



Radical Fibres Ltd

Advanced Nanofibre Technology

Customisation | R&D | Manufacture

www.radicalfibres.com

VACANCY: POLYMER CHEMIST

Term: Full Time/Permanent
Location: Guildford, Surrey, UK*
Start Date: As soon as possible
Salary: £26k to £36k (depending on experience and qualifications)
Apply By: 1st Feb 2022 (may close early if the right candidate is found)
Apply To: support@radicalfibres.com enclosing a cover letter describing your experiences and why you fit the advised position, as well as a copy of your CV.

* We regret that we are currently unlicensed to sponsor visas. Please ensure you have a legal right to live and work in the UK before applying.

The Role

This is an exciting new position as the company looks to grow, which will support the scientific and engineering activities within the business. Primary day-to-day activities will involve the resource management, experimental planning, chemical polymer processing and electrospinning of nanofibres, usually to manufacture samples for customer projects and orders. Knowledge of polymer chemistry, particularly dissolution, as well as post-production analysis will be key in aiding in material development, this includes SEM and optical imaging as well as other forms of analysis such as electrostatics, filtration, acoustic and piezoelectric.

Although we work together as one big team, the role will require a degree of independence from the successful candidate, being just a small team, we typically allocate dedicated projects to each member to manage. The ability to follow local health and safety laws, as well as being mindful of natural and company resources will be essential.

As the role develops, a successful candidate will be developed into assisting with applying for new projects and engaging with customers engaged in existing projects. This can include research which will go beyond chemistry to include device prototyping and testing with the use of small programmable electric devices such as Arduinos or Raspberry Pi's. Radical Fibres is a company that continually innovates, so we welcome creativity and fresh ideas!

Role Responsibilities

- Develop and engineer new polymer formulation, often with novel polymers or solvents
- Plan and execute electrospinning production runs
- Fulfil customer R&D and production orders
- Analysis and assessment of produced nanofibres for quality control
- Ensure the laboratory is a clean and safe working environment at all times
- Work closely with the business managers to update customers,

- Ensure company compliance with all Health and Safety laws.

Key Skills

Essential requirements for this post are:

- A degree in Chemistry, Materials, Engineering or Physics (other science degrees with lab/chemical handling experience will be considered),
- Research expertise in polymeric materials processing, additive manufacturing, processing of polymers or polymer composites or other liquid/solution processing,
- A good understand of polymer dissolution, e.g. Hanson Solubility,
- Experience in electrospinning would be a bonus, but training can be provided,
- Research expertise in in materials characterisation, including SEM,
- Be able to demonstrate that they can work as part of a team, as well as work independently,
- Experience in the planning and handling of chemicals,
- Have knowledge/experience of safe and tidy good working practice within a chemistry lab,
- Excellent communication skills, fluent in English.

Extra Skills that would be useful but not essential:

- A PhD or an EngD or equivalent work experience in any relevant area,
- Skills in programming of Arduino or Raspberry Pi or other programming languages for custom experiment design,
- Designing and printing of 3D printed parts,
- Knowledge of electrostatics.

Key Company Values

- Quality – Delivery high-quality services and materials with a clear customer focus
- Teamwork – Working together to ensure all our unique strengths are successfully utilised
- Inclusion – ensuring that all our staff are offered opportunities to step up to a challenge
- Development – continually challenging and developing individuals and the company
- Ethics – Ensuring all our work achieves a positive impact with our customers and the environment
- Safety – Concreting a safe working environment.

Radical Fibres Ltd Overview

Radical Fibres Ltd is one of the only UK-based electrospinning companies which focuses on meeting the UK's market gap for nanofibre product development and manufacturing, specialising in taking products from TRL3 to TRL9. The company was founded in October 2019 to address the market need for modern high-performance materials, allowing Radical Fibres to bring new horizons with nanofibre technology to the UK. Our team of nanofibre experts work in bespoke, inhouse built labs to tailor these materials to meet customer needs in a manner which translates straight through to large area manufacturing at one of our partner facilities.

Nanofibres are rapidly proving to be the solution to countless current key challenges, often offering material solutions to key problems where low weights and high performances are key. Our current product speciality areas include, but not limited to, smart textile sensors, high performance filter media, composite toughening veils, acoustic attenuation and biodegradable alternatives.

Company Policies

Equal Opportunity: It is the Company's policy that all employees, regardless of race, ethnic or national origin, sex or marital status, religious or political beliefs or disabilities should have equal opportunity in employment. Within this roles fulfilment, to ensure compliance during the application process, all personal information will be redacted during the shortlisting process.

GDPR: Any personal data submitted in the job application will be processed in accordance with GDPR and related data protection legislation.

Flexible Working: Although Radical Fibres does operate a flexible working policy, due to the laboratory-based nature of this role there will be limited scope to work within this role outside of normal working hours, due to health and safety rules around out of hours and lone working.