

## Senior Materials Scientist

### 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 highly skilled and motivated materials scientist to join our team focused on advancing lithium-ion battery technologies. The ideal candidate will lead the development, testing, and optimisation of novel materials used in cell components (electrodes, electrolytes, separators, etc.). This role will also involve supervising a multidisciplinary team of technicians and engineers, overseeing cell testing protocols, and conducting in-depth data analysis to support performance improvements and innovation. The candidate will play a critical role in shaping our materials strategy, enhancing product performance, and accelerating R&D timelines.

#### Key Responsibilities

- Lead the development, selection, and optimisation of materials for lithium-ion battery components, including active materials, binders, electrolytes, and conductive additives.
- Design and execute experiments for material characterisation, performance benchmarking, and process compatibility.
- Oversee the day-to-day activities of junior engineers and junior scientists, providing technical direction and ensuring adherence to safety and quality protocols.
- Develop and implement protocols for cell fabrication, testing, and validation, including coin, pouch, or cylindrical cells.
- Analyse electrochemical performance data to draw insights and inform material and process improvements.
- Collaborate with cross-functional teams, including cell design, manufacturing, and quality assurance, to align material development with product goals.
- Prepare technical reports, presentations, and documentation for internal stakeholders and external partners or funding agencies.
- Stay updated with the latest advancements in battery materials science and contribute to strategic R&D planning.

**Qualifications & skills**

- B.Tech, M.Sc., or higher in Materials Science, Chemistry, Chemical Engineering, Physics, Electrochemistry, or allied fields.
- Minimum of 4 years of relevant industry or academic research experience in batteries; PhD experience also counts.
- Demonstrated hands-on experience with material characterisation and electrochemical testing of electrode and electrolyte materials.
- Experience working in dry-room, glovebox, or controlled-atmosphere environments to fabricate and test cells.
- In-depth understanding of battery material fundamentals: crystal structure, interfacial chemistry, degradation mechanisms, and electrochemical behaviour.
- Strong project management skills: planning experiments, managing timelines, optimising resources, coordinating with cross-functional teams.
- Ability to interface effectively with vendors, academic or industrial collaborators.
- Strong problem-solving mindset, with creativity and analytical rigour.

**Desired Qualifications**

- Excellent written and verbal communication—able to prepare technical reports, present complex findings clearly to technical and non-technical stakeholders.
- Experience with scale-up processes from lab to pilot production or commercial manufacturing.
- Experience submitting grant proposals or drafting invention disclosures and patent documentation.

For more details, please visit <https://e-trnl.energy/about-us>

or write to us at [careers@etrnl.energy](mailto:careers@etrnl.energy)

**Job Types:** Permanent

**Pay:** As Per Industry standards

**Benefits:** Health insurance

**Office location:** Whitefield, Bengaluru.