

Application Scientist - Quantum Microscope

About Onnes

Onnes Technologies is a pioneering company focused on developing cutting-edge technologies in the field of Quantum Scanning Probe Microscopy (qSPM). Our mission is to enable single-spin resolution imaging of quantum materials and biological samples at cryogenic temperatures. With successful product launches like the CRYO-WALKING nanopositioner (arQtika) and cryogenic Vibration Isolation System (cVIS), we are paving the way for the future of Quantum Microscopes. Join us at our QDNL Fieldlab, where we collaborate closely with esteemed scientists and industrial partners to explore applications and drive the development of a full single-spin resolution Quantum Microscope product.

Role Overview

We are seeking an exceptional Application Scientist with expertise in Scanning Probe Microscopy to lead the development of novel quantum-based SPM techniques. As a key member of our R&D lab, you will play an instrumental role in running our milli-Kelvin Dilution Refrigerator setup, including our own products. You will work closely with visiting researchers, assisting them in validating their quantum SPM techniques and exploring the diverse possibilities of Quantum Microscopy. Your responsibilities will include designing and conducting experiments in low temperature environments and contributing to Onnes Technologies' expertise in quantum-enhanced sensors.

Responsibilities

To excel in this role, you should be a proactive professional with a strong academic background in Scanning Probe Microscopy and experience working with quantum systems such as NV centers, SET, SQUIDS, or MRFM is an advantage. Your previous work in experimental physics and hands-on experience with cryogenic setups will be invaluable. You will leverage your expertise to translate SPM concepts with quantum sensors into tangible proof-of-principle experiments, collaborate with visiting researchers, and manage our cryogenic qSPM facility. We value self-driven individuals who thrive in small, dynamic teams with a flat hierarchy and a culture of encouraging new initiatives.

Your Profile

- PhD or Postdoc in physics related to Scanning Probe Microscopy, with an advantage if you have affinity with quantum sensors and/or cryogenics.
- Proven experience in managing R&D facilities.
- Passionate about pushing the scientific frontier in the field of qSPM and Quantum Sensing.
- Self-organized, objective-oriented, and able to excel in a small team environment with ample freedom to operate.

What we offer

- Join a dynamic and inspiring Deep Tech environment with an exciting Quantum Sensing roadmap.
- Collaborate within an experienced and entrepreneurial team, where you will have the freedom to make a significant impact.
- Competitive senior-level remuneration package.
- Full-time or part-time employment with hybrid working options.

Apply Now

If you are ready to take on this exciting challenge, please send your resume (CV) and a compelling cover letter to info@onnestechnologies.com. Join us at Onnes Technologies and be at the forefront of revolutionizing Quantum Microscopy!

