aiXscale Photonics GmbH supplies proprietary high-precision optical glass interposer solutions for reliable, cost-effective and scalable assembly of optical transceivers and co-packaged optics. We serve the needs of current and next generation high-volume Datacom and Telecom applications.

aiXscale Photonics GmbH is a spin-off of RWTH Aachen University and closed a series-A financing round with the Heraeus Group in June 2023. We are located in Aachen, in the western part of Germany, close to Köln (Cologne), Maastricht and Liège. With several photonics companies, Fraunhofer institutes working on optics and the RWTH, Aachen is a regional hotspot for photonics development. The Thalys provides rapid connection to Köln, Liège, Brussels and Paris.

We are reinforcing our R&D team with **several positions at different seniority levels in the fields of photonics & optics design, mechanical design, and metrology data classification**.

Short role description:

- The Development Engineer will report to the Director of Engineering and work on the design of glass molded interposers or photonic integrated circuits used as test vehicles for customer demos. The Development Engineer will also work in close cooperation with the operations team to define test acceptance criteria and automated test data analysis procedures for in-line testing, in preparation of our high-volume manufacturing ramp-up.
- The Development Engineer will perform optical and mechanical design to our existing and to our next-generation product lines, translate design into CAD models and apply imaging processing methods to the classification of metrology data.

Prior knowledge in one or several of the following fields is expected:

- Ray-tracing and its application to the design of refractive optics (lenses, micro-optics). Hands-on experience with Zemax OpticStudio is a plus.
- Design of photonic integrated circuits with finite-difference time-domain simulations or comparable methods. Hands-on experience with the Lumerical Design Suite is a plus.
- Product definition with 3D CAD models. Hands-on experience with Solid Works is a plus.
- Modeling of mechanical strain and thermally induced deformations with finite-element methods. Hands-on experience with Comsol Multi-Physics is a plus.
- Hands on experience with automated analysis and classification of images, in particular segmentation of metrology data.
- Programming skills in Python is a plus.

Requirements:

- M.Sc. or Ph.D. in Electrical or Mechanical Engineering.
- Relevant work experience in an industrial environment is a plus.
- Enthusiasm for working in a dynamic environment that promotes teamwork, creativity, accountability, and professional development.
- Good interpersonal, analytical, and communication skills.
- Prior exposure to the semiconductor industry is a plus.

What we offer:

- Multi-cultural, supportive, inclusive, and family-friendly work environment.
- Attractive employment conditions, including a competitive salary and benefits.
- Opportunities to learn in a fast-growing team in a leading-edge deep-tech start-up.

Please send your application to Florian Merget at fmerget@aixscalephotonics.com.