

Process Engineer (Pouch Cells)

Job description

Introduction

e-TRNL Energy is a fast-growing startup based in Bangalore, focused on developing next-generation energy solutions. We're on a mission to drive innovation in battery technology while building a workplace that values collaboration, agility, and impact.

We are currently expanding our team and strengthening the foundations of our operations. We're looking for energetic professionals who thrive in dynamic environments and want to contribute meaningfully to our growth journey.

Join us at e-TRNL Energy and be part of a company that's not just building advanced technology, but also shaping a vibrant and purpose-driven culture.

Job summary

We are seeking a skilled engineer to lead the development of lithium-ion pouch cells, focusing on cell design, prototyping, and performance optimisation. The role involves hands-on work with electrode formulation, cell assembly, and electrochemical testing. Candidates should possess strong knowledge of battery materials, manufacturing processes, and safety protocols.

Key responsibilities:

- Develop and optimize electrode formulations to meet electrochemical performance and manufacturability targets.
- Lead material selection and qualification efforts in collaboration with internal teams, ensuring consistency and quality across batches.
- Design and execute experiments for coating, drying, calendaring, and pouch cell assembly at lab and pilot scale; analyze results using statistical and electrochemical methods.
- Create and maintain technical documentation, including specifications, SOPs, and test plans; contribute to DFMEA and PFMEA processes.
- Collaborate cross-functionally with R&D, manufacturing, and quality teams to support process scale-up, troubleshooting, and production transfer.
- Mentor junior engineers or technicians and drive continuous improvement in formulation and electrode processing workflows.

Qualifications & skills

- B.E./B.Tech. in Mechanical, Production, Metallurgy, Chemical Engineering, or a related discipline; higher education (M.E./MTech./Ph.D.) is a plus.
- Solid understanding of materials science, electrochemistry, process development, and manufacturing technologies relevant to lithium-ion cells.
- Proven experience (1–2 years) of hands-on experience in pouch cell development, including coating, stacking, assembly, and sealing processes.



- Experience transitioning processes from lab-scale to pilot-scale is highly desirable.
- Proficient in Microsoft Office tools; familiarity with data analysis and visualization software is an advantage.
- Demonstrated problem-solving ability and a strong analytical mindset.
- Excellent communication skills, both written and verbal, with the ability to document work clearly and collaborate across teams.
- Strong attention to detail, time management, and organizational skills in a fast-paced R&D or manufacturing environment.
- Ability to work independently as well as in cross-functional teams; proactive, adaptable, and eager to learn.
- Commitment to safety, quality, and continuous improvement in all aspects of work.

Job Types: Permanent

Pay: As Per Industry standards

Benefits: Health insurance

Office location: Whitefield, Bengaluru.