



VACANCY

SMART Photonics B.V. established in 2012, is an innovative scale-up in photonics at the High Tech Campus in Eindhoven, The Netherlands. We are trusted by the world's leading tech companies, large and small. We are the world's first pure-play foundry for Indium Phosphide photonics semiconductors, collaborating with our customers to turn their designs into the chips we manufacture at our facilities. Indium phosphide chips are proving to be the best choice in many innovative applications ranging from next generation low-power consumption datacentres to “intelligent pills” for medical diagnostics and high-accuracy drug dispense. Integrated photonics also plays an increasingly important role in the aircraft industry, air quality monitoring and ultra-secure cryptography.

SMART Photonics is a rapidly growing, ambitious high-tech company. Join us with the photonics revolution and apply now! We are looking for a:

Vertical Integration Engineer

Location: High Tech Campus, Eindhoven The Netherlands
Fulltime: 40 hours a week

Job description

At SMART Photonics we have both vertical integration engineering and horizontal process engineering. While horizontal process engineering is taking ownership regarding our internal production processes, the Vertical Integration Engineering (VIE) team is mainly focused on implementing incoming new products from our customers, industrialization of our manufacturing, improving our product and line yield, understanding the root causes of technological issues and reducing our cycle time of our products in the manufacturing line.

Essentially, as a vertical integration engineer, you familiarize yourself with the processes as a whole. By generally understanding all the bits and pieces you're capable of converting the customer's requirements into a tailor-made process.

Job responsibilities

In the current life-cycle of our company (scale-up, 70 employees) your role as a Senior Vertical Integration Engineer you will;

- Maintain and improve integrated process and technology in pilot manufacturing for Photonics Integrated Circuits.
- Bring strong troubleshooting skills, ownership & quality mindset with ability to work well in a matrixed team environment, as you will be an integral part of our Task Force Teams.
- Be able to coordinate activities across multiple departments.
- Have a good understanding of line yield, in-line trend shift and new product introduction (NPI)
- Capable to Design, execute, and analyse complex experiments.
- Use software to analyse data including statistical analysis; Consults with senior level engineers on experimental results in order to make decisions about large scale changes.
- Be responsible for critical or complex steps or layers in the wafer fabrication process.
- Communicate technical information to senior leadership outside of the department through presentations.

- Understand our 3-5 semiconductor processing including MOCVD, FEOL and BEOL.
- Need understanding of PFA, defects and Yield for initial batch testing and de-bugging.
- Work Mon-Fri 8-5 am but off hour activities and coverage may be required.

We are looking for a person who has/is

- BS or MS in physics, electrical engineering, chemistry, chemical engineering, materials science or related field. Prefer >4-6 years of experience in the semiconductor industry. Master's or Ph.D. is preferred.
- Basic understanding of the interactions between process and yield.
- Electrical Engineering, Materials Sciences, and Physics expertise within semiconductor field is required.
- Experience with semiconductor manufacturing is strongly preferred.
- Experience in Yield or Process Integration in semiconductor manufacturing is strongly preferred.
- Excel, Power point and strong data analysis and organization skills required.
- Analysis skills, including yield analysis, electrical device characterization, yield issue investigations, data mining, DOE, and SPC.
- Programming and/or scripting experience is a plus.
- Capable to shift focus and change priorities - dealing with ambiguity.
- Ability to demonstrate strong core values including: Integrity, Respect, Teamwork, Quality, and continuous Learning.
- Has excellent communication, documentation and presentation skills.
- Well developed interpersonal skills to escalate issues, get support, and effect lasting change.
- Demonstrated ability to meet deadlines and commitments.
- Ability to address high-pressure situations involving mass production quickly and safely.
- Positive Attitude and Flexibility.

We offer

The opportunity to become part of a new revolution in chip technology in the field of Photonics, like micro electronics was in the '70s. At SMART Photonics you will work with talented and passionate people in an informal, sincere and open culture.

Being part of a scale-up means you will have a broad and entrepreneurial role in a dynamic & exciting environment with the opportunity to grow rapidly alongside our company's growth while you truly see the results of your efforts and added value. We keep our processes simple and functional to stay agile, also in our growth from lab to fab in the coming years.

Are you ready to join us and develop SMART Photonics into a market leader?

Interested?

Did we trigger your enthusiasm? Then hit the application button! Still in consideration? Feel free to reach out to our Recruiter Sjoerd Jacobs (+31 6 41 61 85 85 , sjoerd.jacobs@smartphotonics.nl).

See also our website www.smartphotonics.nl for more information about the company;

Your Design

Our Service

Your Future