



Optical Engineer

Semiconductor devices provide the foundations on which progress in the technology sector are enabled. From Smartphones to Artificial Intelligence, 5G communications to autonomous vehicles, all are made possible through advances in semiconductor processes. Scaling these processes requires sub-nanometer measurement of increasingly complex 3D structures to enable more powerful devices. At **Infinitesima** we have pioneered a revolutionary atomic precision 3D metrology technology which has been qualified by leading companies in the semiconductor industry and we believe is essential for continued progress. To quote Lord Kelvin, *'If you can't measure it, you can't improve it!'*. Come and join our dynamic team to enable the semiconductors for tomorrow's technological developments.

The Opportunity:

We currently have an exciting opportunity for an Optical Engineer to join our Engineering team. Light-based technology is at the heart of our microscope and as an Optical Engineer, you will play a crucial role in the development, optimization and test of optical components and systems integrated into our AFM instruments.

Location: Abingdon

Reporting to: Mechanical & Optical Engineering Manager

Key Responsibilities:

- Own the conceptualisation and delivery of advanced optical test methodologies for key components and sub systems to improve product performance and reliability.
- Diagnose and resolve optical system issues, working closely with other engineers to address technical challenges.
- Maintain detailed documentation of optical designs, experiments, and procedures, facilitating effective transfer of knowledge within the organisation.
- Feed forward learning into future developments
- Work effectively as part of a multidisciplinary team of engineers and scientists
- Communicate effectively with diverse set of peers, customers, and vendors.

Personal Qualities:

- **Self-management:** Able to work independently, setting priorities for own work based upon the company goals and targets.
- **Teamwork:** Engages with other members of the organisation to bring the best solutions to the problem and recognises the value that fellow colleagues bring to enhance own abilities. Supports colleagues with their tasks when critical to the company goals.
- **Impact and Influence:** In own field establishes themselves as the knowledge centre. Shares knowledge freely with coworkers. Advocates for best practice approach to design and problem solving.
- **Ownership & Initiative:** React and address both short- and medium-term issues and proactively takes action to solve them.

- Results Orientation: Focuses on the company goals, avoids distraction, making timely decisions to achieve the targets.

Education / Qualifications:

- Degree or above in Optics or closely related engineering discipline.

Professional Skills/ Abilities:

- Experience of hands-on engineering development in prototype and production environments.
- Proven experience in optical system design, preferably in microscopy or imaging technologies
- Hands-on experience with lasers and fibre optics including test and characterisation.
- Proficiency in optical modelling and simulation software e.g., Zemax
- Solid grounding in optical fundamentals, especially interferometry, and working mathematical knowledge of both wave and ray optics
- Familiarity with atomic force microscopy (AFM) is desirable but not required.
- Excellent problem-solving skills and a detail-oriented mindset.
- Excellent communicator able to present material clearly to audiences and produce concise reports.
- Ability to work independently, manage projects, and meet deadlines.
- Strong sense of teamwork and collaboration and appreciation for a multidisciplinary working environment.

Benefits:

In addition to a competitive salary and an annual bonus. Infinitesima offers flexible working hours, hybrid working, 25 days annual leave, death in service and private health care benefits, personal pension contributions of 4% with salary sacrifice and a generous EMI Share scheme.

All qualified applicants will receive consideration for employment without regard to race, colour, religion, sex, sexual orientation, gender identity, national origin, or disability.

Note to recruitment agencies: Infinitesima Ltd only works with approved agencies and does not accept unsolicited agency CVs. Please do not submit candidate details in response to this advert, or to any Infinitesima Ltd employees. Infinitesima Ltd is not responsible for any fees related to unsolicited CVs.