

## Graduate Battery Coating Scientist

### About us:

Faradion Limited is a leader in the development of next generation rechargeable batteries for the utility, automotive and consumer sectors. It has established research and development facilities at two UK sites, Oxford and Sheffield, has a growing IP portfolio and a committed team of scientists and engineers.

The company is leading a recently established consortium to [\*develop a Sodium-ion battery for solar storage\*](#); this is a really exciting time for Faradion and shows the interest and drive in the market for further energy storage applications. Additionally, another Faradion partnership has just received £1.3 million to significantly reduce the cost of electric vehicle batteries by using cheaper sodium-ion technology.

To aid this research and development, they are seeking inquisitive minds, committed researchers and Chemistry professionals to grow and sustain the innovative environment at Faradion. Currently a team of 15, joining staff can expect an environment where deep thinking, academic creativity and novel approaches are all hugely valued. Individuals who enjoy idea generation, asking 'why' as well as 'how', and want to be part of a team engineering energy solutions for the future will certainly thrive here.

To find out more, visit: <http://www.faradion.co.uk>

### About the role:

As a new member of the Faradion team, you'll be joining a lively research environment that already has graduates in place, and collaborating with technicians, engineers and senior scientists on a daily basis. To give you an idea of your daily activities, you might be:

- Developing battery electrode material inks/pastes for thick film coating production
- Characterising the inks and coatings to optimise the mechanical and physical properties for incorporation into Na-ion batteries
- Tuning the powder material properties to enhance physical and electrochemical performance in Na-ion batteries
- Identifying the key criteria required to facilitate scaling up of the coatings from lab-scale to manufacturing scale
- Working with the engineering team to take into account the effects of increased material and processing scale

### About you:

- You'll have an MSc/MEng in STEM or a technical discipline, though candidates with a PhD in a related area would be ideal
- You'll have at least 2 years' experience of coating technology, preferably in the battery industry
- You'll have experience of ink characterisation techniques, e.g. rheology, and knowledge of mixing methods

- You'll have experience of thick film characterisation techniques, e.g. conductivity, microstructure, porosity measurements
- You can provide examples of having optimised coating properties through processing methods
- Ideally, you'll have experience with carbon-containing slurry systems
- Finally, it would be ideal if you have experience with battery materials, inert atmosphere glove box procedures, and electrochemical techniques

**Important information:**

Location: Sheffield, South Yorkshire, UK

Start date: July/August 2017

Salary: Competitive/negotiable based on experience

**How to apply:**

Please submit a CV and covering letter to Amy Collins: amy@gradconsult.co.uk by 9am on Monday 26<sup>th</sup> June 2017, and clearly specify which role you are applying for.

Please ensure that your covering letter outlines any skills and experience relevant to the activities described above, and specifies why you're interested in joining the team at Faradion.