

Job Title: Senior Battery Engineer Reporting to: Battery Team Lead

Reports: N/A

## Company description

Ilika (<u>www.ilika.com</u>) is a pioneer in solid state batteries. The company has developed miniature micro-fabricated solid state batteries (Stereax) for Internet of Things (IoT) applications and is now developing large format solid-state cells for electric vehicles.

Ilika is a publicly listed company with its head office in Romsey and a facility at the University of Southampton. In 2021 Ilika is establishing a new facility for the scale up and manufacture of Stereax solid state batteries. We offer the successful candidate a competitive package and the opportunity to be part of a world class technical team using state of the art equipment in a supportive environment. This is an excellent opportunity to join the team during a period of growth, and to make a meaningful contribution during this exciting transition.

## Overview of the role

The successful candidate will work at a senior level in a team of battery engineers supporting Ilika's development of Stereax thin film solid-state batteries.

## Responsibilities may include but are not limited to:

- Recognise the importance of and create an inspirational can-do culture in the organisation, with a focus on process improvement, adding value to the business;
- Taking the initiative in proposing and implementing solutions for areas for improvement in the Company's operations;
- Maintaining ISO standards;
- Adhere to good laboratory practice and implementation and approval of risk assessments and COSHH where appropriate;
- Design and development of Stereax Product through to Launch / R&D freeze;
- Lead the development of Stereax battery architectures, materials and fabrication steps to enable product development;
- Development of protocols for electrochemical verification and qualification of solid-state battery samples and data handling and management;
- Definition of characterisation of prepared samples with techniques to confirm composition, structure etc;
- Lead design reviews, communicate ideas and solutions, influence decisions and problem solving;
- Actively support customer and partner interactions, sales & marketing when required;
- Train new users and develop skills within the battery team;
- Interact with wider team to communicate findings;
- Identify opportunities for Intellectual property (e.g. lead on invention notices);
- Define and document key operating procedures.

## Job requirements:

- Well-developed understanding of secondary battery chemistry, cell design, cell production, and material and battery characterisation with particular emphasis on lithium-ion chemistry;
- Design expertise of battery architecture, materials, microfabrication, understanding of processes and workflows to enable product development;
- Experience designing and conducting a range of electrochemical tests e.g. electrochemical impedance spectroscopy, voltammetry etc;
- Experience with a range of electrochemical testing equipment e.g. VMP, Arbin, Gamry, pulse testing;
- Experience in a range of characterisation techniques e.g. Raman, XRD, SEM, profilometry, ellipsometry etc;
- Demonstrated capability by providing sufficient data to enable a product validation, author of high-impact publication/patent in field or commissioning of new electrochemical setup;
- Ability to select chemistry, materials and processes to improve product performance;
- Possess a proven track record of developing novel and successful solutions to complex technical issues;
- Ability to train new users and develop skills within the team;
- Expert knowledge in thin film micro batteries for IoT (automotive, industrial and medical applications) is desirable;
- Demonstrated ability to work well in a team;
- Conscientious and have a good eye for detail;
- Effective written and oral communication;
- Ability to write well defined operating procedures in compliance with ISO standards;
- Motivating attitude and demonstrated ability to positively influence organisational culture.

Applicant must be eligible to work in the UK.

Ilika is an equal opportunities employer and positively encourages applications from suitably qualified and eligible candidates regardless of sex, race, disability, age, sexual orientation, gender reassignment, religion or belief, marital status, or pregnancy and maternity.

Contact: careers@ilika.com