



CDI – Photonics and Optoelectronics R&D Engineer (F/M/D)

About ICON Photonics

ICON Photonics is a deeptech startup company with a vision to scale light-to-chip connectivity enabling the next generation of optical and quantum industries that improve people's lives. Benefiting from more than 10 years of technology development at the CNRS, ICON Photonics develops and commercializes efficient fiber-to-chip connectivity solutions from high fiber density, high speed to cryogenic applications. As a member of our team, you will have the opportunity to evolve in a collaborative environment that allows and encourages our people to reach their full potential.

OUR CORE VALUES

Lead by example

**Bring out the
best in everyone**

**Take
responsability**

**Customer
success is our
success**

**Strive for
excellence**

The Role

The successful candidate will play an important role in the design and characterization of photonics and optoelectronics technologies under development at ICON Photonics, with a focus on interconnects and micro-packaging. She/he/they will address the challenge of ultra-low-loss coupling at the chip level for fiber-to-the-chip interconnects where mm-wave electrical interconnects will also be involved. She/he/they will also operate developments into the free-space light beam-shaping.

The candidate is expected to have the taste of communication and teamwork to cooperate both within the team and with international customers to lead R&I projects and advertise on the technology technical challenges and opportunities. The candidate will interface on a daily basis with the cleanroom fabrication and packaging teams of ICON Photonics.

The candidate will be responsible of the design, simulation (50%), and characterization (50%) phases of the new products, following a continuous innovation cycle. The context of reliability, yield and compliance to environmental conditions (Telcordia, quantum, space, cryogenic, etc.) is crucial.

The position is expected to evolve quickly to a leading R&D or product development position within the company.



Major Responsibilities / Tasks

- 🌈 Design of photonics wafer-level integrated packaging solutions taking into account the optical, electrical and mechanical requirements for the chip interconnects
- 🌈 Simulation and optical modelling of photonic components, waveguides and 3D polymer micro-optics technology such as spot-size-converter (SSC) and free-space beam shapers
- 🌈 Optical characterization for the on-chip micro-optics and photonics interconnects
- 🌈 Electrical characterization of optoelectronics devices and microwave interconnects
- 🌈 Innovate, develop, and maintain original bench setups for R&D and industrial production
- 🌈 Operate reliability and validation tests plans for thermal, microwave, and photonics behavior
- 🌈 Create, develop, and maintain detailed engineering documentation such as qualification plans, validation reports, component specifications/drawings, test procedures and work instructions

Major Desired Skills

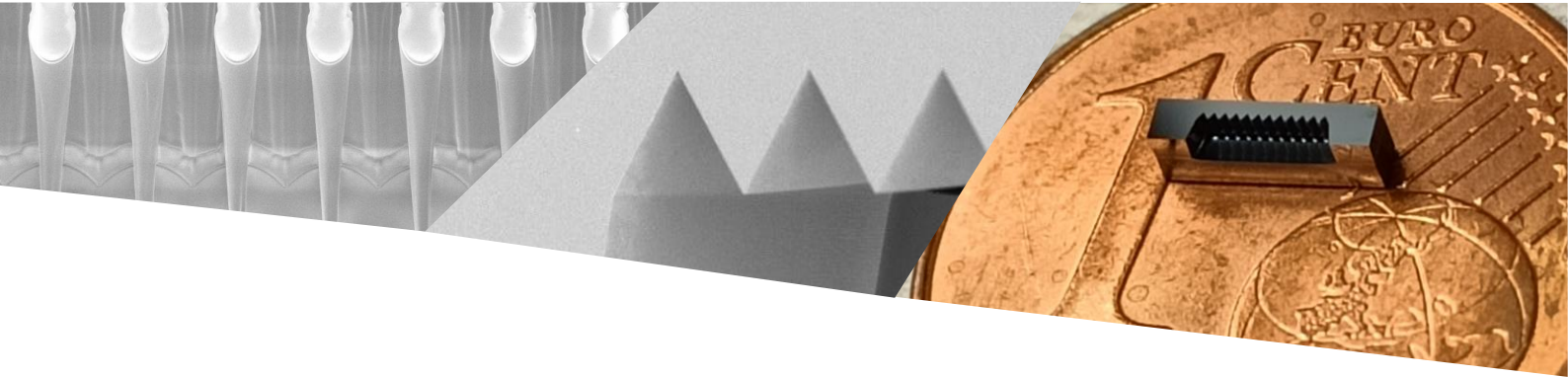
- 🌈 PhD degree in Photonics / Material Sciences / Electromagnetisms or related field, or engineer/master's degree with equivalent 3-year R&D experience in the industry
- 🌈 Strong knowledge of Photonics, Characterization, Physics and Modeling. Good understanding of semiconductor optoelectronics, optical fiber communications and free space optics.
- 🌈 Strong numerical and analytical modeling skills to support system design in optics and/or microwaves (e.g. RSoft, Zemax, COMSOL, Lumerical, CodeV, Matlab, Python, ADS, etc.)
- 🌈 A familiarity with high-speed or microwave-photonics measurements and laboratory instrumentation would be highly appreciated
- 🌈 Language: Strong written and verbal communications skills in both French and English.
- 🌈 Strong communication, interpersonal, and related skills

We offer

- 🌈 Opportunity to join a dynamic and highly motivated international team committed to cultivating an inclusive work environment for all employees
- 🌈 Become a R&D engineer within a game-changing deep-tech startup, tackling exciting challenges such as being part of the largest worldwide quantum computers
- 🌈 Location in close proximity to a dynamic and young scientific campus with research of excellence (ESYCOM CNRS lab and more)
- 🌈 Full time position with great potential for fast career development within a fast-paced startup company
- 🌈 Great package including private healthcare scheme, meal subsidies, public transport subsidies, regular teambuilding events

Application details

- 🌈 Starting Date: from March/June 2024 depending on candidate availability
- 🌈 Location: Scientific Campus at Cité DESCARTES, Champs-sur-Marne (77), RER A train station, and upcoming Grand Paris Express. Green East-side of Grand Paris.
- 🌈 Process: phone call introduction followed by several online / onsite interviews
- 🌈 Contacts: Send CV and motivation letter to join-us@icon-photonics.com



Join us!

Web: www.icon-photonics.com

LinkedIn: <https://www.linkedin.com/company/icon-photonics/>



www.icon-photonics.com

