

# SION POWER CORPORATION

## Job Posting

### **Job Title: Cell Development Engineer**

Department: Battery Systems

Reports To: Director, Battery Systems

Sion Power Corporation, the global leader in the development of a new generation of high-energy, rechargeable lithium batteries for portable power is currently searching for a **Cell Development Engineer** for its research and development facility. Sion's exciting new technology is based on the elements lithium and sulfur, which combined yield a battery system with the highest theoretical gravimetric and volumetric energy densities of any battery couple and offer significant improvements in performance over current rechargeable batteries.

### **SUMMARY**

Responsible for all aspects of cell design, cell evaluation and materials selection to meet product goals for cost, electrical performance and safety by performing the following duties:

### **ESSENTIAL DUTIES AND RESPONSIBILITIES**

- Develop, improve and optimizes cell designs, fabrication processes, and cell materials. Plans and implements methods of new experimentation using design of experiments and evaluates data using statistical methods and presents oral and written technical reports evaluating cell electrical performance and safety.
- Plan and implement cell development project plans, milestones and goals as directed by CTO. Reviews and presents progress as required and provides technical leadership to ongoing cell development objectives.
- Coordinates with Documentation and Cell Development staff in preparation of engineering drawing package documenting cell components, design and material specifications.
- Prepares cell design models to predict cell capacity and bill of materials specifying cost of cell components. Evaluates and implements technology transferred from R&D as required and transfers design documentation to Manufacturing for scale-up and equipment specification.
- In conjunction with other departments, resolves technical issues related to processes and/or equipment including Research, Coating, and Manufacturing. Evaluates the effect of new or existing equipment on cell performance; trouble-shoots design related cell assembly issues in cooperation with Cell Assembly Group.
- Other duties may be assigned.

*The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

## **EDUCATION and EXPERIENCE**

Bachelors degree in Chemistry, Chemical or Mechanical Engineering, Material Science or other closely related field required. Advanced Degree preferred, with a minimum of 5 years lithium battery design, development and materials experience including Design of Experiments (DOE), knowledge of UL1642 and 2054 standards, JSBA Guidelines for Safety Evaluation and DOT CFR49 Specifications.

## **LANGUAGE SKILLS**

The Candidate must speak the English language, skilled in both verbal and written communication, with particular emphasis on technical writing and presentation skills. Ability to present to groups of all sizes also required.

## **MATHEMATICAL SKILLS**

Knowledge of statistics including hypothesis testing, ANOVA and factorial design and analysis. Cell modeling.

## **REASONING ABILITY**

Strong organizational, leadership and analytical skills.

## **PHYSICAL DEMANDS**

While performing the duties of the job, the employee will be required to regularly use a PC, telephone, fax machine, copy machine, lift objects, speak, hear, and write. The employee may need to work in a dry room (~-60 °C Dew Point) for extended periods of time. The employee may be required to handle and transport packaged chemicals and/or work with potentially hazardous and/or toxic chemicals, with appropriate protective clothing, apparatus and training. The employee should be able to lift and move 25 pounds and could be called upon to lift or move up to 50 pounds on occasion. Specific vision abilities required by this job include close and peripheral vision, depth perception, and the ability to adjust focus.

## **WORK ENVIRONMENT**

The Candidate will be immersed in a fast paced, ever changing environment. This person must be able to adapt quickly, meet deadlines and goals, and interface with all levels of employees both internal and external to the company. While performing the duties of this job, the person will occasionally work near hazardous and/or toxic chemicals, energized electronic equipment, and office machines in laboratory, production and office environments.

**SION POWER CORPORATION IS AN EQUAL OPPORTUNITY EMPLOYER/AFFIRMATIVE ACTION EMPLOYER M/F/D/V.**

Sion Power Corporation, a spin-off of Brookhaven National Laboratories, is located in Tucson, Arizona's second largest city and the hub of activity and commerce for southern Arizona—one of the fastest growing states in the U.S. With a population in the metropolitan area of one million people, Tucson is home to the University of Arizona and a center for optic, biotech and other high technology research industries.

Interested parties should contact Human Resources at Sion Power Corporation, [HR@sionpower.com](mailto:HR@sionpower.com)