

Job Title: Battery Scientist / Electrochemist

Location: San Diego, CA – Bay Park area

Position Type: Full-time

Experience Level: 4+ years relevant work experience with M.S. or Ph.D.

Benefits: Medical, dental, vision, life insurance, 401k, paid vacation, and a great team environment

JOB SUMMARY

Lead on various projects from target development, design of experiments, to testing on a wide range of electrochemical storage technologies based on South 8's patented *Liquefied Gas Electrolyte*. Emphasis on electrolyte formulation development for various electrodes and chemistries. Creative problem solving, excellent attention to detail, and fundamental working knowledge of battery materials are required.

DESCRIPTION

Become a critical member of our fast-growing team working to develop a breakthrough battery technology to change the way batteries are made and used worldwide to advance a clean energy future. In this position, you will be a key part of our core team, at the forefront of taking next-generation chemistries and packaging them into advanced battery cells.

We are looking for a thoughtful and creative Battery Scientist, with strong hands-on experience and excellent attention to detail to join our team in the Bay Park area of San Diego, CA. The ideal candidate can be given a target and independently design research plans, perform experiments, analyze data, and recommend new pathways. This role will involve developing detailed understanding of the relationships between material properties, cell design, and electrochemical parameters to deliver high performance, safe, next-generation batteries. The role will require close collaboration with the technical team in addition to external partners and customers, taking initial concepts to production. This is an incredibly exciting, dynamic work environment with several parallel projects with various timelines.

Candidates should have strong working knowledge of and extensive laboratory experience in advanced materials and chemistries for lithium-ion and lithium metal batteries. Including background knowledge in electrolyte design, anode and cathode-electrolyte interfaces, cell fabrication, cycling protocols and analysis, and data archiving. Knowledge of battery cell assembly, manufacturing systems, and gas flow systems is also highly desired.

RESPONSIBILITIES

- Design research strategy from fundamental studies to prototyping in developing new energy storage devices based on *Liquefied Gas Electrolyte* chemistries
- Sourcing, characterizing, and evaluating materials from various suppliers
- Building and evaluating coin and cylindrical cells including materials characterization, electrochemical testing, and failure analysis
- Review scientific literature on energy storage technologies
- Effectively communicate ideas, concepts, designs, and results with the team
- Contribute to technical writing of grants, patents, and reports
- Work independently and efficiently to reach goals with target timelines
- Deliver epic High Fives

REQUIREMENTS

- Ph.D. in chemistry, chemical engineering, materials science, or related discipline, or equivalent experience with M.S.
- Deep working knowledge of battery cell construction and electrochemical testing techniques, including familiarity with Arbin/Maccor/Bio-Logic test equipment, EIS, CV, etc.
- Strong track record of achievements in materials R&D
- Demonstrated ability to prioritize, multi-task, and succeed in an environment with competing demands
- Excellent written and verbal communication skills
- Basic machining (ex. drill press, sanding)
- Ability to lift 35 lbs.
- An aptitude for learning new things and a keen eye for improving processes

ABOUT SOUTH 8 TECHNOLOGIES

South 8 Technologies, Inc. has developed a breakthrough new *Liquefied Gas Electrolyte* chemistry for electrochemical energy storage devices including lithium batteries and electrochemical capacitors. Our patented technology enables a substantial increase in energy, improved safety, and an exceptionally wide operating temperature. Leveraging conventional materials and manufacturing, South 8 Technologies offers a unique solution for a variety of transportation, grid storage, and aerospace applications.

South 8 Technologies, Inc. spun out of UC San Diego's Jacobs School of Engineering and began operations in 2017. We are a diverse team, which values integrity and hard work in an environment that encourages creative thinking, collaboration, and honest feedback. Become a critical member of our highly motivated team and grow alongside us as we deliver breakthrough energy storage solutions to advance a clean energy future.

JOB APPLICATION

Candidates may apply by sending resume and cover letter to careers@south8technologies.com.

Candidates only – we will not respond to inquiries from third-party recruiters.

South 8 Technologies is an equal opportunity employer.