

Test and Assembly Engineer

(100% Employment)

[Qnami](#) develops fundamental new technology using quantum mechanics. Our first commercial product, the Qnami [ProteusQ](#) is a complete quantum microscope system using the most advanced quantum technologies at room temperature to image the smallest magnetic signals and explore new horizons in material science. The underlying technology is based on the control and measurement of a single electron embedded in a [diamond sensor](#) enabling us to measure what could never be measured before. We call this [quantum sensing](#) and are enthusiastically developing this technique with our [unique team](#) of talents to change how people perceive the world.

We are extending our quantum microscope product toward cryogenic environments to support material science close to the coldest temperatures in the universe, and to enable the design and production of qubits for current quantum computers. To help the upscaling of our test and production activities of the cryogenic quantum microscope, we are seeking for a highly skilled and motivated

Test & Assembly Engineer

As a Test and Assembly Engineer, you will play a vital role linking the R&D and production activities of the cryogenic quantum microscope, with the focus on assembly and testing of cryogenic microscopes.

In this position, your responsibilities will include:

- Participate directly with the R&D team in the early development of our cryogenic quantum microscope and its future upgrades.
- Perform tests and quality checks on various sub-components, including cryogenic systems (vacuum and gas handling systems), microscope assemblies, piezo and motor stages, enclosures, and opto-mechanical elements, ensuring adherence to performance and quality standards.
- Assemble the full cryogenic quantum microscope system alongside the R&D team and conduct comprehensive tests on the overall system.
- Transfer, capture, and optimize assembly knowledge from R&D to Production.
- Participate in the configuration, installation, and calibration of the cryogenic quantum microscope in-house and at the client sites.
- Act as a liaison between the R&D and production teams to facilitate a seamless and efficient assembly and installation process for subsequent units.
- Develop, execute, and maintain detailed documentation of test protocols, results, installation procedures, and troubleshooting guides.
- Collaborate with cross-functional teams to identify areas for improvement in product performance, installation processes, and assembly techniques.

You are an Engineer or Scientist with experience in assembling and testing of instrumentation. You are curious, hands-on, like to take initiatives and are eager to learn. You are stimulated by challenge and like to work with a multi-faceted, multi-cultural team. Your qualifications include:

- Completed degree in physics, electrical engineering, mechanical engineering, optics, materials science & engineering, mechatronics, microsystems, or a related field.
- Proficiency in English, both written and spoken; knowledge of German or French would be advantageous.
- Strong understanding of assembly techniques for high-precision and complex systems.
- Detail-oriented mindset with strong organizational skills to manage multiple installations and tasks simultaneously.
- Strong team spirit and willingness to work in a self-managed fashion.
- Prior experience in testing and assembling of cryogenic systems and microscope assemblies makes you distinctive.
- Ability to travel to client sites occasionally (less than 15% in the first 2 years).
- Familiarity with technical drawings and the ability to interpret them effectively.
- Proficiency in CAD software such as [Solidworks](#) would be a plus.
- Industry internship or work experience in high-precision instrumentation branches is advantageous.
- Experience with electronics soldering, PCB designing/testing, and optical engineering would be assets.
- Previous exposure to cryogenics and ultrahigh vacuum systems would be a bonus.

Qnami offers you a unique working environment, you will be fully supported by the team so that you can learn and grow:

- Gain a comprehensive understanding of state-of-the-art quantum sensing technologies and high-resolution microscopy.
- Participate hands-on in the development process of the next generation of Quantum Microscopes.
- Experience a dynamic and forward-thinking deep-tech quantum company with an efficient and [holistic](#) approach to complex environments.
- Goal-driven success allows you to directly benefit from the company's growth and success through equity participation.
- Enjoy comfortable, modern, and easy reachable office spaces and the opportunity to connect with other entrepreneurs in one of Switzerland's premiere startup spaces – [the 5th floor in Muttenz](#)
- Be an integral part of a highly motivated and energetic startup team that values scientific exploration, human connection, and the diverse perspectives brought by all team members.
- Join a diverse and inclusive work environment that actively promotes gender equality, embraces diversity, and welcomes female engineers to contribute their unique perspectives and expertise to our innovative projects.

The role is based in Muttenz, Switzerland, which is conveniently located near Basel, a vibrant city renowned for its rich history of art, humanism, and science.

To apply, please send your comprehensive application, including CV, motivation letter, salary expectation, and examples of previous projects in English, German or French, to jobs@qnami.ch. Kindly note that we only accept applicants with a valid work permit for the EU and/or Switzerland.

Join Qnami and contribute to the growth of our company and the emergence of a quantum industry 1.0.