

**Title:** Opto-mechanical engineer

**Information:** [www.confocal.nl](http://www.confocal.nl)

**Reports to:** CTO

**Based in:** Amsterdam (The Netherlands)

**Company Background:**

Confocal.nl aims to change the microscopy industry with a confocal microscope based on the re-scan invention: the Re-scan Confocal Microscope (RCM). RCM combines the super-resolution capability with higher sensitivity than most confocal microscopes. The Re-scan technology was developed at the Swammerdam Institute for Life Sciences of the University of Amsterdam. This innovative technology converts a standard microscope into a super-resolution microscope for three-dimensional confocal imaging. It is available as a highly affordable and customized device, which is ideal for small labs with specific interests in biomedical research but also as a working-horse at microscopy facilities to increase the imaging capacity. The simple technical design and open-architecture makes the system platform- and software independent which allows plug-and-play upgrading of any standard fluorescence microscopes.

Confocal.nl started as a company in 2016 and has grown now to a team consisting of 10 highly skilled engineers, developers and business developers. At the moment there is a need to expand the technical team with a product developer in order to speed up the design and introduction of new products. This position is a good career opportunity for a creative and experienced opto-mechanical engineer.

**Job purpose:**

As a product developer you will be responsible for the opto-mechanical design of new products: from making the first sketches of ideas, toward design, development, construction and testing of prototypes up to building and testing the final product that will be introduced into the market. You will be a member of an innovation driven team of engineers, scientists and software developers. For good product development it will be important to easily interact and align with the technical team members, but also good communication with customers and members of the commercial team will be crucial. Products that will be developed will cover the field of optical microscopy techniques and will be based on the re-scan technology.

**Job Requirements**

- MS or Ph. D in Mechanical Engineering, Opto-mechanical instrumentation or precision instrumentation. Candidates with suitable hands-on experience with a BS degree will be considered in exceptional circumstances.
- 3 years' experience in opto-mechanical/mechanical design, simulation and testing of optical imaging systems.
- Experienced in working with customers and engineering team to effectively and successfully bring optical products through product life cycle from designing to prototyping to volume production
- Familiar with microscopy technology that is currently available and that is used in biomedical research labs.

**Skills & Competences:**

- Strong foundation in mechanics, materials, physics, math, theoretical modeling, and thermal simulation
- Proficient in using mechanical and optical design tool such as Zemax, Code-V, Oslo and SolidWorks, AutoCAD, Creo to do opto-mechanical system design, optimization, system analysis, tolerance analysis, thermal analysis and assembly.

- Hands-on experience with optical and mechanical components such as objectives, microscopes, cameras and laser systems.
- Sufficient knowledge of electronics and software to allow easy communication with specialists.
- Ability to work independently with minimal guidance from supervisor in the field of design but keen on discussion and supervision in the field of innovative microscopy.
- Ability to develop long-term plans and goals, to evaluate work accomplishments and provide effective feedback.
- Creative, analytical and problem-solving capabilities
- Excellent communication, interpersonal and presentation skills

#### **What do we offer?**

- A very interesting challenge for an experienced opto-mechanical engineer looking for the challenge to create new products that can be used in advanced biomedical research.
- An attractive package of salary and performance bonus
- The opportunity to build up a team of engineers and designers.
- Working for an innovative and focused organization with a clear goal: bringing innovative microscopy to the market.