## Dream Photonics Inc.

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# DREAM PHOTONICS

#### About Us

Join us in enabling the next revolution in the semiconductor industry. For the last 50 years, electronics hardware has benefited greatly from the innovations developed by the semiconductor industry. Silicon photonics, where light is also used in conjunction with electronics in CMOS chips, will revolutionize the semiconductor industry by improving performance, miniaturizing optical assemblies, and enabling completely new applications using photonic integrated circuits (PICs).

At Dream Photonics Inc., we're on a mission to solve the PIC optical I/O bottleneck in the next generation silicon photonics hardware used for scaling up the AI infrastructure. Based in Vancouver, BC, we design and deliver patented silicon-photonics optical I/O and hybrid integration technologies that enable high-efficiency, low-loss, and reliable links for data centers and AI accelerators. As a strategic partner to leading foundries and optical interconnects innovators, our optical I/O and hybrid integration expertise helps springboard the hardware platforms needed to scale-up AI compute efficiently and sustainably. If you're a self-starter who's passionate about bridging optics and electronics to define the future of datacenters and AI infrastructure, we'd love to hear from you.

### Job Description: Optical Packaging Technician

Job responsibilities include, but are not limited to:

The Optical Packaging Technician will be responsible for building integrated photonic assemblies containing optical fibres, lasers, silicon photonic chips, and CMOS electronics chips. To fabricate said assemblies, the technician will utilize numerous pieces of equipment, including the Vanguard Automation SONATA 1000 for two-photon-lithography in the <u>UBC QMI Nanofabrication facility</u>. As such, the technician should be comfortable working in a clean room environment. The technician will also perform packaging processes including wafer dicing (DISCO DAD3240), electrical wire bonding (TPT HB100 Automatic Thermosonic Wedge & Ball Bonder), attaching small components and chips on carriers (TPT T-3000-PRO Die Bonder), and encapsulating them. This work requires that the technician possesses a high-degree of dexterity and attention to detail. The technician will follow process procedures; produce specifications and documentation to manage the fabrication of assemblies and processes.

The following items reflect the most important tasks:

- Plans and delivers nanofabrication process work for the realization of micro- and nano-structured devices, using techniques that include, but are not limited to, 3D printing, electrical wire bonding, die attach, metrology, and testing.
- Works on a number of different projects, that includes internal stakeholders and customers.
- Carries out processing of existing nano/micro-fabrication and packaging techniques.
- Monitors process performance to ensure that these processes remain operational and perform to specifications. Perform measurements to characterize the devices by generating test programs.

- Interacts with team members to report on results, coordinate work, and ship parts.
- Produces the necessary documentation and technical reports on the work done to present internally and/or externally to clients and customers.
- Keeps inventory of required materials and orders as required.
- Assists with shipping and receiving of parts to and from customers and suppliers.

#### Requirements

Minimum qualifications

- College or technical institute diploma, or Bachelors degree BASc (or equivalent) in engineering, or applied sciences. Experience in working in a lab environment.
- Experience working with a programming language for data analysis
- Track record of working across organizations and with customers
- Attention to detail, good communication, presentation, and analytical skills
- Self motivated

#### Preferred qualifications

- Prior experience with device fabrication or packaging, preferably photonic devices
- Working knowledge of Python for instrument I/O and data handling
- Experience in working in a clean room environment, including micro/nano-fabrication equipment such as two-photon lithography, optical lithography, resist processing, and working with other chemicals in a wet bench environment
- Ability to work after regular business hours as needed; additional compensation will be provided for approved after hours work.

#### Team Building

Equity, diversity and inclusion are essential to our company's growth. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the BC Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Métis, Inuit, or Indigenous person.

#### To Apply

Please send your CV, contact information for references, and a statement of your interests in this position, to <u>matthew.mitchell@dreamphotonics.com</u>, with email **Subject: DP Optical Packaging Technician** 

Location: Vancouver, BC, Canada Employment Type: Full-time Compensation: \$60,000-\$70,000 CAD per year