



Product Development Engineer

Hours | Full time **Location** | Bristol, UK

Salary | £40,000- £55,000, Experience dependent

Who we are

Microsol is an early-stage pharmaceutical startup and sits at the forefront of innovation in respiratory drug delivery, providing a step-change in the development and characterisation of orally inhaled and nasal drug products. Microsol is seeking to expand its team to drive its technology development. The company operates across disciplinary boundaries, innovating in aerosol technology for health applications.

Microsol leverages a powerful combination of advanced aerosol characterisation techniques and computational pharmaceuticals modelling. This enables us to delve deep into the intricacies of aerosol behaviour within the airways. Using these tools Microsol is able to optimise formulation properties with unrivalled precision and control, ensuring optimal drug delivery and efficacy.

We seek to attract, develop, and retain individuals from the widest possible talent pool and the broadest range of backgrounds. We are committed to building an inclusive working environment where all colleagues can thrive and reach their full potential. We particularly welcome applications from Black African, Black Caribbean and other minority ethnic groups, as they are currently under-represented across our industry.

Reasons to join Microsol

- **Impact:** you will be part of an innovative startup with a focus on respiratory drug delivery.
 - You will contribute directly to groundbreaking research, improving patient lives.
- **Team:** you will work alongside a passionate and collaborative team of talented individuals.
 - Microsol is building a team of innovators. You'll be part of that and have a large degree of access to decision making.
- **Culture:** enjoy a flexible and supportive work environment that fosters creativity and growth.
 - You'll be able to grow with the company and have a large ability to shape your role.

What you'll be doing

We are seeking an experienced Product Development Engineer to take Microsol's aerosol analysis technology from an academic prototype through to a commercial instrument. You will lead a project to convert our highly specialised prototype into a product for low-volume manufacture. The ideal candidate will bring strong industrial product development experience and deep expertise across mechanical engineering, electronics, and embedded software.

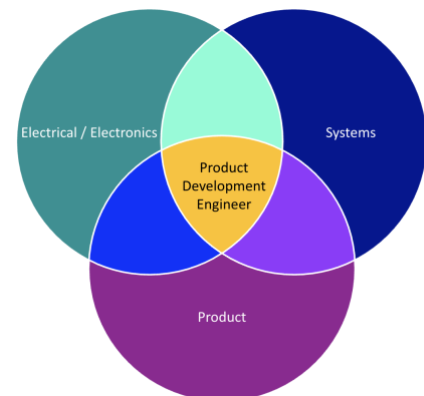
You will work within a multidisciplinary team of scientists and engineers. The project may require reconsideration at the system level, and we anticipate that the instrument will be materially improved through your contribution. We are looking for individuals with a systems engineering mindset and a proactive, problem-solving approach. Experience in scientific instrumentation, medical devices, or comparable specialist hardware is desirable.

Responsibilities

- Lead the engineering effort to take the instrument from prototype to commercial product.
- Take a system-level view of the instrument, revisiting its architecture and the allocation of functions across mechanical, electronic, and software domains, with the latitude to redesign where appropriate.
- Drive improvements in the instrument's performance, reliability, and supportability.
- Apply design for manufacture principles suited to low-volume, high-specification builds, including design for assembly, serviceability, and field repair.
- Plan and execute design verification and validation activities.
- Ensure compliance with applicable regulatory and quality standards, and maintain the associated technical documentation.
- Collaborate closely with the science team to preserve measurement performance through design changes.
- Establish repeatability across small production batches, including jigs, fixtures, test rigs, and build documentation.
- Support risk management activities across the product lifecycle.
- Contribute to user, service, and build documentation.
- Contribute to planning with company management and ensure timely delivery of milestones.

Skills and experience we are looking for

- A degree in a relevant engineering discipline (mechanical, electronic, mechatronic, biomedical, or similar), or equivalent experience.
- At least 4 years' industrial experience taking physical products from prototype through to commercial release, ideally in scientific instrumentation, medical devices, or comparable specialist hardware.
- A systems engineering mindset, with the ability to reason about the instrument as a whole and make sound architectural decisions across mechanical, electronic, and software domains.
- Strong mechanical engineering capability, including CAD proficiency (SolidWorks, AutoCAD, or similar).
- Electronics engineering expertise across analogue and digital circuits, sensors, and PCB design.
- Proficiency in embedded software development (C/C++, Rust, or similar), with experience of microcontrollers, I/O interfacing, and communication protocols. Python knowledge is desirable.
- Demonstrable experience of engineering for manufacture in a low-volume, high-specification context, including design for assembly, serviceability, and verification.
- A sound understanding of engineering health and safety, including risk assessment, safe design practice, and relevant regulatory and quality standards.
- Strong troubleshooting skills across mechanical, electronic, and software domains.



As a key member of a small team, you must also have a positive, initiative-taking attitude, a high level of motivation, very strong communication and teamwork skills, and a passion for our work. Your ability to articulate your own expertise and to interpret information from others will be essential. The demands on a startup can shift rapidly, so you will also need to be highly adaptable, well organised, and able to prioritise and manage your workload effectively.



Location & Commitments

- Full time role.
- Based in laboratory facilities, but flexible/hybrid working negotiable.
- Overtime may be required in line with external deadlines.
- Travel to clients and conferences may be required from time to time, expenses will be covered.

Contact

If you have questions or would just like to speak prior to applying, please reach out to careers@microsolscience.com.

If you'd like to apply for this role, please send a CV and a cover statement detailing your reasons for applying and how you think you would contribute to Microsol to careers@microsolscience.com.