing requirements to other process owners.
- Reporting results to cross-functional teams for feedback and refining requirements.
- Collaborating with design, process, testing, and management teams to comprehend device performance and potential failure modes.
- Acquiring and commissioning thin-film deposition equipment.
- Collaborating with suppliers and industrial/academic partners on new material and process development.
- Filing relevant patent applications.

About You:

- Deep expertise in colloidal quantum dot or perovskite technologies, including ligand exchange processes, ink formulation, and coatings for optoelectronic applications.

- Understanding of electro-optical film properties and characterization techniques relevant to optoelectronic device performance.
- Familiarity with semiconductor devices and process technology.
- Experience in managing internal and external vendors.
- Track record of innovation, problem-solving, and failure analysis.
- Experience in equipment acquisition.
- M.Sc. or Ph.D. in a relevant Science/Engineering field or equivalent.

Why Join Us:

- Thrive in a high-growth, multicultural, and collaborative environment.
- Enjoy flexible working hours and a culture.
- Access continuous professional training and opportunities for career advancement.

If you're passionate about advancing technology and making an impact in semiconductor innovation, join us at SERINO to drive the future of material analysis and data accessibility through quantum film processes.

Intrigued? Then we look forward to receiving your resume by applying through LinkedIn.