

Cathode Research Scientist

OXIS Energy is a world-leading developer of next-generation batteries based on Lithium Sulfur (Li-S) chemistry, which has the potential to offer revolutionary improvements to the energy density of energy storage systems. OXIS' cells offer twice the energy density of the incumbent Li-ion technology, and is therefore attractive for a diverse range of applications such as for **electric vehicles**, unmanned aerial vehicles (UAVs) and satellites.

Based at Culham Science Park in the beautiful Oxfordshire countryside, OXIS is proud to have a highly-experienced international R&D department with a strong **collaborative attitude** and shared goal of developing the “next big thing” in energy storage technology.

We are now looking for a cathode research scientist to join our dedicated R&D team. The successful applicant will work within a close-knit group that will bring **new ideas** forward and develop them through rigorous testing from lab-scale through to pilot-scale. The role is highly **hands-on**, and will allow for the development of a variety of skills from materials chemistry, electrochemistry and analytical science, to advanced coating processes. We are therefore looking for someone who is highly self-motivated, **proactive** and practical, with an interest in contributing to the electrification of global transport and technology.

Main Responsibilities

- To complete lab-based research on new Li-S cell cathode materials and characterise these materials using a range of analytical and electrochemical testing techniques with the aim of increasing cell energy density and cycle life.
- Liaise with the existing OXIS R&D team to incorporate new materials improvements into state-of-the-art Li-S cells.
- Liaise with Production Development to transfer new cathode formulations to pilot-scale production, capable of being incorporated to a large number of full-scale pouch cells.
- To report progress and findings to the Cathode Group leader and Project Technical Lead.
- To prepare full technical reports and presentations on research findings and present them both internally and externally.

Required Skills and Experience.

- The ideal candidate will hold a degree or PhD in chemistry, electrochemistry or materials science.
- Demonstrated ability to work both independently and in collaboration with a team, possessing excellent attention to detail and commitment to work in a conscientious and safe manner.
- Strong aptitude in using Excel, Microsoft Office, and PowerPoint, to analyse data, write comprehensive and coherent reports and deliver presentations with clarity.
- Experience in writing scientific reports, Standard Operating Procedures (SOPs), implementing Control of Substances Hazardous to Health (COSHH) control measures and performing Risk Assessments.

Preferred Skills and Experience

- Previous experience in completing lab-based research into new materials for Li-ion/Li-S batteries or other electrochemical devices would be beneficial.
- Specific slurry coating knowledge/experience at lab or production scale will be a distinct advantage.
- Knowledge/experience in working with different forms of carbon for conductive composites.
- Knowledge and practical experience of conducting electrochemical testing techniques such as cell cycling, cyclic voltammetry and electrochemical impedance spectroscopy (EIS) of cells.