



Test Engineer

About SpectaCell

SpectaCell is a TechBio start-up from imec, VIB and Ugent, building a first-of-its-kind digital microscope designed to become the industry standard for functional testing of novel cancer and immune therapies. By combining breakthrough imaging technology with deep AI-driven biological insights, we are bridging the gap between lab research and large-scale biopharma manufacturing. We are on a mission to build a scalable tools-and-data business that empowers researchers and manufacturers to accelerate the development of life-saving therapies through smarter tools and better data.

The role

We are looking for a hands-on, versatile Test Engineer to join our early team and help turn our proof-of-concept systems into a robust, manufacturable platform. You will work across the full product development cycle: validating PoC builds, set-up the test infrastructure that lets us move faster, shaping requirements for future prototypes, and helping drive the transition from Alpha units to a commercial instrument. You will work closely with the Head of Product, lab scientists, external engineering partners, and future users. You will be one of the people who decides what “good” looks like, how we measure it, and how we get there.

This is a high-ownership role for someone who likes solving hard technical problems in real systems, enjoys working across disciplines in a growing team of go-getters and wants to help turn an ambitious concept into something that will accelerate the development of novel drugs.

What will you do

- Functional testing of Proof-of-Concept instruments: design and run structured test campaigns, evaluate system performance (mechanical, optical, electronic, and firmware), and identify areas requiring improvement.
- Drive root-cause analysis and troubleshooting, identify failure modes and work with internal and external teams to drive design improvements
- Translate user needs into functional and system requirements: ensuring usability, robustness, and reliability for clinical and manufacturing environments are aligned with technical learnings from the POC devices.
- Define and maintain test plans, protocols, and acceptance criteria for all subsystems including the lens-free imager, cartridge interface, and instrument control workflow.
- Help build internal testing infrastructure, including fixtures, calibration methodologies, and automated test scripts where applicable.

- Installation and maintenance of analytical equipment: Work with lab scientists to set up and maintain key analytical equipment and lab infrastructure, coordinating with vendors during installation, qualification, and performance testing
- Participate in user evaluations and usability studies, capturing feedback, and converting it into actionable engineering requirements.
- Support development of upcoming Alpha & beta prototypes: focusing on functionality verification, risk mitigation, and iteration of system architecture of alpha prototyping and on design-for-manufacture/assembly (DfM/DfA), reliability testing, and preparation for transfer to manufacturing for the beta prototype development.
- Work effectively in a fast-moving, multidisciplinary start-up environment, taking ownership across a broad range of tasks as needed.

What we're looking for

- Bachelor's or Master's degree in Engineering (Mechanical, Electrical, Biomedical, Mechatronics, or similar).
- 2–7 years of relevant experience in lab instrumentation, medical devices, diagnostics, or complex mechatronic systems.
- Strong hands-on troubleshooting skills and the ability to investigate issues across optics, mechanics, electronics, and software.
- Experience creating test plans, validation protocols, and functional requirements for complex systems.
- Confidence working with external development partners and challenging design or test output when needed. Comfort in early-stage development, where systems are evolving quickly and responsibilities are broad
- Experience with early-stage product development (PoC → Alpha → Beta → Commercial) is a strong plus.
- Familiar with DfM/DfA principles, risk management (ISO 14971), and/or verification & validation processes are advantageous.
- A practical, self-directed, low-ego mindset, and excited to take on broad responsibilities within an entrepreneurial environment.
- Fluent in English, both spoken and written.

Why SpectaCell

- You will have broad ownership from day one and play a defining role in building one of SpectaCell's first core products. You will work across disciplines rather than inside a narrow-defined function.
- You will join a young, ambitious start-up at a stage where your work can materially shape the company's trajectory
- We offer a fast-paced working environment in our Ghent-based hub and a flat reporting structure that puts you at the heart of our mission.
- You will benefit from an attractive salary package with a wide range of benefits, including meal vouchers, group insurance, a mobility budget, flexible working hours, and the opportunity to participate in an employee stock option plan.

Interested? Contact us via info@spectacell.com