



Vertical Integration Engineer

Job description

As Vertical Integration Engineer you are responsible to organize and execute a broad range of multidisciplinary tasks. You are responsible for aligning various internal groups to meet the requirements of our customers and act as a foreman that oversees the various aspects of vertically integrated and hybrid photonics. Your experience in the field of microfabrication, integrated optics, electronics, mechanics, and software (for hardware and automation) makes you the multidisciplinary hands-on specialist that communicates with the various technical disciplines within the vertically integrated capabilities of LioniX International. Besides the multidisciplinary knowledge, you will bring solid understanding of LiNbO₃ modulator devices and the hybrid integration and packaging thereof. Creativity, micro-assembly and DO-IT are in your DNA.

Your responsibilities will be:

- Managing of multidisciplinary projects where vertical integration and hybrid integration of active chips (InP, LiNbO₃) are required;
- Translating customer requirements into hybrid integrated active photonic modules;
- Being a multidisciplinary hands-on engineer working with many different stakeholders;
- Balance between project management and cutting-edge lab work, learning from and inspiring colleagues.

Your team

You will be part of the Module and Assembly team. This team responsible for all the vertical integration of hybrid photonics related activities within LioniX International. The competences within the team span a broad range of expertise's, ranging from optical characterization, integrated- and fiber optics, mechanics, electronics, PCB design and 3D design. These skills are applied to test and assemble photonic integrated circuits (PICs) for Life Science, Tele- and Datacom, Sensors, Medical and Food. The team is closely working with the chip design team, cleanroom team, electronics team as well as commercial customers and European project partners. Since the markets and products of our customers are changing rapidly, LioniX has organized itself as a very flat organization with many responsibilities for the individuals in the teams.

Professional requirements:

- PhD. Degree in Electrical engineering or Applied Physics.
- Knowledge and expertise in cleanroom processes and microfabrication is essential.
- Strong background in LiNbO₃ modulator modelling and integration (both bulk and LNOI).
- Solid understanding of backend processing, like polishing and wirebonding.
- Knowledge of optical and electrical characterization.
- Experience in photonic packaging is essential.
- Knowledge of reliability testing.
- Simulation and design skills with COMSOL and Solidworks, as well as Python programming are a strong advantage.



- Creative, organized, pro-active.
- Team worker in multidisciplinary and international setting, strong communication skills

Languages

- Fluent in English
- Dutch or willing to learn Dutch

What LioniX International offers you

- Competitive salary
- Good terms of employment
- Company paid pension plan
- Company paid insurances
- Healthy work – life balance
- International working environment

Working at LioniX International means you will be working in a dynamic and inspiring environment. As a technology driven company our teams are always curious and looking for challenges and possibilities. Your team expects you to work as a team player, but individually you will have many possibilities for self-deployment. This is stimulated actively since it is of great importance for LioniX International that we invest in a long-term relationship between you and us.

As a global leader in microsystem technology, your working environment will be both Dutch and international. Your colleagues and the projects you are working on both have a diverse nationality.

When joining the LioniX family, you will experience that we also create many opportunities for non-work related matters, such as Friday afternoon celebrations and days-out with the company. Finally, LioniX International has good terms of employment including an excellent pension and insurance plan both for you and your family.

Company profile

LioniX International is a leading global provider of customized microsystem solutions, in particular integrated photonics-based, in scalable production volumes. We provide customized solutions for OEM's and system Integrators, by vertical integration, from design to fully assembled modules. We continuously maintain our technology leadership secured in a strong IP position. Currently LioniX International employs nearly 50 highly educated people, and its management has multiple decades of combined experience in micro/nano system technology.

Further information is on our website www.lioniX-international.com

Contact

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