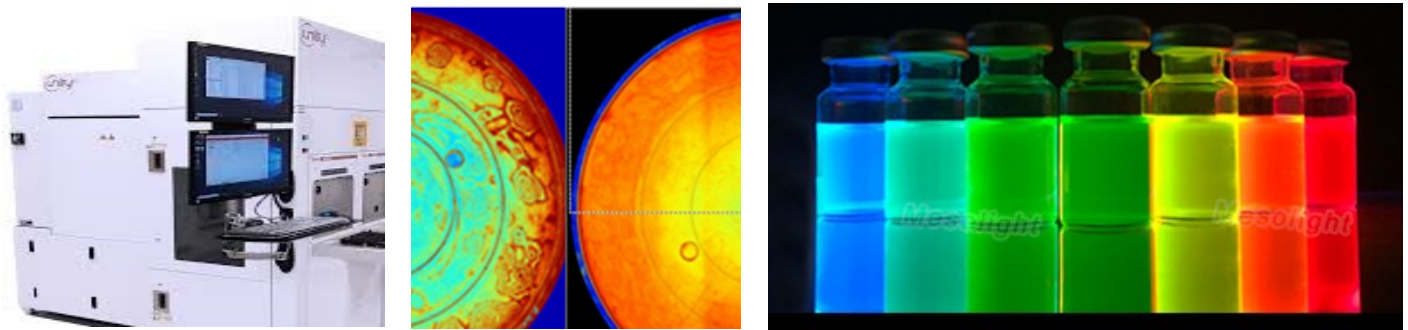


Internship on Fluorescence for semiconductor inspection

Literature review, modeling, design of experiment and test of capabilities of nanoparticle inspection machines in fluorescence mode

UnitySC designs and develops high precision tools to optically control the processes for the semiconductor industry.

Crystalline defects in semiconductors are not amenable to detection by standard imaging techniques. However, fluorescence can act as a signature of these structural defects. We want to extend its capabilities to measure fluorescence. A proof of principle will be performed with quantum dots.



You will be part of the R&D team and will have as objectives to:

- Extend a model of the fluorescence response of one of our machine.
- Prepare test samples by dispersion of quantum dots.
- Measure the dynamic response of the machine and compare it to the model.
- Generalize the technique to wafers of interest.

You are enthusiastic regarding optics and nanophotonics in particular. You enjoy diving into physical principles and models and are also keen to perform experiments. Eager to work on new high-tech tools, you want to understand how they work and how to push their performances forward.

You want to make an impact on a research and development project. You communicate easily with the other members of the team and are at ease in an international environment.

Duration : 6 months.

Please send a resume and a cover letter to: guillaume.vienne@unity-sc.com